

Acoustic Atmospheres

A Contribution to the Study of Ecological Aesthetics

by Gernot Böhme

Translated from the German by Norbert Ruebsaat

Editors' Introduction

In every issue of *Soundscape* we are aiming to publish at least one article that is written by a scholar and/or professional who is willing to grapple with issues of soundscape and acoustic ecology from the inside of his or her discipline or specialisation. Acoustic Ecology as an inherently interdisciplinary field of study is in the process of formation. Its boundaries, in our opinion, can only be defined with clarity (and without giving up flexibility), when an exchange of knowledge and ideas occurs between those disciplines that are involved with aspects of sound and the acoustic environment and those that are already actively engaged with issues of soundscape, listening and ecology. In that spirit of exchange, these articles are meant to encourage dialogue and debate, and it is hoped that they initiate new and deeper ways of listening to each other.

The German philosopher Gernot Böhme first presented the ideas for his article at the Symposium "Acoustic Ecology and Ecological Aesthetics," on June 6, 1999 as part of the larger festival *Stadtstimmen* (City Voices), conceptualized by Sabine Breitsameter and organised by the city of Wiesbaden, Germany, (March-Oct., 1999). Critical of the natural sciences for excluding aesthetics, i.e. people's perception and state of being, from their study of ecology, he takes the reader on a tour-de-force of philosophical thought, examining ecology, and ultimately acoustic ecology, through his "aesthetics of atmospheres." At the symposium he spoke of ecology as the relationship between the *quality* of an environment and people's state-of-being inside that environment. This relationship creates what he calls the atmosphere of a place or situation. *Acoustic* atmospheres become the centre of discussion in this article, examining both music and the soundscape as well as people's forms of listening in the context of ecology.

1. Introduction: The Origins of the Aesthetics of Atmospheres in Ecological Nature Aesthetics

The fact that the environmental crisis represents a challenge to Aesthetics was not recognized at first. Scientific reaction to the crisis sought recourse in a 19th century idea, which originated with Ernst Haeckel, namely, the idea of Ecology. This idea took up the even older idea of a natural economy or household, and broadened this idea into a science which investigated the systemic interconnections of nature's parts, the integration of organisms with their surroundings, the social relationships of organisms, and the self-regulating systems in which organisms lived. This science seemed the proper method by which to identify humanity's destructive effects on the environment, to set guidelines for environmentally friendly behaviours and, finally, to examine appropriateness and inappropriateness of environments for organisms, including human ones. In this way the environmental crisis which, of course, only became an issue because humanity was at the point of injuring itself as a result of what it was doing to nature, became a merely physiological and toxicological crisis: the question of what constituted human environments was answered by Ecology purely in terms of the natural sciences, i.e., by assertions regarding metabolic processes and energy exchanges. In this process, the fact that environmental consciousness was not entirely or even primarily brought into being by toxicological crises like Minamata disease,

but rather by such books as Rachel Carson's *Silent Spring*,¹ in other words, by aesthetically mediated impressions, was forgotten. The image of a springtime without birdsong—that was what really got people moving.

Ecological Nature Aesthetics was originally proposed to counter Ecology's inadequacy as the leading environmental science, in other words, as a proposal to develop Ecology into a full-fledged science of human environments.² For, whether an environment is experienced as human or not, does not depend on physiological or toxicological factors alone, but on qualities in the environment which are experienced aesthetically. The paradigmatic example is that of a city quarter which suffered from chemical factory emissions. "The factory stinks," people said. When scientific research showed that the emissions were not toxic, the case from the factory management's point of view was closed. But it was not closed, because the sensibilities of the people who lived around the factory were being disturbed. Sensibilities meaning: how one feels in an environment. This idea became the content of Ecological Nature Aesthetics: to examine the relationship between environmental qualities and human sensibility. Atmospheres became the primary focus of this Aesthetics because atmospheres constitute the "In-between" between environmental qualities and human sensibilities.

It has since become clear that this represented a new initiative originating from outside classical Aesthetics, an initiative whose tendencies would reform Aesthetics as a whole. Aesthetics was origi-

nally conceived, in the middle of the eighteenth century by Alexander Gottlieb Baumgarten, as a theory of sensual perception. All too quickly, however, it developed into a theory of taste and limited its investigations to artworks. While for Kant, Aesthetics seemed by and large to still be Nature Aesthetics,³ for Hegel they became simply a prologue to the actual field of Aesthetics, which was art theory. Aesthetics henceforth served primarily to inform aesthetic judgments and thereby art criticism, and it completely abandoned the field of sensual experience and affective understanding.

2. The State of the Aesthetics of Atmospheres

The profound advantage offered by an Aesthetics of Atmospheres is that it can draw on a large reservoir of daily life experiences. One talks of a pleasant valley,

of the depressive mood before a storm, of the tense atmosphere in a meeting, and it is easy to agree on what these phrases mean. If atmospheres are moods, which one feels in the air, then we are describing a phenomenon which is familiar to everyone; moreover, the potential source material for discussing and characterizing atmospheres is nearly inexhaustible. One speaks of a sombre atmosphere, a foreboding atmosphere, an exalted atmosphere, but one speaks also of an atmosphere of violence or holiness, and one even speaks of the boudoir atmosphere, or a petit-bourgeois atmosphere, of the atmosphere of the twenties.

Arising from these everyday experiences and expressions, the concept of atmospheres has since become a scientific concept.⁴ What is unique and also theoretically complex is that the term describes a typical in-between phenomenon. Atmospheres stand between subjects and objects: one can describe them as object-like emotions, which are randomly cast into a space. But one must at the same time describe them as subjective, insofar as they are nothing without a discerning Subject. But their great value lies exactly in this in-betweenness. Atmospheres combine what was traditionally divided up into Production Aesthetics and Reception Aesthetics. It is possible to generate atmospheres, of course, and there are developed art disciplines dedicated specifically to the creation of atmospheres. These involve the deployment of what are clearly objects plus all kinds of technical aids, whose presence, however, does not serve its own end, but serves to create atmospheres. Stage design is the paradigmatic example of this approach to atmospheres. On the other hand, however, atmospheres are experienced affectively, and one can only describe their characteristics insofar as one exposes oneself to their presence and experiences them as bodily sensations. This is the classical side of Reception Aesthetics.

Contrastive and ingressive experience were suggested as approaches to the study of atmospheres: one experiences the specifics of atmospheres most clearly when their characteristics are set apart,

rather than when they appear as something that surrounds us to the point of unnoticeability. Atmospheres are therefore experienced as contrasts, as, for example, when one is in atmospheres that contradict one's own mood; or they are experienced via the change which

occurs when one enters them from inside another atmosphere. Atmospheres are in these cases experienced as suggestive instances,⁵ that is, as a tendency or urge toward a particular mood.

On the Production Aesthetics side, atmospheres are, as we said, examined by reference to what produces them, i.e. objects, their qualities, arrangements, light, sound, etc. The decisive factor, however, especially as regards the ontology of objects, is that the concern is not with the properties of the object,

properties which encapsulate it and distinguish it from other objects, but rather with the qualities via which the object projects itself into a space. It is a matter of reading characteristics as ecstasies,⁶ that is, ways in which a thing goes out of itself and modifies the sphere of its surroundings, that is of specific concern here. The study of ecstasies is especially important for the arts of Design and Stage Design, because in these the emphasis is not on the objective characteristics and functions of things, but on their scenic potential.

The Aesthetic of Atmospheres, whose beginnings can thus be found in Ecological Aesthetics, rehabilitates Alexander Gottlieb Baumgarten's initial point of departure, i.e. Aesthetics as Aisthetics, as a general theory of perception. It has in the meantime proven its revelatory power by way of a series of case studies - the atmosphere of a city, light as atmosphere, the atmosphere of dusk, the atmosphere of church spaces, on music as atmosphere, and finally in the study of the atmospheres involved in interpersonal communication.⁷

3. The Aesthetic Conquest of Acoustic Space

Music as art has consisted, since Greek times, of knowing "the tones," and what tones are was determined through harmonic relationships to a fundamental tone, i.e. through intervals. This conception of music appears inconceivably narrow to us today. The twentieth century has brought in a profound expansion of musical material, reaching into many dimensions. It is possible to speak, in fact, of a conquest of acoustic space. From tonality through chromatics, the road leads through a step-by-step expansion of musically acceptable acoustic materials, all the way to the inclusion of sound and noise. What began as an interest in microtones within intervals of the chromatic scale, and the inner life of the tone itself, the attack, the embouchure, grew to include an interest in the individuality of the instruments, their voices, and led to an appreciation of the importance of "sound" as such. By transmogrifying instruments via strik-



Hildegard Westerkamp

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ing and scratching of resonating bodies and via new percussion instruments, a whole host of sounds, not only tonal ones, were admitted into music's sphere. Every day sounds, street scenes, nature sounds and the acoustic world of the factory entered finally via tape recordings. Today, the technique of sampling makes any kind of acoustic material available for composition.

The claim can be made that in addition to this expansion of musical material, a basic transformation, or, shall we say, an expansion of the essence of what music is has occurred. The dogma that music is a time art held sway well into this century. Music, in this conception, found its essential being as a product of time, in the unity of the musical gesture, which transcends the moment. From the basic push to the cadence and return to the tonic through melody and theme, the weave of musical movements, all the way to the unity of the symphony: the unity of the time-bound sequence was what constituted music. Even in something like Schönberg's twelve tone music, the adaptation of fugal techniques still placed what was essentially musical inside the unity of the time-regimented sequences. This notion of music was not overhauled but was relativized when it was discovered that music was a space art, and when it was specifically developed as such in New Music. The fact that music fills spaces and that, by way of resonance and echo, space represents a vital component of its effectiveness was always known. What was newly discovered is that the individual tone, the tone ensemble, but also the tonal sequence, or, more specifically, the sound sequence, have spatial dimensions and form figures and ensembles in space. This fact was previously not understood as musical subject matter. It is likely that modern electronic techniques for reproduction and production of music were what first brought this region within reach and thereby directed attention to it. The ability to make a sound skitter across the room like an insect or to let it rise above a muffled soundmass and spew sonic fireworks—such things were only made possible by technology, which, in realizing them, directed attention to something which, to a certain extent, has always been part of music's province. The Greek terms for high and low, *ὀξύς* and *βαρύς*, which translate as sharp and heavy, broad, point to these possibilities. New Music began, partly via the use of classical instruments, and partly via electronic installations, to consciously work with the spacial aspect of music and thereby promoted recognition of space as an essential dimension of musical composition. This dimension can, under certain circumstances, become the primary dimension of a musical work of art, in which something like a beginning and an end and an over-arching time principle can consequently no longer be expected. It is precisely music's tendency to become a space art that has brought it into the realm of an Aesthetics of Atmospheres. Musical space is, strictly speaking, expanded corporeal space, i.e. a physical reaching out into the domain which the music concurrently moulds and articulates.

The discovery that music is the fundamental atmospheric art has solved an old, always annoying and yet inescapable problem of musical theory, i.e. the question: of what does music's so-called emotional effect actually consist? In opposition to the helpless association theories and the theories that called upon fantasy to mediate, the Aesthetics of Atmospheres gives a simple answer to the question: music as such is a modification of space as it is experienced by the body. Music forms and informs the listener's sense of self, (*das Sichbefinden*) in a space; it reaches directly into his or her corporeal economy. Practitioners have long since made use of this theoretical insight: already in silent movies, music gave spatial and emotional depth to the picture. Later, film music continued this practice. In

radio dramas and features, one speaks of an atmosphere or mood, i.e. of music or sound material, which one lays down under the action to provide atmosphere for the spoken word. Similarly, a certain *soundscape* provides atmosphere in bars, and one renders visits to airports, subway stations and to the dentist pleasant through the use of Muzak and similarly sweetens and enlivens shopping malls, hotel foyers, etc.

If music in our century has expanded the acoustic field by expanding the arsenal of musical source materials to include technical sounds and samples of the every day, including noise, and if music has moved from being a time art to being an art which consciously and affectively shapes spaces, it has, in this process of conquering space, encountered a totally different development. I am referring to the World Soundscape Project founded by R. Murray Schafer in the seventies.⁸ In this Project, the world of natural sounds, the acoustic life of a city, the acoustic characteristics of technology and work were explored, documented, and the material thus made available was ultimately used to compose. Acousticians and sound engineers worked with musicians, or were themselves composers. Thus, what from the perspective of music was an expansion of musical materials, was, seen from this perspective, a discovery of the musicality of the world itself. Of course it was always recognized that birds and whales had their own music. But the soundscape perspective involved more, namely, the discovery of the acoustic character, or, better still, the characteristic appearance or shape of life realms, be they natural ones, like the sea, the forest and other landscapes, or be they the life worlds of cities and villages. It became apparent that even the documentation of such acoustic worlds required densification and composition in order to make the regions addressed accessible to one who was not at home in them. What could be closer at hand than making this densification and composition into an explicit design and to thereby partially encounter, partially ally oneself with music? In the latter instance, the piece *Roaratorio* by John Cage is exemplary.

In the meantime it has been discovered that the feeling of "home" is strongly mediated by the *soundscape* of a region, and that the characteristic experience of a lifestyle, of a city's or a countryside's atmosphere, is fundamentally determined in each instance by the acoustic space. This means that one's conception of what a landscape is can today no longer be restricted to what one sees and that city planning can no longer be content with noise control and abatement, but must pay attention to the character of the acoustic atmospheres of squares, pedestrian zones, of whole cities.

We must not consider the two developments, i.e. that of music in the twentieth century and that of the World Soundscape Project, without looking also at the development of technology. If the blossoming of music as a space art is unthinkable without electronic reproduction and production techniques, the exploration of acoustic landscapes without electronic recording and reproduction technologies is similarly so. The development of acoustic technology in the twentieth century has had an additional effect, however, which is independent of either of the above developments, and that is the all-pervading presence of music. Music, which in past millennia of European tradition was connected to celebration and special occasions, has become a cheap general consumer product. Music is constantly available via radio and television, and the acoustic decoration of public spaces has made our acoustic environment something that, as a rule, is occupied or has at least been colonized by music.

What are the consequences of this development? Considering the last point, one can speak of acoustic pollution of our environ-

ment.⁹ On the other hand, however, one must admit that the acoustic consciousness of the average individual has experienced a noticeable development. This is not only to suggest that musical desires and the musical demands contained in them have been heightened substantially—it also means that listening as such has developed into an important dimension of life and into a broad zone of satisfaction for the general public. Of course one must state that the noise of the modern world and the occupation of public space by music has led to the habit of not-listening (*Weghören*). At the same time, listening has grown from an instrumental experience—I hear something—to a mode through which one participates in the world. The above-mentioned developments have blurred music's boundaries. If, at the beginning of European music history, music was defined by such boundaries, the regular expansion of the musical field has willy-nilly rendered every boundary uncertain. If Thierry de Duve¹⁰ said, speaking of the visual arts, that after Duchamp the fundamental question of Aesthetics—what is beauty?—turned into the question, What is art? this statement can also be applied to music.

4. Acoustic Atmospheres

Perhaps the reference to acoustic atmospheres provides a temporary answer to this question. Temporary, here, meaning that it describes that which characterizes musical experience in our time. One must consider that in future, perhaps quite soon, other answers will be required. What is certain is that the great epoch of music that began with Plato is at an end. Plato criticized people who wanted to discover with their ears what harmonic intervals were.¹¹ And Theodor Adorno could still write that the appropriate way to listen to a symphony was to read the score. What a distance we have travelled from such viewpoints! What we wonder about today is whether modern music can still be notated with any accuracy. The sensuality of music appears to have been rehabilitated, and we must counter the whole Platonic project by saying that what music is can only be determined by listening. Perhaps one must even say that the actual subject of music is listening itself. It is said of modern art in general that it is self reflexive, that it makes art, art's social position, art's anthropological significance, art's very existence, into art's subject matter. In the visual arts this reflective tendency had a clearly definable purpose. In many visual artworks the concern was no longer to represent something but to present the experience of looking. This may have begun already with Turner and the Impressionists, but becomes clearly evident in the work of artists such as Joseph Albers, Barnett Newman, Marc Rothko. In music, this development may have been less evident, because in a way it is music's natural *métier*. For it has always been clear that, unlike the image, music has no object; it does not represent anything. Of course there was Programme Music. But it could not be



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denied that these were basically detours, and that music in these instances was putting itself in the service of something else. Kant already said that music was the language of the emotions. Of course one could interpret this statement in accordance with standard semi-otic notions and say that music signifies emotions, that is, it represents them. But that is not what Kant meant, for he specifically differentiated the tone in which something is said from the sign which transmits its content; and by tone he meant that which allows one to take part directly in the feelings of the speaker.¹² Music was for him the self-actualization of this method of communicating emotions. We have reason, today, to generalize this line of reasoning. Music's determining feature would thereby become the thematicization of acoustic atmospheres as such. And this would generate a different set of boundaries for music than the one, which comes to us from the Platonic tradition. Music was in the latter tradition defined by the restriction of allowed sound materials, or rather, by the limits of the acoustic realm, which defined musical sounds. Today we can say that music occurs when the subject of an acoustic event is the acoustic atmosphere as such, that is, when listening as such, not listening to something is the issue. This requires further elaboration. But one can say off the top that music in this case need not be something made by humans.

What does “when listening as such, not listening to something” mean? In asking this question one notices the great extent to which listening is a rule object-oriented. I hear a car driving by, I hear the clock strike twelve, I hear somebody talking, I hear a mosquito, I hear a ship's horn. This kind of listening is useful and convincing; it serves to identify objects and locate them in space. But to a certain extent, in listening this way, one stops listening to listening itself. Of course, in place of I hear a dog bark one can say, I hear the barking of a dog. But this is in fact a different kind of listening. Yes, the barking belongs to the dog. It is one aspect of his presence in space. But the characteristic feature of voices, tones, sounds, is that they can be separated from their sources, or rather, they detach themselves, fill the space and wander through it much in the manner of objects. Perceiving acoustic phenomena in this way, that is, as themselves, rather than as expressions of something, demands a change of attitude. We, the citizens of the twentieth century, have, perhaps as a direct result of using acoustic mechanisms, especially through headphone listening, begun to practice this attitude. It is embarrassing for many of us to discover only in this way that acoustic spaces are something unto themselves, that they are independent of things and not identical with them. Of course acoustic space is also experienced in real space. We are talking, however, about bodily space, the space of my own presence, which is pitched out around me by my physical sensations. In a listening which does not leap over tones, voices, sounds to the sources where they might stem

from, listeners will sense tones, voices, sounds as modifications of their own space of being. Human beings who listen in this way are dangerously open; they release themselves into the world and can therefore be struck by acoustic events. Lovely tunes can lead them astray, thunderclaps can shatter them, scratching noises can threaten them, a cutting tone can damage them. Listening is a being-beside-yourself (*Außer-sich-sein*); it can for this reason be the joyful experience of discovering oneself to be alive.

These things must be experienced; they cannot be transmitted verbally. But there is a good analogy, that might clarify what is meant. Descartes, a fundamentally mechanistic philosopher, already asked the question: where does someone who feels out a stone with a stick experience this stone to be? His answer was, like Gestalt psychology's answer in the twentieth century, that one experiences the stone to be where it is. This has also been described as the embodiment of the stick, and this is not at all a faulty label. However, strictly speaking, the issue here is the expansion of corporeal space. It is even more appropriate to say that when we are listening and not simply tapping around with a stick, we are outside ourselves. And this being which is outside itself does not encounter voices, tones, sounds, out there, but is itself formed, moved, moulded, crenated, cut, lifted, pushed, expanded and constricted by voices, tones, sounds.

The best existing model for describing listening proposes that one inwardly re-enacts that which is heard. This is the resonance model for listening, and it was rendered convincing by the common experience that when one hears a melody one, to a certain extent, sings along with it inwardly. But this model suffers from the false topology of an Inside and an Outside, and quickly reaches its apogee when one thinks of the complexity and quintessential foreignness of that which is heard. No one sings along with the whirring, trilling, whistling, whining, buzzing, droning of an engine room. One doesn't hear these sounds inside oneself at all, but rather exactly outside. What resonates and delivers the "inside" wherein the voices, tones, sounds and noises take place is the corporeal space itself. This experience rarely occurs in pure form because to a certain extent it forms the very ground from which we listen: the "I" does not normally lose itself in the listening act, but protects itself by distancing the voices, tones and sounds, relegating them back to their sources, and thus leaping over the experience of the In-between.

5. Conclusion

We should end by returning to the beginning, which, after all, consisted of an ecological question. The development of music in the twentieth century has led to a state of affairs where music itself became a component of the environment. Music's functionalization as an aspect of interior design—one speaks of acoustic furniture—has reduced it, to a certain degree, to the status of atmosphere. On the other hand, avant-garde music coming from one side, and the World Soundscape Project arriving from the other, have elevated acoustic atmospheres to the status of musical essences. In this way, the voices of things and the concert of the world have experienced growing attention, and listening has gained strong currency as a valued life component. When one takes all of this into account, Ecological Aesthetics in the acoustic realm is not an embellishment of natural science-based Ecology, but acquires its own *métier*, namely, the recognition, the maintenance and the structuring of acoustic space. The question of what constitutes a humane environment becomes a question inquiring after the character of acoustic atmospheres. And here too it is a matter of overcoming the narrow natural

science based approach which remains at best capable of grasping noise as a function of decibels, and to ask instead what type of acoustic character the spaces in which we live should have.

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Notes

- 1 Rachel Carson, *Der stumme Frühling* (Silent Spring). München: Biederstein 1962.
- 2 Gernot Böhme, *Für eine ökologische Naturästhetik*. Frankfurt/M.: Suhrkamp 1989, 3. Aufl. 1999.
- 3 It becomes evident that examples taken specifically from the field of design form the centre of this field. G. Böhme, *Kants Kritik der Urteilskraft in neuer Sicht*. Frankfurt/M.: Suhrkamp 1999.
- 4 Gernot Böhme, *Atmosphäre. Essays zur neuen Ästhetik*. Frankfurt/M.: Suhrkamp 1995, 2. Aufl. 1997. Michael Hauskeller, *Atmosphären erleben. Philosophische Untersuchungen zur Sinneswahrnehmung*. Berlin: Akademie Verlag 1995.
- 5 Gernot Böhme, *Anmutungen. Über das Atmosphärische*. Ostfildern: edition tertium 1998.
- 6 For more on this term, see G. Böhme, *Atmosphäre*, Teil III, see footnote 4.
- 7 G. Böhme, "Kommunikative Atmosphären". In: T. Arncken, D. Rapp & H.-C. Zehnter (Hrg.), *Eine Rose für Jochen Bockemühl, Sondernummer der Elemente der Naturwissenschaft*, Dürna: Kooperative 1999. For the other themes see *Anmutungen*, see footnote 5.
- 8 A newer example of R. Murray Schafer's extensive writings is, *Voices of Tyranny—Temples of Silence*, Indian River, Ontario: Arcana Edition 1993.
- 9 A key work on this question is: Hildegard Westerkamp, "Listening and Soundmaking: A Study of Music-as-Environment". In: Dan Lander, Micah Lescier (eds.), *Sound by Artists*, Toronto: Art Metropole 1990, 227-234.
- 10 Thierry de Duve, *Kant after Duchamp*, Cambridge/Mass.: MIT 1996.
- 11 Platon, *Politeia*, VII, 531a.
- 12 I. Kant, *Kritik der Urteilskraft*, 3. Originalausgabe 1799, 219.

The following articles by Gernot Böhme can be found in English translation:

- "Atmosphere as the Fundamental Concept of a New Aesthetics." In: *Theses Eleven* No 36, 1993, 113-126 (key article of *Atmosphäre*, see footnote 4).
- "An Aesthetic Theory of Nature." In: *Theses Eleven*, No 32, 1992, 90-102 (article from *Natürlich Natur*, Frankfurt/M. 1992).
- "The Atmosphere of a City." In: *Issues in Contemporary Culture and Aesthetics* (Maastricht), no. 7, 1998, 5-13 (article from *Anmutungen*, see footnote 5).
- "Aesthetic Knowledge of Nature." In: *Issues in Contemporary Culture and Aesthetics* (Maastricht), no 5, 27-37 (article from *Atmosphäre*, see footnote 4).