Eyes that hear. The synesthetic representation of soundspace through architectural photography

Yeux qui écoutent. La représentation synesthésique de l’espace sonore au travers des photographies d’architecture

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Introduction

1 In the last two decades, the aesthetics of visual representations of architecture have undergone a deep transformation. In the past, the appraisal of images was largely based on some form of shared aesthetic taste, aimed at emphasizing the morphological character of buildings, and their plasticity. In these images, the power of masses and the physical nature of built space would be displayed through light and color, narrating the sculptural character of buildings through forcibly aseptic images where architecture seemed distant, almost out of reach.

2 Contemporary architectural visualizations tend to be more complex. Buildings are displayed in a far less idealized fashion; denser and remarkably richer images transform architectural objects into changing personae. Architecture no longer seems to be understood as an object to be admired, but rather as a medium capable of catalyzing a variety of aesthetic experiences that change following the seasons, the time of day, the atmospheric conditions, or the specific situation. The public's appraisal is thus no longer based on formal or material characters, but on the qualitative and perceptual aspects that the represented space generates.

3 In other words, the aesthetic dimension of these images reverts to the original root of aethesis – the theory of sensible knowledge. This new paradigm can be well described turning to the contemporary philosophical debate on atmospheres. According to Gernot Böhme, today:
The quest for an aesthetics of nature as an aesthetic theory of nature requires that we reformulate the theme of aesthetics as such. The new resulting aesthetics is concerned with the relation between environmental qualities and human states. This “and”, this in-between, by means of which environmental qualities and human states are related, is atmosphere. (Böhme, 1993, p. 114; 2017, p. 14)

Similarly, what becomes relevant in contemporary architectural images is the representation of a “floating in-between”, namely “something between things and the perceiving subjects” (Böhme, 2013, p. 3). To grasp this new paradigm, we need to take into account the reality expressed by the comprehensive appearance of the image and overcome a "traditional" aesthetic judgment often focused only on the architectural work’s formal qualities. Today, architectural visualization specialists seek to excite affective responses capable of anticipating the actual corporeal stirring afforded by lived space. To capture this aspect, this paper proposes to focus on the spontaneous motor behavior of space’s subjects and how it is described, as it showcases the “affective affordances” that are set forth by architectural environments (Griffero, 2008, p. 85-86; 2014, p. 79-82).

In photography, shifting our attention from the architecture towards the depicted people and focusing on gestures, postures and facial expressions of these characters we could grasp which is the atmosphere the photographer tries to restore and how this is achieved. As a result, we can proceed in considering these animate figures as a witness of the depicted space and in reading the audio-visual clues that these bodies suggest.

This paper would like to advance a new way to read the representation of the atmosphere starting from these bodily traces. To explore this dynamic, at first, the theoretical contributions that grounded the paper will be illustrated. It will be emphasized, through the metaphor of the mise en scène, how it is possible to “design” an atmosphere in photography; then the importance of the human body according to two meanings will be examined: as a feeling body by Hermann Schmitz philosophy and as a depicted body who generates a “mirrored” empathetic process in the viewers by Vittorio Gallese theory; finally, the multi-sensuous aspects which characterize an atmosphere and consequently its representation will be introduced.

Secondly, a further step will be taken, before delving in the Elbphilharmonie photographs case study the proposed methodology will be described by means of the analysis of the audio-visual traces in a series of photographs taken inside a museum hall, in Rome. The sense of this practical example is not to offer absolute indications on how to read these bodily clues, but rather to show an alternative way to decipher the atmosphere depicted in architecture, starting to observe these figures and what they can suggest, perceptually.

Thirdly, it will be shown how the representation of an atmosphere, today, is acquiring a strong relevance through a virtual tour of the Elbphilharmonie. At first, a series of photographs will be analyzed starting from the outside space, in the HafenCity district, and then gradually moving to the inside of the building from the ground floor to the music hall at the top.

The composition of an atmospheric image

According to Böhme, “felt space is the modulation or articulation of bodily sensing itself. To be sure, this modulation or articulation is caused by factors that need to be
identified and treated objectively” (2017, p. 92). These factors modulate the bodily experience; they possess mood qualities, Böhme calls them “generators of atmosphere” (Ibid.).

In architecture, generators are both physical and non-physical (Ibid.). The physical ones are the “affective affordances” (Griffero, 2008, p. 85-86; 2014, p. 79-82) emanating from the architectural objects as shapes, dimensions, spatial relations, and materials. In short, all the physical features that define architecture, those objective qualities able to create a movement suggestion in the subjects. The non-physical are intangible entities “like light and sound” (Böhme, 2017, p. 92), color, smell, wind, warm and cold, etc.

Architects can only partially control the latter aspect, as non-physical generators of atmospheres can be influenced by unpredictable phenomena like weather, natural light, corporeal presences as people, animals, trees and flowers. Moreover, the non-physical ones “and this merits emphasis, modulate bodily felt space by creating tightness or expansiveness, orientation, and enclosing or excluding atmosphere” (Ibid.).

Finally, all of these generators – both physical and non-physical – influence the subjects’ bodily experience, defining corporeal contraction and expansion (Schmitz, Müllan, Slaby, 2011, p. 249), synesthesia and social characters (Böhme, 2017, p. 93).

However, in the photographed atmosphere of architecture, generators can be planned. The photograph devises the frame’s composition by selecting both physical and non-physical generators, and how to highlight them in order to activate the observers’ dispositions.

In this layering of lights, colors, and figures, the role of architecture changes - from protagonist becomes set. Gernot Böhme explains how atmospheric space can be artificially constructed through the metaphor of the mise en scène (Böhme, 2017; 2010, p. 175-184; 2013; 1993, p. 122-125). Indeed, a theatrical play includes the generators, which activate sensorial and emotional perception: light, color, sound (medium); spatial relation of the space (size, height, location); and the actions performed by actors (subjects). These elements move and move us in unison, concurring in the definition of a scene’s expressive character, which can be lively, calm, serious, melancholic, joyful, sad, etc.

Using stage practice as a starting point, it can be understood how certain compositions of things generate atmospheres: according to Böhme, in this specific case “the making of atmospheres is [...] confined to setting the conditions in which the atmosphere appears” (2013, p. 3). By extending this principle to images, it can be argued that these are also capable of generating atmospheres. In an image, like on stage, a particular aesthetic effect is derived from the “actual phenomenal reality”, as opposed to the “factual reality”, a distinction Böhme (2010, p. 176-191) draws from Josef Albers’s theory of color (1971).

Just as stage designers, image artists compose sets that include lights, colors, the unfolding scene’s depth of field, spatial relations, and people. They isolate actual reality from factual reality producing mood qualities (Morselli, 2019, p. 6-7). A photograph stabilizes an immediate and spatially effused feeling “frozen” within an image.

Aesthetic work consists of endowing things, environments, or people themselves with properties that make something emanate from them. That is, it is about making atmospheres through work on the object. We find this kind of work everywhere. [...] These branches include [...] the whole sphere of visual arts proper. (Böhme, 2017, p. 24-25)
Architectural visualizations (both photography and photorealistic rendering) have the power to synthesize such aesthetic experience, generating immediate emotional responses. The working and effects produced by visual techniques are comparable to the dynamics of artistic appreciation, and in this sense, it is necessary to interpret the space as it is represented. Hence the meaning of what Böhme terms the “aestheticization of reality” (Böhme, 2017, p. 24; 35; 57).

Atmospheres and felt bodies

This paper acknowledges the value of aestheticization of reality in contemporary architectural photography. To understand how this value manifests itself, the focus should be on the kinetic-affective expression of the depicted felt bodies. A useful theoretical platform in this sense can be found in Hermann Schmitz’s theory of atmospheres. Developed from the 1960s in his System der Philosophie, the theory revolves around three fundamental concepts: atmosphere, its pre-dimensional character, and the immediate and pre-reflective corporeal experience of the felt body (Leib).

These concepts are related to the meaning of space traced by Schmitz, which is something totally different from the traditional Western Philosophy. The description of architectural space and, consequently, its representation has been strongly influenced by two meanings: the space as Aristotle’s topos, and the spatium as the measurable system of Descartes. Until the beginning of the twentieth century, these interpretative models have represented the main conceptual poles in understanding the relationship between subject and space. Instead, space according to Schmitz’s neophenomenology is something that cannot be physically measured nor geographically localized. Starting from his Leib concept, there was a shift toward the affective involvement of the subject corporeal perception. In other words, space in Schmitz’s thought is something that we can perceive through our corporeal experience, sensually and emotionally, influencing our understanding of the world. To emphasize this aspect, the philosopher defined space as something without a surface, namely a surfaceless space (Schmitz, Müllan, Slaby, 2011, p. 247-255). Therefore, it is something impossible to measure in a traditional way, because it manifests itself to each of us in a specific way related to our perceptions, e.g. in hearing voluminous sounds or sensing atmospheres (Schmitz, Müllan, Slaby, 2011, p. 244-245).

Notably in Schmitz’s theory, the felt body itself pertains to this realm of “surfaceless spaces” (randlos) (Schmitz, Müllan, Slaby, p. 247-255), which includes smell, sound, and silence – the entities he terms “half-things” (Schmitz, 1978, § 245). The felt body “is a feeling body – its mode of existence cannot be separated from its becoming manifest to the conscious subject in specific kinds of corporeal feelings” (Schmitz, Müllan, Slaby, 2011, p. 244), similarly to power or fear.

To Schmitz, felt-body theory is animated by a continuous corporeal dynamic of “expansion and contraction”, a primary movement that responds to the atmospheric presence in the environment the subject experiences (Schmitz, Müllan, Slaby, 2011, p. 247-258). This dialectic alternation of corporeal stirrings can be interrupted by sudden sensorial stimulation, such as strong noise, leading to the prevalence of one state over the other.
In architectural photography, gestures, postures, and facial expressions can hint at the oscillatory movements of the felt body, interacting in the subjects’ corporeal communications (Schmitz, Müllan, Slaby, 2011, p. 250-251; Schmitz, 2016, p. 7).

**Felt bodies into figurative representations**

To understand how the photographed architectural atmosphere is emanated, all the felt bodies involved should be considered. In the radiance of the depicted atmosphere, three categories of perceivers can be found: people portrayed, the photographer, and the observer looking at the photograph. The first two define the experiencing of the atmosphere in the portrayed space, while the latter perceives the atmosphere through its representation.

Firstly, let us begin by considering the portrayed people and the observer. Griffero, starting from Schmitz’s felt-body communication theories, investigates the importance of the gaze in a portrait (Griffero, 2017, p. 93-101). The gaze, among other corporeal communication entities, is one of the most effective generators. Like sound, silence, atmosphere, and felt-body, gaze is a “quasi-thing” (Griffero, 2017, p. 108-112), namely a half-thing. In pictorial representation, this entity generates the floating atmosphere between two felt bodies: the portrayed and the observer. In this case, the presence of photographed people establishes a link inside and outside the frame.

The gaze comes out of all the other felt bodily elements represented that are able to generate a ‘vital impulse embracing the two felt bodies [the portrait’s and that of the observer] in the mutual intertwining of corporeal direction’ (Schmitz). (Griffero, 2017, p. 98)

This generates an ‘in between’ suspended – but predualistically so – between subject and object (in this case, portrayed figure and observer): the ‘in between’ I always refer to when tackling the specific felt-bodily communication (even in the most distracted perception) with quasi-things. (Ibid., p. 100)

However, as Griffero writes, the gaze maintains its relevance despite the absence of the eyes of the depicted subject, “even through the elimination of the eyes” (Griffero, 2017, p. 99). Indeed, another gaze resides in the portrayed space – the photographer’s. Despite their material body not being visible, their presence as felt-body can be perceived. The photographer’s felt body acts as a filter between the portrayed people and the observer. Therefore, the photographer’s presence becomes relevant in some photographs and not in others, depending on the atmosphere radiated by the image.

**Corporeal engagement and embodied simulation in aesthetic experience**

Efforts in understanding the effects generated by these images emanating from the body’s representation, cut across disciplinary boundaries, and represent a central topic in contemporary research. Aesthetics, psychology of art and phenomenology currently converge in the work of neuroscientist Vittorio Gallese, who turns his investigation towards the *aesthesis* in the primary sense of multimodal perception of the environment by means of the body through an analytical practice that he describes as “experimental aesthetics” (Gallese, 2014, p. 52).
Although the understanding of the art-brain relationship has started to be investigated in neuroscience by Semir Zeki according to a neurobiological approach, Gallese's attention is directed towards an aesthetic understanding of works of art response, focused on empathetic process. For this reason, he collaborates with art historians, such as David Freedberg, who is best known for his work on psychological responses to art; he is inspired by philosophers such as Robert Vischer and Merleau Ponty, and by the German art historian Aby Warburg, who investigated the representation of human figures focusing on the power of expression and postures (*Pathosformel*). Moving through these contributions, Gallese is trying to apply the discovery of mirror neurons, carried out over twenty years ago, to investigate empathic responses to visual artworks (Freedberg, Gallese, 2007).

According to Gallese, the representations of actions and emotions through corporeal expression in a static image or in a sculpture “consist of the activation [on observers] of embodied mechanisms encompassing the simulation of actions, emotions, and corporeal sensations, and that these mechanisms are universal” (Freedberg, Gallese, 2007, p. 197). His approach can offer a useful key to understand the “weight” of human figure insertions, even in architectural images.

This insight is supported by eye-tracking studies assessing the different responses to images with or without human figures, in two experimental conditions: aesthetic judgment and movement judgment. The results, carried out by an interdisciplinary research team formed by psychologists, neuroscientists - including Gallese - and art historians in 2012, seem to experimentally confirm earlier intuitions of Gestalt psychology: “according to Arnheim the recognition of some dynamic qualities of the image is one of the most important elements of the aesthetic experience” (Massaro, Savazzi, Di Dio *et al*., 2012, p. 2).

By comparing images with or without human figures in this study, what emerges is that the dynamism expressed by the presence of acting personages is a central attractor of eye movement, producing a greater impact than unpopulated pictures. In particular, attention is given by the face area, “especially when ascribing an aesthetic judgment whereas dynamism ascription appears to be strongly guided by attention to features portraying actions” (Massaro, Savazzi, Di Dio *et al*., 2012, p. 15). Moreover, attention given to face representation was deeply investigated by the same research team in 2019, focusing on the eye and mouth regions (Di Dio, Massaro, Savazzi *et al*., 2019).

Thus, the presence of human gestures and postures strongly influences the global appraisal of an image. Concentrating our attention on the effects these depicted bodies generate in artworks, it is possible to extend the same principles to architectural photography. Starting by these neuroscience research works, still in progress, the paper would like to underpin a further hypothesis: the representations of sensorimotor activity and emotions have great importance in describing an atmosphere (Morselli, 2019, p. 3).

Ultimately, the introduction of expressive human figures in the architectural representations holds remarkable relevance: it could generate a feeling of the atmosphere through the body’s representation.
The aestheticization of soundspace

The multi-sensuous aspect that accompanies the perception of space is another pivot of the theory of atmospheres and consequently of the possibility of their representation. Atmospheres are often illustrated through metaphors, applied to describe a character of the felt body that lies at the base of corporeal experience. Sensorial qualities are intermodal and are transferred from one sense to another: for example, “a tone is also referred to as high or sharp, a color as warm, or a voice as coarse” (Böhme, 2010, p. 61).

Acoustic metaphors are often used to explain the pre-dimensional character of atmospheres. The *surfaceless space*, theorized by Schmitz, includes sounds as “the massive, room filling sound of a giant church bell, but also the shrill and sharp cry of a bird of prey” (Schmitz, Müllan, Slaby, 2011, p. 245). These half-things “are felt immediately in our bodily responsiveness” (*Ibid.*) exactly how we can feel the weather that surrounds us.

Likewise, Böhme’s definition of atmosphere is that of a tuned space. The term *tune* is in turn inspired by Jakob Böhme’s *The signature of all things* (1651), where it is adopted to describe how the manifestations of nature act upon the body, that is compared to an musical instrument’s sound box (Böhme, 2017, p. 138; 2010, p. 207).

The felt body emanates into the environment exactly as the body of a sound box reveals its essence, “it has an attunement resulting from its cut, covering, or cavities” (Böhme, 2017, p. 45). Jakob Böhme calls this attunement a “signature”. The felt body “vibrates” by being immersed in atmospheric space, exactly as a sound can “move us” emotionally.

This association led to the introduction of the term *tone* in the phenomenological lexicon. The intermodal qualities expressed by this term become more evident. *Tone* is a term belonging to both the worlds of sound and painting: the *tone* of a sound can be high or low, as well as the *tone* of a color that can be dark or bright, but also the *tone* of one’s voice can brighten or darken during a speech.

As Schmitz and Böhme describe acoustic stimuli through these examples, the reader imagines the scenes using his own visual imaginary. Corporeal synesthesias emerge, binding the aural and the visible that move us in unison.

From motion to emotion: sonic traces

This paper aims at investigating how sound phenomena can be represented in images through a series of visual cues, even when sound as such is not perceptually present.

To understand the dynamics of these relations, let us observe some photographs taken inside an art museum: in this series of shots, visitors are observed while moving through a room with specific spatial qualities. The space in question is one of a sequence of six halls articulating the south wing of the *piano nobile* in Rome’s Palazzo Barberini.
Visitors explore the wing proceeding in an east-west direction, crossing a series of portals lined up on the south wall’s intersection. This configuration forces visitors along a well-defined linear path. Yet, this route changes abruptly when visitors entering a hall encounter the paintings hanging on the walls.

We can describe these photographs by focusing on the visitors’ bodily movements (Ill. 2). In the first image to the right, a man is walking forward, his gaze pointing at a clear direction. In the central image, a second figure appears, a woman whose face is slightly turned to the right. While the man’s attention is immediately caught by the paintings on the wall he is facing, the woman following him – after some hesitation – is attracted by the opposite wall. The last photograph shows the two persons in a static position: the legs have stopped, arms are behind their backs. Motionless, their bodies sway slightly forward towards the exhibited paintings, which are contemplated in total verbal silence. The man’s gaze is immediately attracted by the gaze of the portrayed woman in the middle of the wall, in front of him. Noticeably, the portrayed lady is...
observed by the neighboring paintings (ill. 3). Of course, the depicted faces cannot turn: it is the exhibition setting that generates movement. In this sequence of photographs, the visitors are caught in a moment of sensorial excitement produced by the aesthetic pleasure arising from looking at the artwork.

44 The aforementioned scene includes a further subject: the photographer. In depicting the scene, they themselves are into that “spatial character” (Böhme, 2017, p. 92), and share the sensorial experience of the portrayed visitors. Their position does not allow them to view the paintings clearly, however, they start to perceive their “actual fact” (Albers, 1971, p. 71-74), the half-things in act.

45 According to Schmitz, “anybody who is in such a space in which an emotion is poured out would have to be able to feel it just like they feel the weather” (Schmitz, Müllan, Slaby, 2011, p. 255-256). This explains why the photographer feels the impulse of stopping at exactly that point, establishing a physical distance between himself and the people in the room: they feel the atmosphere.

Illustration 3: Palazzo Barberini, Piano nobile, Hall of Audience, Rome. Rosalba Carriera female portraits (1739-1743)

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46 The sudden halt of the body expresses a change in the state of the felt body, which is produced by spatially effused emotions. Upon experiencing something that potently strikes an affective chord, such as a vast landscape or a magnetic painting, the corporeal reaction “exacts” a pause, creating an atmosphere of silence similar to a “ceremonial silence broad and dense” (Schmitz, 2016, p. 3).

47 In these images, this characteristic silence is marked only by the sound of people’s footsteps that reinforce this atmosphere. According to Böhme,

Silence is always articulated through individual sounds (e.g., the evening’s silence through a dog’s barking in the distance). In the church space, [...] silence is most intensively articulated by one’s own footsteps. (Böhme, 2017, p. 176)
Corporeal communication in these images acquires a central role in understanding the activation of synesthetic processes. Although the felt-body experience is stimulated by a multi-dimensional sensory continuum (Griffero, 2008, p. 89), postures and facial expressions suggest the irradiation of a dominant atmospheric quality that “invites” those using the space.

What happens is that we respond [...] to a psycho-physical pressure permeating the environment, or to a psycho-physical impulse (sensorimotor but also image-motor) suggested by certain expressive-formal qualities. (Griffero, 2008, p. 90)

If we isolate the prevalent sonic characters suggested in these images, it becomes possible to understand how they produce a specific atmosphere according to the synesthetic processes that are activated. The representation of facial expression in people portrayed in the scene, their gestures and corporeal movements, as well as the distance taken by the photographer when recording that scene, suggest the presence of these “half-things”: sounds.

This is the atmosphere’s capacity of being spatially poured into space, in a pre-dimensional and pervasive way, such as when upon entering a concert hall right after the end of a performance, it is still possible to feel the presence of the music. The corporeal communication of the present subjects can help us capture what has just happened or is about to take place, thus representing visible traces of the sonic space. To explore this dynamic, let us now turn to the photographic representations of one of the most evocative contemporary architectures built for music, Hamburg’s Elbphilharmonie.

A sonic journey starting in HafenCity

The construction of the Elbphilharmonie (2006-2016) culminates the large urban-scale regeneration of the Mitte district in Hamburg; that is known today as HafenCity (2001-2009). The project aims at the reclamation of a former industrial port, where silos and warehouses were abandoned at the end of the last century. Many of these structures have been repurposed for residential use, or turned into service buildings such as schools and office spaces, all according to the principles of environmental sustainability. The neighborhood lies on an island rising 8 to 9 meters above sea level and is articulated by a system of public spaces, plazas, boulevards, and piers, establishing an intense relationship with the water and the boats and ships cruising along the coast (Frediani, 2011).
The Elbphilharmonie is the centerpiece of the urban project. Rising at the tip of the Grasbrook Island on the river Elbe facing the sea, is the neighborhood’s iconic landmark. It was designed by the Swiss architecture firm Herzog & de Meuron (2004-2014) and uses as a base a former red-brick warehouse known as Kaispeicher, used until the 1990s to store cocoa, tobacco, and tea. The main volume extrudes from the brick walls and rises 108 meters, preserving the footprint of the original building. The architecture’s formal structure, together with the choice of materials for the building envelope, create a strong spatial and sensorial relation with the surrounding context:

The glass façade consisting in part of curved panels, some of them carved open, transforms the new building, perched on top of the old one, into a gigantic, iridescent crystal, whose appearance keeps changing as it catches the reflections of the sky, the water and the city. (Herzog & de Meuron, 2016)

Seen from a distance, the building appears to be vibrating with the sea and the sky, reflecting on its surface the movement of both clouds and waves.
The journey around this building begins on the Magellan Terrassen, an esplanade on the river Elbe about 500 meters away from the Elbphilharmonie. The entrance to the building is located on the rear end, facing a small square opening towards HafenCity. To reach this specific point, visitors must cross the neighborhood in an east-west direction; the same location can be reached through a pedestrian bridge on the northern side. The terminal part of the island, serving as a harbor, is longitudinally divided in three strips of land connected through a system of terraces, walkways, and stairways, designed by the Spanish firm Miralles Tagliabue EMTB in 2002 and completed in 2005.

The photographs below show the Magellan Terrassen, that is – together with the Marco Polo Terrassen – one of the starting points of the eastern route to the Elbphilharmonie. From here, a pedestrian path along the river leads visitors to the entrance of the philharmonic.
Illustration 6: Magellan Terrassen, Miralles Tagliabue EMTB

[Image of Magellan Terrassen, Miralles Tagliabue EMTB]

Illustration 7: Magellan Terrassen, Summer Festival 2015

[Image of Magellan Terrassen, Summer Festival 2015]

http://ahoihamburg.net website © ahoihamburg.net.

Images 6 and 7 show the terrace in the morning, on two sunny days: in this warm weather, visitors can relax and enjoy the open air, while looking at the sunlit surrounding urban and marine landscape. In both photographs, the elements constituting the physical space are the same, as is the position from which the image is taken: we can see the terrace, the urban furnishing, trees, street lighting and the buildings along the river, up until the Elbphilharmonie. Besides the shadows cast on the pavement and the intensity of sunlight, the two images are very similar; the only elements that change substantially are the human figures animating the scene. Gestures, expressions and body positions of the figures inhabiting this space could be
described as being in a state of corporeal expansion generated by a relaxed atmosphere (Schmitz, Müllan, Slaby, 2011, p. 244).

However, although these subjects share the same public space in a quite similar weather condition, it is expressed in different ways.

By analyzing the two photographs and comparing the details of the human figures and their postures, three fundamental differences can be observed: first the number of people occupying the terrace; second people’s relative position; and finally, the different attitudes in which the figures are captured. In ill. 6, two young girls are sitting and chatting in the foreground; shifting our gaze to the right side, the equivalent of a few meters deep into the photograph, a young man is lying on a bench; finally, further in the distance, three small groups of people are engaged in conversation. People occupy the plaza’s space rather freely, perhaps influenced by the sunlight and heat. In ill. 7, people’s position appears to be much more orderly and coordinated: almost all of them sit on the stairs and are portrayed from the back. In addition, while in ill. 6 people maintain a distance from each other – alone or in groups – occupying five different spots in the plaza; in ill. 7, they all sit quite close to each other. All bodies and gazes in this urban situation point towards a single spot: the person sitting in front of them, in the middle of the plaza’s lowest level.

This detail suggests what the visitors of Magellan Terrassen are witnessing: their gazes explicitly tell us that they are sharing an affective experience. All faces turn towards one point, where a musical instrument emits a sound by means of a body. “The gaze”, writes Schmitz, “is itself one of the directions of the material body schema for the motor system” (Schmitz, 2016, p. 7); in this case, gazes and bodily directions are attracted in unison to the music. This ambiance is “tonalized” by the soundspace, eliciting distinct emotions that are experienced by the spectators as affective stirrings through their felt bodies. In the first image, the subjects occupy the plaza’s freely available space in a loose way, keeping mutual distances under control. This distance is negotiated on the basis of the level of privacy that each subject wish to establish with their own conversation partners in isolation from the rest of the visitors.

The sound experience of this sonic environment moves on two levels: the first, common to both images, is given by the base aural phenomena typical of the Magellan Terrassen – the rustling leaves, the sound of wind moving over water, and the noise produced by the boats’ engines; the second, is provided by the people’s voices and by the objects emitting sound. This second level is layered upon the first and characterizes the contingent affective situation with various tonalities. The people’s gazes in the first photograph – all but a single isolated figure – are turned towards their conversation partners: here verbal communication as a bodily dynamic defines the composition of groups and creates the “correct” distance between persons. The voice is the “sound” or “aroma” capable of characterizing atmospheres, since, according to Böhme, “we can say with great clarity that the voice of something or someone actually is, namely, the articulation of a bodily presence” (2017, p. 139).

Since we are describing images, we cannot truly hear the voices of the people engaged in conversation, nevertheless we can sense their presence. In the first image, human voice, just like smell, “as an expressive form [...] is so characterized [...] that it allows an identification with absolute certainty” (Böhme, 2010, p. 205)
Everyone knows how one can recognize a partner on the phone without any verbal communication. Likewise, the individuality of personal odour is, after all, even deployed in criminal investigations. (2017, p. 139)

This characterization pertains to all types of voices, since “each voice has a character” (ibid.), including those of animals and objects. In the second image, in fact, a musical instrument produces the “voice”: given its reduced dimension, it is impossible to exactly understand what instrument it is; nevertheless, it is possible to feel the shared emotion that it generates.

But beyond which kind of musical instrument it could be, the sound produced by musician’s energy vibrates and creates an interaction with both things and people. In Jakob Böhme’s philosophy, this resonance effect is called instrument’s signature, i.e. “the expression (described as tone or sound) produced by the ‘spirit’ exciting the essence” (Böhme, 2010, p. 207).

Illustration 8: Magellan Terrassen, Summer Festival 2018

Inside-out Elbphilharmonie

Having crossed the terrace and walked along the boulevard, the visitors arrive at the building’s entrance. A small square marks the passage from the exterior to the interior and, once inside, beyond the ticket desk, they are led into a narrow and compressed space (Ill. 9). The vertical connection between the old warehouse and the new building is realized through a curved tubular escalator, leading visitors to a level located eight meters above. This spot marks the point that connects the new glass shell and the pre-existing brick building. The designers highlight this transition through a physical separation between the two structures: a panoramic plaza overlooking the port. Visitors leaving the escalator’s tunnel again find themselves in an external space.
The escalator connects two outdoor spaces, the entrance plaza on the ground floor and the elevated panoramic terrace, where they can admire Hamburg’s port; that is not only a technical connection between levels, but it also provides a specific sensorial experience as an acoustic filter causing an “oscillation” in the felt body, as it suddenly transits from a state of corporeal expansion to one of contraction. By means of its hard physical quality and reduced section, this space starkly alters all sensorial perception, including that of sound. It is a 150-second “pause” in the city’s sonic environment, ending upon exiting on the terrace above.

Illustration 9: Elbphilharmonie, Tube

Elbphilharmonie official press website © Michael Zapf
Illustration 10: Elbphilharmonie, Tube

Illustration 11: Elbphilharmonie, Tube

http://www.archdaily.com, image courtesy of ©Laurian Ghinitoiu

Observing the visitors portrayed in Image 11, it is noticeable how this space forces them to remain physically close to each other, and to the tube’s boundaries. This
nearness translates into a corporeal compression and in the lowering of the tone of voice.

However, towards the end of the ascent something else occurs: the perception of natural light above begins to change, and sounds become correspondingly denser. These cues influence the felt body, leading it to a change in state: according to Schmitz, the capacity for atmospheres to be introduced into locational space does however go so far that the person can prepare his own emotional space from the emotions that have been made available to him thus at particular location. (Schmitz, 2016, p. 8)

This anticipated space produces a sensorial excitement and prepares the felt body for an expansion.

Leaving the tube, visitors find themselves in the hall preceding the terrace (Ill. 12). Here, they are allowed to roam freely, chasing cryptic directions which, again according to Schmitz, are

Both corporeal directions and oncoming movement suggestions have a definable source, even if this cannot be located precisely. Even the merely acoustic movement suggestions originate from a sound source. By cryptic directions I mean directions for which no source can be found. (Ibid., p. 7)

Fluid and spontaneous movements are performed in this space; however, when crossing the threshold of the glass wall, they take up a precise configuration. This time movement is not prompted by a sound source, but rather by a material obstacle: the balustrade bordering the terrace marks an external limit beyond which it is not possible to move, this detail captures people’s attention. The curiosity aroused by the emotion that only that privileged view can afford leads the visitors to bend their torsos towards, to immerse themselves as far as possible into the surrounding cityscape (Ill. 13).

Illustration 12: Elbphilharmonie, Plaza inside

archdaily website, image courtesy of ©Laurian Ghinitoiu
In doing so, they undergo a strong sensorial experience, produced by the humid air, the smell of the sea and the sounds from the port muffled by height, the distant view, and the colors and lights perceived with varying tonalities.

After contemplating the panorama, visitors resume their exploration of the Elbphilharmonie.
Illustration 14: Elbphilharmonie, section rendered by bloomimages

Capitation: 1 Entrance, 2 Ticket, 3 Tube, 5 Stair, 6 Bar, 7 Foyer, 8 Great Music Hall.
Elbphilharmonie official press website ©Herzog & de Meuron

Illustration 15: Elbphilharmonie, Internal stair Grand Hall Foyer

Elbphilharmonie official press website ©Iwan Baan.

Figure 15 presents another set of stairs, a transition space quite different from the previous one. The visitors ascend through a series of wide and open ramps spiraling...
around the funnel supporting the Great Concert Hall. These stairs lead to the foyer preceding the hall. In this view, we can observe how people use the stairs in different ways: some walk up or down, some lean over the parapet, others again decide to stand still. The posture of the three visitors at the top of the central ramp suggests a sudden stop of the body.

Six to seven steps before the end of the ramp, a large glass wall becomes visible: this unexpected encounter with the external cityscape, produced by the building’s transparency, prompts a full halt. The visitors have now reached the foyer of the Great Hall, and pause for another panoramic intermission before entering it: a moment of silence before finally encountering music itself.

Illustration 16: Elbphilharmonie, Grand Hall Foyer

Illustration 16 shows an emotion “poured out spatially” (Schmitz, Müllan, Slaby, 2011, p. 246), following a modality that can be compared to what happens inside Palazzo Barberini – the museum described at the beginning of this article. The photographer with a similar corporeal dynamic has stopped, seeing the back of three sitting persons, caught in the moment of sensorial excitement. The silence filling this contemplation is generated by the existence of a landscape, made even more enticing by the glass envelope that alters the visual perception. Silence, as sound, atmosphere and the felt body, is a surfaceless space: it can fill a room in every direction. Silence,

   Precisely like noise, it signals a change in the external world and acts in an even more immediate, invasive and threatening way – being its source and vanishing point impossible to localise – than the visual impression, and therefore it is far from being a mere privation. (Griffero, 2014, p. 111)

This photograph shows an atmosphere of silence generated by a sensorial ecstasy of a contemplated landscape. This silence has its own character which, “as the silence of an untouched morning is broad and delicate” (Schmitz, 2016, p. 3).
The glass wall isolates the foyer from external noise, and there is no talking between the people sitting here; the photographer establishes a physical and aural distance between themselves and the scene they are depicting. The distance established by the photographer additionally defines the silence. They choose to portray this scene, imposing a central perspective that accentuates the bodily stillness, the calm and comfort that are required by the corporeal expansion. Only after having patiently waited for his turn, the photographer can step closer to observe the landscape in the first person. “Silence always exists as expressively and situationally qualified in the motor corporeal suggestions” (Griffero, 2014, p. 111).

Illustration 17: Elbphilharmonie, Foyer

The Great Music Hall

The description of an image of the Great Music Hall concludes this sonic journey. This space, in which an atmosphere is installed, can be considered as the constructed scene par excellence.

In Image 18, the hall is being prepared for a performance, and it appears as a large box awaiting to be “filled”. The photograph is taken from the upper gallery, usually occupied by the audience, and from this elevated position it shows the hall’s spatial unity. Analyzing the image, the observer’s eyes follow a clear path: first, the orchestra at the bottom-center, emphasized by the intense artificial lighting; then the rows of seats that propel our gaze to spiral upwards, where an uvula-shaped sound box drops from the ceiling. Even without sound, in this photograph “what in [...] apprehend is not the space truly occupied by the thing – towards which we may also be entirely indifferent – but the space that, we could say, the thing claims” (Böhme, 2010, 2009)⁵.
The Great Music Hall – more than any other space described so far – epitomizes how an atmosphere can be artificially evoked. Gernot Böhme introduces the “construction” of atmospheric generators ensued from Plato:
The peculiar character of such a making, which consists not properly in the fabrication of a thing but rather in fixing the conditions under which the phenomenon can appear (Böhme, 2017, p. 161); Plato draws a distinction between two kinds of performing act. [...] There is a difference, he argues, between the eikastike techne and phantastike techne. It is the latter which interests us here. In eikastike techne, mimesis consists in the strict imitation of a model. Phantastike techne, by contrast, allows itself to deviate from the model, it takes account the viewpoint of the observer, and seek to make manifest what it represents in such a way that the observer perceives it “correctly”. (Böhme, 2013, p. 4)

The Hall was designed according to some spatial “rules” dictated by the auditorium type – the eikastike techne – that becomes clearly recognizable through the presence of the orchestra. But what actually characterizes the emotional experience of music, its propagation through sonic space, is the architecture’s affordances, that together with the director’s artistic decisions install the “correct” atmosphere – phantastike techne.

“It does not relate to determination of things, but to the way in which they radiate outwards into space, to their output as generators of atmosphere” (Böhme, 2013, p. 5).

Illustration 20: Elbphilharmonie, Great Music Hall, Berliner Philharmoniker, 2019

Elbphilharmonie official press website © Michael Trippel
Photograph 20 was taken from an upper gallery space. Here, as we can see, the position of bodies in space follows the organization determined by the architects: the orchestra is located on the hemicycle, while the audience’s seating spirals around it. In Photograph 21, something breaks this scheme: the image is taken from a low point, just a few steps away from the musicians whose backs are portrayed, showing the choir’s insertion in the rows “dedicated” to the audience.

In this way, new relationships of nearness and distance are established between audience and musicians, breaking conventional schemes and deviating from a pre-established model. Focusing on the listeners’ postures, in image 20 it is possible to observe how those are characterized by the direction of the faces, tracking a precise visual/auditory target. In this case, the sonic space, albeit irradiating in every direction, provides the exact location of its origin – the musicians gathered in the orchestral space. In the following photograph (Ill. 21), the physical dislocation of sound sources is “interrupted” by the choir’s presence, translating in a difference in the audience’s movement. This sonic space propagates following a dynamic quite similar to the example of the swimmer drawn by Schmitz, who is crossing into the water and “struggles against a resisting volume that is without areas or lines” (Schmitz, 2016, p. 3).

That against which the public “resists” here is the music’s surfaceless space, which they are experiencing in an intimate way. Observing the directions of the bodies, as expressed by head torsion in Image 21, some people are turning their gaze towards the choir, others to the orchestra, while a single person in the corner of the first row looks with joined hands facing an uncertain direction.
This detail allows us to observe how sonic space exerts its influence generating emotions (Ill. 22). “They immediately corporeally and affectively involve the conscious subject as modes of influence indistinguishable from causes” (Schmitz, Mullan, Slaby, 2011, p. 256).

Although the chair “forces” this man to take up a specific position, through his arms, face and closed eyes he expresses “everything that he himself can perceive as belonging to himself, in the vicinity – not always within the boundaries – of his material body” (Schmitz, 2016, p. 3). His facial features show how “the purely corporeal stirrings [...] which are the affective marks of emotions” (ibid.) and the feelings generated by music translate into involuntary corporeal movement.

**Conclusion**

The representation of sonic experience through images is a complex matter, yet photography can be a useful tool in understanding how the felt body responds to stimuli generated by a particular ambiance.

A photograph, intended as a tool capable of synthesizing the actual phenomenal reality, can help us clarify forms, processes, and conditions that specific situations engender. The synesthetic integration of visual and sonic phenomena translates into gestures, postures and spatial relations between different subjects or between subjects and social situations. Close observation of these images can therefore be used as a methodological tool to clarify the immediate and pre-reflective responses of the felt body.

The body’s movement through built space

Is thereby not only framed by the body or by architecture but is itself constitutive and transformative of spatial form by being kinetically generative. Combining these forms of movements with the built environment, it becomes evident that
architecture may constrain or determine aspects of motions, for example as a blind alley forces movement to stop or to be stopped, before it can turn around and pick up the pace in a new direction. (Sørensen, 2015, p. 66).

This reflection highlights how subjects’ movements and emotional responses are certainly influenced by the affective affordances set forth by architecture, by means of its qualitative characters.

The felt body’s corporeal stirrings, however, can also be described starting from the in-between, that sonic space we have focused on. As a result, this consideration can help us in “measuring” the relationship of nearness and distance between bodies – both human and architectural – in an original way. Furthermore, these aspects of architecture are crucial in design practice.

The emotional response sparked by the subject’s use of space can produce paths branching out in unexpected directions in relation to the built project. If analyzed through the lens of sonic space, these feeling becomes manifest in a kinetic way, “one must start out from such morphic experiences of stillness in order to find reference objects through which one can set up a locational space with positions and distances” (Schmitz, 2016, p. 3).

By describing the Elbphilharmonie and its urban surroundings, we have observed how the perceiving subject’s response to atmospheres can be expressed in a calm silence, connected to the body’s immobility. Spatially effused feelings operate in relational terms moving us both internally and externally, and determining our material body scheme. Some aesthetic experiences, such as the contemplation of landscapes or artworks, can create a condition of silence that is characteristic of visual enjoyment and accompanied by the felt body's stillness.

This immobility further produces an atmosphere, which is spatially effused, and has an impact on all users’ styles of motility: in the Elbphilharmonie, the photographer first stops at a distance from those sharing the same space, eventually proceeding through the room, penetrating the atmosphere and reaching its “source”. When they first enter the atmosphere of that space, they spontaneously establish a spatial and temporal interaction with those who are present and with the built forms.

However, considering the dimensions of the architectural spaces, we can observe that they allow visitors some freedom of movement. The immaterial, surfaceless space prevails on the materially built aspects, influencing spatial relationships. In other situations, we have seen how the qualities of the architecture, merged with the body’s stillness, become visible through a variously tuned silence: in the escalator tunnel, for example, the mechanical device moves the visitors according to a pre-established timing, nearly forcing them to preserve rigid relationships of distance and nearness.

In these examples, the body’s immobility and the vocal silence suggest the presence of a feeling that precedes physical displacement, introducing a sense of stillness, or, conversely, fear; “the difference lies in the way in which the atmospheres become corporeally tangible” (Schmitz, 2016, p. 6). By reading these clues, we subvert the traditional analysis that proceeds from the built to the sensorial, orienting our investigation towards a perceptual focus and the emotional content of space.

This methodology allows us to compare different architectural spaces also through the affective affordances that are expressed by the body. The presence of these visual clues creates dense and richly meaningful images, displaying the presence of atmospheres.
To focus on sonic space does not mean to reduce the complexity of sensorial experience: on the contrary, it suggests how atmospheres can be represented exactly through the aural environment, or the subjects’ response to it. Sonic space, depending on the architectural and situational qualities wherein it becomes manifest, grants us the possibility of “measuring” the environment both sensorially and emotionally.

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NOTES
1. A series of ten volumes published in German between 1964 and 1980.
3. My translation of the original text: In quanto forma espressiva […] è tanto caratteristica […] , da
rendere possibile un’identificazione che avviene con assoluta singolarità.
4. My translation of the original text: L’espressione (denominata tono o suon o) [che] si produce
grazie al fatto che lo “spirito” eccita l’essenza.
5. My translation of the original text: Ciò che in questo caso si sente non è lo spazio realmente
occupato dalla cosa – che può anche esserci del tutto indifferente -, ma lo spazio che, per così
dire, essa rivendica

ABSTRACTS

This paper investigates the representation of sound phenomena in contemporary architectural
photography. This aspect will be highlighted through a phenomenological analysis conducted on
the photographs of the Elbphilharmonie Hamburg, designed by Swiss architecture firm Herzog &
de Meuron. Focusing our analysis on the aesthetic features of photographs, the aim of
stimulating the audience sensorially and emotionally becomes evident. We usually only focus on
visual aspects, neglecting the synesthetic effects generated on the observers. Starting from an
analysis of the portrayed persons in terms of expressions, gestures, postures and corporeal
directions, the goal is to highlight how they change in relation to the building’s sound space, and,
as a consequence how they are able to influence the perceiver outside the frame. The
interpretation of these clues is based on Herman Schmitz’s felt body theory and Gernot Böhme’s
New Aesthetics.

Cet essai étudie la représentation du son dans les photographies contemporaines d’architecture.
Cela est mis en évidence par une analyse esthétique phénoménologique menée sur les
photographies de Elbphilharmonie Hamburg. Si on analyse les caractéristiques esthétiques des photographies d’aujourd’hui, on peut remarquer qu’elles visent à stimuler le public d’un point de vue émotif et sensoriel. Lorsque nous regardons ces images, normalement nous nous concentrions uniquement sur les aspects visuels, en négligeant les effets synesthésiques provoqués.

A partir d’une analyse des expressions du visage, des gestes, des postures et des directions corporels des caractères représentés, cet essai veut souligner comment ils changent par rapport à l’espace sonore et en conséquence dans quelle manière ils peuvent influencer le récepteur hors le cadre. L’interprétation de ces indices est inspirée à la théorie de corps-propre de Hermann Schmitz et de la nouvelle esthétique de Gernot Böhme.

INDEX

Mots-clés: ambiance, espace sonore, corps-propre, nouvelle esthétique, synesthésie, photographie, phénoménologie, Elbphilharmonie

Keywords: ambiance, soundspace, felt-body, new aesthetic, synaesthesia, photography, phenomenology, Elbphilharmonie

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