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ABSTRACT

This article discusses listening that is appropriate to sound art and the associated changes in the paradigms, or thought patterns, that occur so often when we move from visual to aural perception. The distinction between historically accepted and rejected sounds is used to show how putting sounds in cages has fashioned a form of listening and of life. Twentieth-century experimental music and, especially, the music and the reflections of John Cage have opened these cages of sound and at the same time weakened the visual paradigm for intellectual knowledge. This article examines sound art as a place where artistic practices coincide with certain theoretical issues centered on sound. The centrality of sound is approached first, and music and sound art are discussed in relation to space. Second, the attention to sound in the reception of prominent examples of sound art focuses on site-specific relationships with the city and with listening. The article concludes by affirming the need for an aesthetic reflection that takes into consideration the implications of these profound transformations. However, that is another cage yet to be opened.

I. INTRODUCTION: THE CAGES OF SOUND

A history of sounds in Western culture shows that we have a great number of sounds locked in a cage—not so as to listen to them better but, rather, to simply avoid paying attention to them. In this article, I examine the theoretical foundations of sound art, an art that requires us to attend to sounds themselves. I highlight examples of sound art that draw on site-specific spatial organization of nonmusical sound and explain how this practice challenges theoretical distinctions that have traditionally distinguished music from visual art.

Currently, it is possible to distinguish three cages for sounds. The first cage is occupied by musical sounds that correspond to the so-called history of music. The history of music has long taught us how sounds become musical sounds. All other sounds, which are not considered musical, are outside of this cage. The construction of counterpoint and harmony and the progressive acceptation of dissonances in different periods of history are illustrative examples of how

sounds have been led into this cage of musical sounds and locked in. During the early twentieth century, avant-garde and experimental music, helped by new technology, led to a second cage. It holds work ranging from Luigi Russolo's The Art of Noises and Edgard Varèse's use of percussion to phonographic recordings of all kinds of sounds with the musique concrète and the works of John Cage. These works showed that all sounds can be music. Later, in the late 1990s, the term "sound art" had led to the third cage of sounds.1 In this third cage, proposals of the first wave of avantgarde, the experimental music of the second half of the twentieth century and works created by visual artists with sound operate at the same time. The term "sound art" covers experimental music, sound poems, noise music, sound design, radio art, soundscape, sound sculpture, and sound installation-indeed, any art project incorporating sound. It is a vast field that is very difficult to cover and define. As Max Neuhaus wrote, "Sound Art' seems to be a category which can include anything which has or makes sound and even, in some

The Journal of Aesthetics and Art Criticism 75:1 Winter 2017 © 2017 The American Society for Aesthetics cases, things which don't" (Neuhaus 2000). The difficulty in defining it is a consequence of the heterogeneity of approaches and works and, above all, the fact that practices associated with the term arise mainly in order to expand and, in many cases, destroy the art world. The distinction between art and life informs many of these practices.²

The artistic practices associated with the second and third cages derive from a variety of aesthetic and artistic proposals and projects, including Italian Futurism, Dadaism, the art of Marcel Duchamp, the musical instruments invented by Harry Partch, the creation of sound sculptures like those of Harry Bertoia and the Baschet brothers, the experimental music of Cage, Stockahusen, and Xenakis, the *musique concrète* of Schaeffer, and the events and actions of Fluxus. (And undoubtedly many more.)

The second and third cages became central to the work of many visual artists, as evidenced by the fact that that some visual artists and musicians began to present and perform their works outside museums, galleries, and concert halls.

At the beginning of the twentieth century, Kandinsky (1946 [1911]) praised the power of the music by Debussy and Schoenberg because it conveyed the impressions of the spirit by exclusively musical means. For Kandinsky (1946, 29, 31), the musical experience is the experience of the vision of the soul. With sound art, in contrast, hearing is presented as "another form of seeing" (Goddard 1983). In sound art—a hybrid form that establishes various relationships between the visual and the aural—the combination of image and sound aims to involve the public in the real space in which the work is performed, rather than in a virtual space (see Goddard 1983).

Such a history of caged sounds would also be a history of enculturated listening. This listening would be, in turn, the model we have collectively created so we can lend our ears to the world and to ourselves in a certain way. As a result of caging the sounds around us, we fashion at the same time a form of listening and of life. It is useful to recall, in this respect, the way Plato classifies the harmonies in Book III of the Republic. Following the tradition of Pratinas and Damon, Plato recognizes a particular character in each harmony, determining which should be banished and which retained. The acceptable harmonies depend on the normal tension of the voice, which are therefore associated with the domain of the

rational soul. The musician appears, consequently, as someone who creates moral harmony by combining words and deeds in the Dorian mode. On the other hand, the harmonies that should be banished are those that produce hubris, or the impossibility of meaning in terms of regulatory order (Plato, Gorgias, 501e; Protagoras, 347c–d; Symposium, 176d–e; Crito, 54d). Although the Republic denies that sensible vision can produce knowledge, Plato's classification of harmonies was associated with the development of the visual paradigm in the foundation of Western knowledge. To know is to see, as the Platonic tradition of Parmenides had proclaimed.³

The superiority of the voice that speaks while singing, as opposed to that which sings without speaking, became manifest in the development of religious music in Christianity and established a limit on music within the history of Western music. Beyond such music was a huge array of sounds that were considered dissonant with reason and, as such, were merely noise. After many shifts and turns, several twentieth-century musicians, including Edgard Varèse (Charbonnier 1970, 75, 83) and Morton Feldman (1969, 73-77), began to consider that, perhaps, the music world had also become a cage. In his writings and his art, Cage devoted himself tenaciously to opening the cage called "music," and by opening this cage, he made a place for the sounds that had been excluded under the category labeled "music."4

Cage lent his ears to music and heard the prejudices, the barriers, and the implicit meanings with which thought guides sound.

While studying music things get a little confused. Sounds are no longer just sounds, but are letters: A, B, C, D, E, F, G. (1985c, 96)

Studying with a teacher, I learned that the intervals have meaning; they are not just sounds but they imply in their progressions a sound not actually present to the ear. Tonality. (1973g, 116)

According to Cage, music is a world that makes a note from a sound, a melody from the processing of sounds, and, from this, the listener tends to feel the processes and not the sound in itself: it is a listening process that takes in the sense of the music which has been composed. A traditional composer restricts the listening process with music because the musical addresses only those who desire a cognitive listening process. This listening process is precisely what Cage called into question, as he taught that music listeners were not in fact listening to sounds, but rather to the relationships between them to the extent that they conformed to the ideas they had regarding them. A new listening was necessary "to let sounds be themselves rather than vehicles for man-made theories or expressions of human sentiments" (Cage 1973c, 10).5 This nontraditional listening process requires a discipline involving acceptance: "an open ear and an open mind" in Cage's words (Cage 1985b, 34). Acceptance does not imply a passive attitude, but an active one, because listening always involves action (Cage and Reynolds 1987-1988, 395). His emphasis on the sounds themselves goes against the traditional notion that the musically untrained hearer only enjoys sound in a passive manner, and that activity occurs through an intellectual process (Cage 1973g, 116). The new listening process expounded by Cage therefore opens up a space which may be regarded as a permissive place, in which the difference between listening to what is usually called art and listening to daily sounds of life is no longer an issue. In accordance with Zen Buddhism, for Cage, this new process manifests a kind of knowledge which insists on the exercise of not knowing.⁶

Cage's music therefore is intended to free up a new way of active listening, which opens up the ears and the spirit to give room to experience and to a perception that involves a new way of being in the world (Cage 1985b, 34; 1985a, 50). Cage did not seek to introduce listeners to this process by laying down any particular model to be followed; in fact, he stated that he preferred his listeners to be tourists rather than inhabitants, to be bodies and spirits that pass through a landscape (Cage, in Retallack 1996, 129–130). The perception of open ears and minds is clearly different from aesthetic perception in the traditional sense because in the former case, the attention paid to that which is happening impedes any possibility of normatively formulated meaning (Cage 1981, 120).

This new mode of sound perception implies a change in the way one experiences the world. This perception addresses a relative poverty of spirit, of not knowing, in order to be filled with experience:

Music is about changing the mind—not to understand, but to be aware. The understanding mind is what you get when you go to school, which is boring and of no

use whatsoever. The experiencing mind is what we need because it stands us in good stead whether things are going smoothly or not; it finds tranquility in the least tranquil situation. (Cage in Kostelanetz 2003, 226)

From this perspective, the predominant methods of music education still exemplify a mental activity that creates relationships but forgets what is fundamental, which is sound itself. These methods indicate the steps required to make a note from sound, demonstrating that the ideas held regarding music are an obstacle to the value of sounds.

Where a visual paradigm accompanied the division of the harmonies in the Platonic-Pythagorean tradition, Cage's writings and compositions confronted this paradigm while, in his own words, he beat his head against the wall of harmony.8 Until the twentieth century, the greater importance assigned to musical form compared to sound contributed, in its way, to the establishment of a visual paradigm which, by associating sight with truth, relegated sound to the background.9 In this context, sound art has contributed to a weakening of this rigid visual paradigm, because it requires that perception be established from the sound. This implies a move away from the desire of representation which is traditionally linked to visual perception.

The sound art that appeared in the late 1960s and early 1970s is a manifestation of the weakening-although not a replacement-of the visual paradigm which began to be felt at the end of the nineteenth century. To cite only a few emblematic examples that can give an account of that weakening, in 1872, Friedrich Nietzsche published The Birth of Tragedy out of the Spirit of Music, in which he relates the history of art to the development of Western culture. Two years later, the first exhibition of impressionist painting was held at night, with the public viewing the works of art in artificial lighting. In 1876, Richard Wagner chose to plunge the hall into darkness for his performances in Bayreuth. A year earlier, in 1875, Alexander Graham Bell had invented the electric transmission of sound and then later, in 1901, Guglielmo Marconi relayed the first transatlantic telegraph transmission. Finally, in 1912, the same year in which Arnold Schoenberg presented his atonal work Pierrot Lunaire, Frantisek Kupka offered Amorpha: Fugue in Two Colours, an inaugural piece for the historiography of abstraction. These dates mark only a few of the moments in which, from the fields of philosophy, technology, and the arts, music and sound become central elements. From the atonal work of Schoenberg and the abstract piece of Kupka, we can trace a path between different artistic practices to situate ourselves in the field of *intermedia*, or "between categories," in Dick Higgins's (1966) words.¹⁰

Other modes of seeing, listening, and feeling space and time and of establishing relationships between sound and image were underway. If the paradigm of vision dominated thinking and praxis in the Western world since the time of ancient Greece, gradually, new approaches to sound and listening have invited us to rethink our relationship with the external and with ourselves. In this reassessment, sound art-nourished by a desire for experimentation that lies between the media and between what concerns sight and listeningplays an exceptional role. This intermedia position generates great riches but also makes it difficult to establish it as an artistic practice in its own right. Douglas Kahn declares in the introduction of his book, Noise, Water, Meat, "by sound I mean sounds, voices and aurality" (2001, 3). However, as Dan Lander reminds us in his introduction to Sound by Artists (Lander and Lexier 1990, 10), it is difficult to identify what sound art actually is due to its historical connection with music. Nevertheless, it is precisely their different ways of understanding the centrality of sound that enables us to point out additional differences. Although I cannot provide a complete analysis of the multiple conceptions of sound in music and sound art here, I will draw attention to two key turning points: sound in its relation to space and the reception of sound art works.

Interest in the relationship that music and sound have with physical space has called into question the distinction between spatial and temporal arts as promulgated by the aesthetics of the eighteenth and nineteenth centuries (Rousseau 1824, 483; Lessing 1962, chaps. 16 and 20; Kant 2000, §51). According to that aesthetic, music is an art that takes place only in time. In line with Lessing, Hegel explains that music, unlike painting, evolves over time and is related to the movements of the soul. Music is the formal interiority, the pure sound event. In Hegel's words: "Subjective inwardness constitutes the principle of music" (1976, 266). Consequently, the relationship between music and physical space calls into question this link between music and subjective inwardness. In Section II, I explain how sound art challenges the first cage and the dominant Western aesthetic. In Section III, I return to the implications for doctrines about music, art, and interiority.

II. SOUND IN SPACE: MUSIC AND SOUND ARTS

Music is the product of a sound culture that has progressively distinguished between musical and nonmusical sounds and, as the unwanted sounds are rejected, music is kept in a cage of sounds. Gradually, from the Baroque era until the end of the nineteenth century, music theory based on notions of pitches and the relations between them, chords and keys, ended up restricting musical material to the twelve notes and the modes, major and minor. Similarly, the instrumentation tended to exclude percussion and other instruments considered to be noisy.

In spite of this, in practice, music often escaped the theoretical cage that separated musical sounds from noises, such as in the case of *Il Combatimento di Tancredi e Clorinda* published in 1638, in the eighth book of Monteverdi's Madrigals, or *Indes Galantes* scene V (1735) by Jean-Philippe Rameau. In the first, to emulate the sounds of battle, Monteverdi does not hesitate to include tremolos, *pizzicati*, and trumpet fanfares. Meanwhile, in the work of Rameau, we can hear an earthquake in the hammering of the strings.

Despite these exceptions, music theory directed musical practice. Theoretical attention to the relationships between sounds in tonal music relegated the sounds themselves and their singularity to the background. Even today, prominent philosophers of music contend that music requires the transformation of sounds into tones through their placement in an established scale, locating the tones in an imagined, purely "musical space" (Scruton 1997, chap. 9). However, over the last century, sound itself has found a central place in the history of music. This move toward another concept of sound is evidenced by a range of works including Klangfarbenmelodie (sound-color melody) by Schoenberg, the soundscape proposals in the 1970s by R. Murray Schafer, recent works in sound ecology by Barry Truax or Hildegard Westerkamp, and other works, such as 4'33" (1952) by Cage or Gesang der Jünglinge (1955-1956) by Karlheinz Stockhausen. As Makis Solomos describes this change, it is a mutation that occurred within music itself and led to the passage from "a musical culture based on tone to a sound culture" (2013, 491). This mutation, which leads to a focus on the sounds themselves apart from any tonal status, has greatly contributed to the creation of sound art. This new emphasis on the centrality of sound in music is what Solomos calls a sound culture.

This passage from the field of music to a sound culture is also revealed by the discomfort some felt in maintaining the term "music" for certain compositions that strayed far from the established diktats (Varèse 1983, 56; Cage 1973d, 3). Eventually, the notion of music to describe these developments became less annoying. Alvin Curran explains: "It is the most extraordinary moment in music history, I think personally, because there are no longer any rules: you can do anything. Whether you use the Internet or you use a single stone, you can make music today" (Curran et al. 2009, 94).

In the transition toward a sound culture, the issue of space is especially relevant. In the 1950s, when the parameters of sound were being reconsidered, space appeared as an additional parameter of the composition. A central example is Stockhausen's Gesang der Jünglinge, a vocal piece based on the harmonization of electronically produced sounds with recorded human voices, as in the musique concrète. This work is composed for five loud-speaker groups that are distributed in such a way as to surround the public in space. The movement of sound in space contributes to the formal articulation of the work.¹¹ Today, the emphasis is on a morphological treatment that considers space to be intimately linked to sound; a space-sound (Solomos 2013, 454-455). With regard to the organization of sound in space and its perception, it is important to note that the consideration of space as a parameter of the composition is a way of asserting a logic of rationalization of that space—which is in keeping with the approach of serial music (Adorno 1998, 259-260). This rationalization, adopting the form of the measure, is also in keeping with developments in music in the eighteenth century with respect to time (Colloque de Royaumont 1998). The rationalization of time in musical scores went hand in hand with the technical advances in the time measuring instruments used in commerce and among salaried workers (Crosby 1997).12 Similarly, the rationalization of space in the musical score developed in parallel with the rationalization of urban space

in the graphical and statistical representation of demographics and land use, which have led to the homogenization and uniform criss-cross patterns of streets established in the cities. This parallelism between the score and the map is highlighted, among others, by Daniel K.L. Chua:

The score rationalises the fissured and layered patterns of medieval notation by containing music within a geometrical space that pictures the totality as a map. Indeed, like the Ptolemaic co-ordinate system which was adopted by the early sixteenth century to chart an empty globe for the inscriptions of newly 'discovered' territories, the handful of sixteenth-century scores presupposes an empty grid of parallels and meridians in the form of staves and barlines on which notes are inserted and newly discovered harmonies colonised. At times the number of notes does not even determine the spatial intervals between barlines; they are simply squeezed into a pre-existent lattice. (1999, 54–55)¹³

The rationalization of space associated with the progressive introduction of the telegraph and the telephone first altered the urban landscape by filling it up with cables and wires, and, now, with wireless technology, space is further saturated with electromagnetic waves that extend yet further to control the many objects in orbit around the planet. Space is therefore rationalized, everywhere, as occurred previously with the rationalization of time in the eighteenth century. It is not clear whether the morphological treatment of space-sound escapes this rationalization, and not all music has been included in this trend. The works of Cage and La Monte Young, or the work of Fluxus or ZAJ, are excellent examples of how some artists have chosen to reject this rationalization. The use of chance operations in the works of Cage involves, among other concerns, a critique of the notion of measurement which lies at the basis of the creation of musical time and which is reflected in the score.14 La Monte Young's The Tortoise, His Dreams and Journeys (1965), performed by the Theatre of Eternal Music before any score was written and without beginning or end, also goes against this rationalization. In the 1960s, the activities of Fluxus and ZAJ-groups that dealt with its aesthetic but were independent from it-also deviate from this rationalization. Examples include Comb Music (1962) by George Brecht, consisting of a card with instruction for performing, or the etcéteras by ZAJ, based on gestures, silences, phrases, and so on. These works are presented as concerts but have nothing to do with the way a traditional concert takes place.

The relationship of sound art with space and the related differences between sound art and music have become a common denominator when establishing the specificity of sound art. We can mention, for example, David Toop's reference to the Sonic Boom, an exhibition that he curated for London's Hayward Gallery in 2000. For Toop, the exhibition revealed sound art as being separate from the principles of the organization and the conventions of music. The works displayed were an exploration of the articulation of the physical environment of sound through media such as performance, specific site installations, or sound sculptures (Toop 2000). However, it is difficult to fully separate such nonmusical artistic practices from the world of music when considering how they emerged historically. Alan Licht (2009, 4) reminds us that one of the backdrops to this attention to the sounds themselves is in spatialized music composition. Likewise, we should not argue for increased interaction or immersion in sound if we believe that all listening is active and that sound organizations in space, such as the Polytopes by Iannis Xenakis in the 1970s, are immersion experiences similar to those of current works by sound artist Ryoji Ikeda. Nevertheless, we must also recognize that, on the whole, sound sculpture, installation, and performance feed from the leftovers of the relationship between the visual arts and the space in which they are performed, as is also evident in the case of the Xenakis's Polytopes. 15

In their relationship with space, many works of sound art are in line with works created by visual artists in the 1960s and together illustrate the expanded field of art making. Thus, as Licht suggests, there are important similarities between earthworks and sound art. Among other examples, Licht (2009, 5) highlights the likeness between Composition 1960 #10 (1960) by La Monte Young and Two Parallel Lines (1968) by Walter de Maria. The performance score of La Monte Young's #10, dedicated to Bob Morris, was: "Draw a straight line and follow it." It was interpreted by Nam June Paik in the Fluxus Internationale Festspiele Neuester Musik in Wiesbaden (1962), in a performance entitled Zen for Head, which formed part of a series of compositions in which Paik examined specific assumptions about music and art. In this interpretation, he dipped his head, hands, and necktie in a bowl of ink and tomato juice and, using his body as a calligraphy brush, drew a thirteen-foot line on a piece of paper. The second work, by de Maria, a former collaborator of La Monte Young and himself a musician, consisted of drawing two, mile-long parallel lines with chalk in the Mojave Desert of California. This work, entitled *Mile Long Drawing*, was created in 1968 and was displayed in a photograph that showed the artist lying between the two parallel lines. This project evidently dates back to 1962, when de Maria proposed the raising of two walls: *Mile Long Parallel Walls in the Desert*.

Both artists, Young and de Maria, are musicians, although their training and dedication in this area are unequal. However, there are many artists from the field of visual arts who have considered sound. Beginning with Marcel Duchamp and Kurt Schwitters and moving on to Alexander Calder, Joseph Beuys, or Bruce Nauman, the exchange of disciplines and practices is clear and explicit.¹⁷ Later there were exhibitions such as those by René Block, Für Augen und Ohren. Von der Spieluhr zum akustischen Environment. Objekte. Installationen. Performances (For eyes and ears: from the music box to the acoustic environment. Objects, installations, performances) held in the Academy of Arts of Berlin in 1980, or Sound/Art, curated by William Hellerman in 1983 and held in New York's Sculpture Center. Für Augen und Ohren is recognized as the first sound art exhibition in Europe.

Avant-garde musicians and visual artists come together in their desire to create works that are at the cutting edge of traditional views of fine arts and music. The links between sound and the space in which it takes place and/or moves will modify both consideration of sound and its relationship with space and time and its reception. Max Neuhaus, who began his career as a virtuoso percussionist but went on to become one of sound art's founders, makes this clear in a program note in 1974:

Traditionally composers have located the elements of a composition in time. One idea which I am interested in is locating them, instead, in space, and letting the listener place them in his own time. I'm not interested in making music exclusively for musicians or musically initiated audiences. I am interested in making music for people. (1994c, 34)

Neuhaus seems to associate time in music with the analytical perception carried out by most musicians and music lovers. His interest in making music for people, notwithstanding their musical knowledge, places him in consonance with the avant-garde proposal to renounce differences between art and life. The listener must be able to listen in his own time; the time of his life.18 This proposal, which approaches Cage's (1981, 235) position of a generalized permeability, implies a dimension of the space of daily life that becomes. in turn, the space of listening.¹⁹ Following the lead of Neuhaus, a number of sound artists have used the sounds of city streets as their space of listening. In Section III, I explore the idea that, listening to everyday life, we know where we are: it leaves us in our own time, not a different time marked by the sound.

III. IN THE STREETS OF THE CITY: SOUND AND LISTENING

Attention to the city, and to the way in which the tensions of city life modify sensitivity and create a new type of man, was expressed by the writers of the nineteenth century. From Edgar Allan Poe, E. T. A. Hoffmann, Charles Baudelaire, Arthur Rimbaud, Émile Zola, and Arthur Machen to Alain Robbe-Grillet and Italo Calvino in the twentieth century, the city is converted into an appropriated center to illustrate the dystopias and heterotopias of our times. According to Burton Pike (1981, 72), the literature on a static city, which has occupied a large part of the nineteenth century, was replaced at the end of the century by a perspective that highlighted the dynamic and fluid aspects of city life.

The city becomes a great producer of energy, not only economically, as Friedrich Engels (1969) suggested in 1845, but also in terms of sensibility. The city provides the substrate from which art extracts its new content. Futurists announced this, and, in the walks taken by Dadaists through unexceptional areas of Paris, we find a precedent to the Walks initiated by Neuhaus. In 1966, Neuhaus had decided to leave the concert hall and listen to the sound of the city. Subsequently, he proposed Listen, a series of listening walks in which he invited audiences to listen in public spaces. These walks were carried out until 1976. The listening walks began by stamping the word "Listen" on

the hands of the participants. Participants were invited to be aware of the daily sound environment (Neuhaus 2011, 190–192). Proposing excursions outside of the usual tourist routes and bringing along concert audiences are actions that reveal an artistic interest in everyday routines and offer an aesthetic credential to sights and sounds that tend to go unnoticed. Time and space are interwoven in this experience and may become, as in the case of Neuhaus, a way of articulating concepts that enable processes of individual experience.

At the end of his life, Neuhaus (2004) divided all his work into eight categories called "vectors": invention, networks, moment, passage, performance, place, sensation, and walks. In particular, two of these categories concern us here: moment and place. The *moment pieces* or *time pieces* can be listened to in different places, such as the sound of bells. The *place pieces* are sounds from a specific place or works created for a specific place. The *moment pieces*, as explained by the artist, are listened to in the space in which you are and not only in the place where the sound is generated, while the *place pieces* are listened to in the individual's own time (Neuhaus 1994a, 1994b).

Time Piece Stommeln (2007) was the last moment piece created by Neuhaus. This permanent piece is presented as "a communal sound signal for the Stommeln Synagogue with soundings at Halachic Hours in the town square of Stommeln" (Neuhaus 2007). In order to create this piece, Neuhaus examined the ways of life of Stommeln, paying particular attention to both acoustic and visual elements of the symbolic site. Neuhaus wanted to create a sound that could be integrated into the sounds of the context but that, at the same time, could be perceived when it disappeared. The synagogue had been sold to a farmer in 1937, and since the 1920s it had not been used for religious rituals. The synagogue was, therefore, the symbol of a community that had lost its voice. Time Piece Stommeln was located in the Town Square adjacent to the synagogue. "Neuhaus says he wanted to give voice to this 'vacant house of spirit,' to give a voice to a building in which chanting has not been heard for more than eighty years" (Loock 2007). The sound created by Neuhaus starts at an imperceptible level. It is mixed in with the sound context and is hardly noticeable, then it continues increasing in volume for a few minutes, and then suddenly disappears. In that moment, in the silence of the remaining sound,

it is possible to perceive it as an "after-image" (Neuhaus quoted by Loock 2007). The intermittent presence of the sound increases attention to the sounds of the environment. When people are aware of the sound that has disappeared, they go beyond everyday perception modes. For attentive participants, sounds and space are perceived with heightened awareness, and the listening can be a rewarding aesthetic experience.20 In this context, the aesthetic experience modifies perception and may alter the understanding of what has been lived. Time Piece Stommeln communicates that the possibility of this kind of aesthetic experience is always available in the ordinary life of people and does not belong only to the space of the concert hall. Neuhaus proposes that this aesthetic experience of everyday life is also an ethical experience: "The works of this kind rest on two basic ideas. One is to deal in a complex way with a broad spectrum of people, both culturally initiated and uninitiated. The other idea is that they can enter into people's daily lives" (1994a, 58). According to Brandon LaBelle, Neuhaus's project of modifying the public's listening to everyday life makes listening a political activity in which sound and space are understood as foundational elements of the conditions of life in the city (LaBelle 2006, 158-160).²¹

Neuhaus's work is one example of a larger movement, in which the soundscape is formed by all the environmental sounds, and the music is part of them. During the twentieth century, the boundaries between music and environmental sound were progressively blurred. Russolo invented the intonarumori (1913) with which he was able to intone noise "enharmonically"; Antheil's Ballet Mécanique (1926) combines sounds of the industrial age, such as airplane propellers, with jazz and atonal music; both Honegger's Pacific 2 3 1 (1924) and Villa Lobos's Little Train of the Caipira (1930) imitates the noise of a train. Pierre Schaeffer's musique concrète (1948) worked with "concrete" sounds and included environmental sounds in the composition of musical pieces, and Cage's 4'33" (1952) and 0'00" (1962) opened the concert hall to environmental sound.²² Seen against the backdrop of this enlarged soundscape, "music has a special relationship with this sonic environment," Schafer proposes, "a pure or ideal reflection of the real situation" (2010, 88).

However, this reflecting function can also be applied to the works of sound art. The sounds can be heard as reflections of society and, I would add, as symptoms of what is happening in society. The Sonambiente Festival held in 2006 in Berlin is an example of this. The festival's codirector. Matthias Osterworld, said "sound art is very often an intervention into a certain site, is a reflection of space, of the given space, of the social situation" (Paci Dalò 2006). The city is conceived as a basis upon which to create the work of sound art. These works can be seen as an intervention into the diversities of sounds, rhythms, dynamics, and textures of the city sounds which, in turn, reflect urban life. Objects or the issues that matter to citizens can be material for the work, following the postulate of nondistinction between art and life. Such was the case with Christina Kubisch's work, The Royal Tree (2006), which was installed among the branches of the oldest tree on the Schleusenbrücke at Schlossplatz, or with Tilman Küntzel and Alfred Behrens, who decided to install two works. Maintenance Measures for the SoundUnit Fan and Soundwall and You'll never walk alone-European Stadium Sounds, in connection with the 2006 football World Cup, which was being held in the city at the time of the festival.

Llorenç Barber's cities concerts, which use the city as an instrument, follow the same line.²³ These city concerts stem from listening to those sounds that are not being listened to—because they have always been there, or because they have been repudiated. A concert of a city is an exercise in rewriting space that is alive.

Listening to the sounds of the city may also have a political dimension, representing a path toward a different way of learning to think and relate to the city, as well as to oneself. In this way, listening reveals itself as a model for creating an "acoustic politics of space" (LaBelle 2010, xix). Listening to Barber's city concerts or the proposals of Sonambiente Festival 2006 in relation to the city, we should question the paradigm shift involved in moving from the visual model of knowledge to the aural. In all cases, the spatial element is present, both physically and through sound. Perceiving the city through sound reveals a discontinuous and heterogeneous space, as opposed to the perception of space through sight, whose representation is continuous and divisible. In my view, this acoustic politics of space includes the revision of the visual paradigm discussed in Section I and puts into question the model of listening and sound as interiority and as the privileged constituent of the creation of subjectivity. It will be recalled that this model was assumed by the theoreticians of German romanticism, such as Herder, Hoffmann, Wackenroder, and, in the generation that followed, by Schopenhauer.²⁴ The inherited model of romanticism is based on a modern philosophy of subjectivity that understands the subject as substance.25 In this model, the relationship between music and subjectivity is established by music's power to transform the listener by acting on the temporal structure of the sense of self. The nonspatial, temporal organization of the autonomous music was seen as responsible for this transformation (Clarke 2005, 145, 148–149). Opposing this model, some music of the twentieth century encourages us to break up this subjectivity and expand it, or make it proliferate in the sense of Deleuze and Guattari (Charles 1978a, 265-269; 1978b, 232). Faced with the substantial concept of modern subjectivity, Deleuze and Guattari (1980, 9) explain in the introduction of A Thousand Plateaus that the subject is not one but several. They propose a more fluid conception of subjectivity: a nomadic subjectivity. This subjectivity, a difference of identity, is polyphonic and implies experimentation (1980, 469-470; Guattari 1992, 39). This conception of subjectivity is consistent with the type of listening which promotes sound art. Accordingly, the spatialization of music and the importance of space in works of sound art also contribute to uprooting aesthetic theory from the modern idea of subjectivity.²⁶

Clearly, the presence and even the ubiquity of sound have already called into question the representational model associated with primacy of the visual, suggesting new connections between the visual and auditory. However, it does not necessitate a paradigm shift in favor of the auditory or the substitution of one model for another. The very characteristics of sound and those of listening are in line with a society that has been described as 'liquid modernity' (Bauman 2000). But the emergence of sound art forces us to use caution when proposing potential contributions for a change of paradigm.

Sound art may well be the contribution that indicates, first, that there is no longer a division between the arts of time and space. That division led to a conception of the history of art that did not take into account the history of sound. Christian Marclay's *Time Line* (1999) confronts this situation by looking at the period from 1780 to 1960 and showing the difference between the fields of

sound and visual art with regard to public, critical. and economic value (Neset 2013, 16).27 Sound art contests the duality, or separation, between arts of time and space. The majority of sound art projects incorporate both sound and image. In many cases, such as in the work of Carsten Nicolai, the process leading to the production of sound and image is the same. For example, Nicolai's installation unidisplay (2012) with real-time projection, largescale screens, mirror walls, and benches with loudspeakers, is created, as the artist explains: "with Derivative's Touchdesigner software which has been used for alva noto live performances with a triple-screen projection" (Nicolai 2012).²⁸ This rejection of the opposition of the auditory and the visual invalidates both prioritization of the visual and any proposal for an alternative hierarchy. The aural model, which arose through the enhancement of aurality, has been offered as an alternative model in itself; however, its theoretical implications have still not been properly studied, given the difficulty of establishing a suitable vocabulary for it in accordance with its practices.²⁹ Addressing this difficulty, phenomenological or reduced listening was highlighted first by Pierre Schaeffer and then by Salomé Voegelin (2010, 150), with the aim of modifying the relationship between the sound experience and the appropriate vocabulary used to deal with this experience. Sound art connects the visual and the aural by other means, without hierarchies which weaken the experience and its comprehension. Sound art can lead to an unedited mode of establishing links between two domains that were considered separate and often exclusive. Thus, works that actively explore the relationship between looking and listening, such as Ridge on the Horizontal Plane (2011) by Luke Fowler and Toshiya Tsunoda, encourage us to consider the overall specialization of the senses. The appropriate response is to consider what sound contributes specifically (LaBelle 2006; Voegelin 2010) and to recognize that listening, in addition to the specific nature of the sonorous, is always contextualized internally and/or externally (Kim-Cohen 2009). This means that we should reexamine the traditional division between the internal and the external, and, consequently, between the works themselves and the public.

If the arts of time are traditionally assigned to interiority—the classical aesthetic upon which the fine arts are based—and the arts of space are currently assigned to exteriority, then in breaking

with this system, sound art illustrates that it is inappropriate to maintain this distinction. However, the notion of interiority in relation to sonic experience and exteriority with respect to visual experience remains current in followers of Walter Ong (1999, 67) and the Toronto School.³⁰ The problem lies in the established nexus between the listener, generating an interior experience of subjectivity connected with temporality, and sound, particularly in traditional music, which develops in time. But when music was released from its cage to meet with other sounds, proposals were made to detach listening from memory and interiority. Varese's Ionisation (1929-1931) was the first serious work in Western music written entirely for percussion. This work is written for thirty-seven percussion instruments, of which only threecelesta, piano, and chimes-are tuned according to equal-tempered scale. This music of timbres and rhythms requires an alternative kind of listening. In this respect, Cage is also exemplary. His objective is the nonmental: a lack of distinction between the spiritual and the material world, between subject and object.³¹ His work from the 1950s specifically proposes the dismantling of memory, a task which he makes possible by questioning ideas on proportion and harmony (Pardo 2014, 28).

Sound art participates in this decoupling of listening from interiority. Sound art encourages engagement with what is given to both vision and listening, producing an upheaval of the notions of spatiality-externality and temporality-interiority. As Licht stresses, sound art tends to deal with sound as a natural and/or a technological phenomenon, as opposed to one that reveals human expressivity (Licht 2007, 14). The sound is inseparably connected with a physical space that makes you feel it qualitatively, encouraging you to feel and think about the life of that place. Neuhaus (1994c, 34) stated that placing the elements of the composition in the space left listeners in their own time. The aim was not, however, for the sound to inject its own time in the listener, thus relegating to the background the spatial and visual experience. The listener's own time may be affected by the experience of sound in space, but the immanence of the sound, in this case, does not lead to an internalization in which the sound runs linearly. The philosophy of sound art and experimental music rejects the narrative model of musical forms which is normally applied to tonal music and which contributes to the theorization of the listener as one who performs an internalization exercise linked to memory.

For one final example, consider Surround Me: A Song Cycle for the City of London (2010–2011) by Susan Philipsz. She was struck by the silence of the financial district in London at weekends. Inspired by the vocal music in Elizabethan London, Philipsz's voice is heard through empty streets that run from the Bank of England to the River Thames. The song cycle cannot be separated from the space in which it resonates. Directed at what is exterior, listening is not located in the so-called quiet interiority of a subject that is already constituted. The work exemplifies the difficulty of considering listening only as internalization. In addition, the nexus and the simultaneity between sound and image in such works of sound art mean that what is visible to the eye cannot be relegated to a contrasting absolute exteriority. The notions and the experiences of interiority and exteriority begin to falter. This art form also requires setting aside a concept of pure listening in which sound is exempt from any interference, empirical or mental. The internal and external are interwoven.

IV. CONCLUSION

Cage stated that "an ear alone is not a being" (1985b, 32). The ear is also a body that feels and a mind that thinks. There is not one unique type of listening, but rather, various modalities that can exist in the same listener. The practices of sound art have blurred the distinction between the arts of time and space, between the internal and the external, as well as between their correlates: the subject and the object.

The practices of sound art appeal to a new kind of commitment to the production of works and their perception and therefore demand new means of generating subjectivity on the part of both the artists and the public. The subject is not separate from the object as it is in established epistemology with pretensions of univocal, corresponding truth, although this may not be fully discarded. In sound art, the simultaneity and the ephemeral character of the sound are central, showing that the processes of subjectivity are multiple and polyphonic. Listening can take on processes aimed at identity or multiplicity following the production of new

forms of subjectivity, based on experimentation and the rejection of dualistic positions.³²

The weakening of the visual paradigm and the appearance of sound art should lead to a rethinking of the aesthetic. Sound art implies that the aesthetic of the future will not be based on clear and distinct principles, connected to discrete categories of art; instead, it will accept complexity. It should start, as Daniel Charles proposes, by cleaning the ears and end by becoming a way of life (1978b, 230, 235). This aesthetic is yet to be developed. The cage is about to open.

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REFERENCES

- Adorno, Theodor W. 1998. "Music and New Music." In Quasi una Fantasia. 249–268. London and New York: Verso.
 Bauman, Zygmunt. 2000. Liquid Modernity. Cambridge: Polity.
 Bosseur, Jean-Yves. 1992. Le sonore et le visuel. Paris: Dis Voir.
 Cage, John. 1973a. "Composition as Process: III. Communica-
- Cage, John. 1973a. "Composition as Process: III. Communication." In Silence: Lectures and Writings, 41–55. Wesleyan University Press.
- ——. 1973b. "Diary: How to Improve the World (You Will Only Make Matters Worse) Continued 1968 (Revised)." In M: Writings '67-'72, 3-25. London: Calder and Boyars.
- . 1973c. "Experimental Music." In Silence: Lectures and Writings, 7-12. Wesleyan University Press.
- 1973d. "The Future of Music: Credo." In Silence: Lectures and Writings, 3-6. Wesleyan University Press.
 1973e. "45' for a Speaker." In Silence: Lectures and
- Writings, 146-193. Wesleyan University Press.

 ——. 1973f. "Indeterminacy." In Silence: Lectures and Writ-
- ings, 260–273. Wesleyan University Press.

 1973g. "Lecture on Nothing." In Silence: Lectures and
- Writings, 109-127. Wesleyan University Press.
 ——. 1981. For the Birds: In Conversation with Daniel
- Charles. Boston and London: Marlon Boyars.

 ———. 1985a. "Diary: Audience 1966." In A Year from Monday: New Lectures and Writings, 50-51. London and New
- York: Marion Boyars.

 1985b. "Happy New Ears." In A Year from Monday:
- New Lectures and Writings, 30-35. London and New York:
 Marion Boyars.

 1985c. "Juilliard Lecture." In A Year from Monday:
- New Lectures and Writings, 95-111. London and New York: Marion Boyars.
- ——. 1993. John Cage: Writer. Selected and introduced by Richard Kostelanetz. New York: Limelight Editions.
- Cage, John, and Roger Reynolds. 1987–1988. "Entretien (1961)." In Revue d'Esthétique. Nouvelle série, n°.13-14-15: 393–401.
- Cassin, Barbara. 1980. Si Parménide. Le traité anonyme De Melisso Xenophe Gorgia. Presses Universitaires du Septentrion.

- Chambers, Ian. 2009. "The Aural Walk." In Audio Culture: Readings in Modern Music, edited by Christoph Cox and Daniel Warner, 98–101. New York: Continuum.
- Charles, Daniel. 1978a. "La musique et l'oubli." In Le temps de la voix, 256-269. Paris: Jean-Pierre Delarge.
- ——... 1978b. "Musique et subjectivité." In Le temps de la voix, 226-255. Paris: Jean-Pierre Delarge.
- Charbonnier, Georges. 1970. Entretiens avec Edgard Varese. Paris: Editions Pierre Belfond.
- Chua, Daniel K. L. 1999. Absolute Music and the Construction of Meaning. Cambridge University Press.
- Clarke, Eric F. 2005. Ways of Listening: An Ecological Approach to the Perception of Musical Meaning. Oxford University Press
- Colloque de Royaumont. 1998. La Rationalisation du temps au XIIIe siècle: Musique et mentalités, edited by Catherine Homo-Lechner. Paris: Centre Européen pour la recherche et l'interprétation des musiques médiévales: Foundation Royaumont.
- Crosby, Alfred W. 1997. The Measure of Reality. Quantification and Western Society, 1250–1600. Cambridge University Press
- Curran, Alvin, et al. 2009. "Around the Avant-Garde: Avant-Garde and Counterculture. A Round Table with Terry Riley and Alvin Curran. Presented by Carmen Pardo." In *The Limits of Composition?* edited by Carmen Pardo, 73–94. Madrid: La Casa Encendida.
- De Kerckhove, Derrick. 1989. "McLuhan and the 'Toronto School of Communication." Canadian Journal of Communication 14(4): 73-79.
- Decroupet, Pascal, and Elena Ungeheuer. 1998. "Through the Sensory Looking-Glass: The Aesthetic and Serial Foundations of Gesang der Jünglinge." Perspectives of New Music 36: 97-142.
- Deleuze, Gilles, and Félix Guattari. 1980. "De la ritournelle." In *Mille Plateaux. Capitalisme et Schizophrénie*. 381–433. Paris: Les Éditions de Minuit.
- DeNora, Tia. 1995. Beethoven and the Construction of Genius: Musical Politics in Vienna, 1792-1803. University of California Press.
- Engels, Friedrich. 1969. "The Great Towns." In *The Condition* of the Working Class in England. 57-93. London: Panther Edition.
- Feldman, Morton. 1969. "Between Categories." *The Composer* 1(2): 73-77.
- Fürst-Heidtman, Monika. 2005. "Der spanische Komponist Llorenç Barber." Musik Texte: Zeitschrift für Neue Musik 104: 47-78.
- Goddard, Don. 1983. "Sound/Art: Living Presences." In Sound/Art, edited by W. Hellerman. New York: The Sculpture Center, BACA/DCC Gallery: The Sound Art Foundation. Exhibition catalog.
- Goehr, Lydia. 1997. The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music. Oxford University Press
- Guattari, Félix. 1992. Chaosmose. Paris: Galilée.
- Hegel, Georg Wilhelm Friedrich. 1976. Vorlessungen über die Aesthetik. Berlin/Weimar: F. Bassenge.
- Higgins, Dick. 1966. "Intermedia." The Something Else Newsletter 1: 1-3. New York: Something Else Press.
- Hornsey, Richard. 2012. "Listening to the Tube Map: Rhythm and the Historiography of Urban Map Use." Environment and Planning D: Society and Space 30: 675-603
- Kandinsky, Wassily. 1946. On the Spiritual in Art. Translated and edited by Hilla Rebay. New York: Solomon R. Guggenheim Foundation.

- Kahn, Douglas. 2001. Noise, Water, Meat: A History of Sound in the Arts. MIT Press.
- Kant, Immanuel. 2000. Critique of the Power of Judgment, edited by Paul Guyer. Translated by Paul Guyer and Eric Matthews. Cambridge University Press.
- Kim-Cohen, Seth. 2009. In the Blink of an Ear: Toward a Noncochlear Sonic Art. London and New York: Continuum.
- Kostelanetz, Richard. 2003. Conversing with Cage. New York: Routledge.
- LaBelle, Brandon. 2006. Background Noise: Perspectives on Sound Art. New York and London: Continuum.
- ——. 2010. Acoustic Territories. New York and London: Continuum.
- Lander, Dan, and Micah Lexier, eds. 1990. Sound by Artists.
 Toronto and Banff: Art Metropol and Walter Phillips Gallery.
 Lemoine, Serge, et al. 2003. Aux origines de l'abstraction, 1800–1914. Paris: Réunion des Musées Nationaux.
- Lerdahl, Fred, and Ray Jackendoff. 1983. A Generative Theory of Tonal Music. MIT Press.
- Lessing, Gotthold Ephraim. 1962. Laocoon: An Essay on the Limits of Painting and Poetry. Translated by Edward Allen McCormick. Indianapolis: Bobbs-Merrill.
- Licht, Alan. 2007. Sound Art: Beyond Music, Between Categories. New York: Rizzoli.
- 2009. "Sound Art: Origins, Development and Ambiguities." Organised Sound 14: 3-10.
- Liddell, Henry George, and Robert Scott. 1982. A Lexicon: Abridged from Liddell and Scott's Greek-English Lexicon. Oxford: Clarendon Press.
- Loock, Ulrich. 2007. "The Time Piece for the Stommeln Synagogue." Max Neuhaus. http://www.max-neuhaus.info/ bibliography/Stommeln.htm.
- Meyer, Leonard B. 1956. Emotion and Meaning in Music. University of Chicago Press.
- Neset, Anne Hilde. 2013. "Expressway to Yr Cochlea." In Soundings: A Contemporary Score, edited by Barbara London, 16-19. New York: The Museum of Modern Art.
- Neuhaus, Max. 1994a. "Lecture at the Siebu Museum, Tokyo, 1982." In Sound Works, Vol. I: Inscription. 58–70. Ostfildern-Stuttgart: Cantz.
- ——. 1994c. "Program Notes." In Sound Works. Vol. I: Inscription. 34. Ostfildern-Stuttgart: Cantz.
- 2000. "Sound Art?" In Volume: Bed of Sound. New York: P.S.1 Contemporary Art Center. Exhibition catalog.
 2004. "Vectors." Max Neuhaus. http://www.max-
- ______. 2004. "Vectors." Max Neuhaus. http://www.max-neuhaus.info/soundworks/vectors/.
- ———. 2007. "Time Piece Stommeln." Max Neuhaus. http://www.max-neuhaus.info/soundworks/permanent/.
- . 2011. "Listen." In *Sound*, edited by Caleb Kelly, 190–192. MIT Press and Whitechapel Gallery.
- Neuhaus, Max, and Ulrich Loock. 1994. "A Conversation between Max Neuhaus and Ulrich Loock, Milan, March 25 1990." In Sound Works. Vol. I: Inscription, 122-135. Ostfildern-Stuttgart: Cantz.
- Nietzsche, Friedrich. 1988. Sämtliche Werke: Kritische Studienausgabe, Vol. I, edited by Giorgio Colli and Mazzino Montinari. Berlin and New York: Walter de Gruyter.
- Ong, Walter. 1999. "Orality, Literacy, and Modern Media." In Communication in History, Technology, Culture, Society, edited by David Crowley and Paul Heyer, 60-67. New York: Longman.
- Paci Dalò, Roberto. 2006. "Sonambiente, Berlin Plays from the Roots." Digicult 16: http://www.digicult.it/digimag/issue-016/sonambiente-berlin-plays-from-the-roots/.

- Pardo, Carmen. 2014. La escucha oblicua. Una invitación a John Cage. Madrid: Sexto Piso.
- Pike, Burton. 1981. The Image of the City in Modern Literature.
 Princeton University Press.
- Plato. 1997. Complete Works, edited by John M. Cooper. Indianapolis: Hackett.
- Pritchett, James. 1993. The Music of John Cage. Cambridge University Press.
- Retallack, Joan. 1996. Musicage: John Cage in Conversation with Joan Retallack. Wesleyan University Press.
- Rousseau, Jean-Jacques. 1824. "Essai sur l'origine des langues." In Œuvres Complètes, vol. II, edited by Victor Donatien de Musset [Musset-Pathay]. Paris: Dupont.
- Sacks, Oliver. 2010. The Mind's Eye. New York: Knopf.
- Sauge, André. 2011. "Considérations lexicales et grammaticales sur quelques fragments de Parménide." Sintaktika 41: http://syntaktika.revues.org/78.
- Schafer, R. Murray. 1994. The Soundscape: Our Sonic Environment and the Tuning of the World. Rochester: Destiny Books.
 2010. "Soundscape and Acoustic Ecology." In ARTE SONoro, LXXXIV-XCIV. Madrid, La Casa Encendida.
- Scruton, Roger. 1997. The Aesthetics of Music. Oxford University Press.
- Slouka, Mark. 2009. "Listening for Silence: Notes on the Aural Life." In Audio Culture: Readings in Modern Music, edited by Christoph Cox and Daniel Warner, 40-46. New York: Continuum.
- Solomos, Makis. 2013. *De la musique au son*. Presses Universitaires de Rennes.
- Steinberg, Michael P. 2006. Listening to Reason: Culture, Subjectivity, and Nineteenth Century Music. Princeton University Press.
- Sterne, Jonathan. 2003. The Audible Past: Cultural Origins of Sound Reproduction. Duke University Press.
- Stévance, Sophie. 2009. *Duchamp, compositeur*. Paris: Harmattan.
- Toop, David. 2000. "Sonic Boom." In *Sonic Boom*, 107–131. London: Hayward Gallery Publishing. Exhibition catalog.
- 2011. "Haunted Weather: Music, Silence and Memory." In Sound, edited by Caleb Kelly, 206-207. MIT Press and Whitechapel Gallery.
- Treib, Marc. 1996. Space Calculated in Seconds. The Philips Pavilion, Le Corbusier, Edgar Varèse. Princeton University Press.
 Treitler, Leo. 1990. "History and Music." New Literary History 21: 299–319.
- Varèse, Edgard. 1983. Écrits. Paris: Christian Bourgois.
- Voegelin, Salomé. 2010. Listening to Noise and Silence. New York and London: Continuum.
- Weber, Max. 2004. Zur Musiksoziologie. Nachlaß 1921. Vol I/14 of Max Weber Gesamtausgabe, edited by Christoph Braun and Ludwig Finscher. Tübingen: Mohr Siebeck.
- 1. Although the term "sound art" dates back to 1982 and William Hellermann's Sound Art Foundation and it has been used in a number of different exhibitions, as Alan Licht explains: "None of these exhibitions purported to be an exhibition of sound art per se, but as a result, there has been a tendency to apply the term 'sound art' to any experimental music of the second half of the twentieth century, particularly to John Cage and his descendants" (2007, 12).
- 2. Max Neuhaus (2000), considered one of the pioneers of sound art, explains in the introduction to the exhibition Volume: Bed of Sound: "If there is a valid reason for classifying and naming things in culture, certainly it is for the refinement of distinctions. Aesthetic experience lies in

the area of fine distinctions, not the destruction of distinctions for promotion of activities with their least common denominator, in this case sound. Much of what has been called 'Sound Art' has not much to do with either sound or art" (hypertext file, n.p.).

- 3. Barbara Cassin (1980, 549) explains that Plato assumes a sense of knowing that is linked to vision and that is conveyed by the Greek language. This connection appears in the translations of the *Poem* of Parmenides. See, for example, Sauge (2011, 4). Note the meaning of $\varepsilon i \delta o \varsigma$ according to Liddell and Scott: "that which is seen, the form. shape, figure" (1982, 195).
- 4. Regarding the notion of music—of harmony, in particular—as being locked in a cage, Cage wrote in a letter to music editor Enzo Perruccio, "Percussion is completely open. It is not even open-ended. It has no end. It is not like the strings, the winds, the brass (I am thinking of the other sections of the orchestra), though when they fly the coop of harmony, it can teach them a thing or two" (1993, 247, my italics).
- 5. Cage's position opposes those who believe that there is a structural similarity between language and music. For these academics, particularly Leonard B. Meyer and followers of the generative theory of tonal music by Fred Lerdhal and Ray Jackendoff, musical perception is the product of a tonal system of relationships. According to Meyer, a musical event has no meaning in itself; it must be oriented toward another. In consequence, the key to the experience of emotion and meaning in music is, for Meyer, the expectation which needs to be learned. However, in generative theory, there are also inborn principles that guide the perception of musical structure. As a result, the perception of tonal relationships can also be seen as intuitive (Meyer 1956, 84, 138; Lerdahl and Jackendoff 1983, 4, 281).
- 6. Cage's first contact with this tradition of thought took place in the 1930s when he attended a conference organized by Nancy Wilson Ross, entitled "Zen Buddhism and Dada," in the Cornish School of Seattle. Ten years later, at the end of the 1940s, he took an intense interest in Oriental philosophy and attended the classes of Daisetz Teitaro Suzuki over a period of three years at the University of Columbia. Cage (1991) himself mentions the influence of Alan Watts and offered a list of readings which are of special interest with respect to the subject: The Art of Zen by Stephen Addis, Doctrine of Universal Mind by Huang-Po, Neti Neti by L. C. Beckett, and Ten Oxherding Pictures. In 1989, he expressed a desire to read Wittgenstein and Buddhism by Chris Gudmunsen (Kostelanetz 1993, 241–242).
- 7. "When we separate music from life what we get is art (a compendium of masterpieces). With contemporary music, when it is actually contemporary, we have no time to make that separation (which protects us from living), and so contemporary music is not so much art as it is life and any one making it no sooner finishes one of it than he begins making another just as people keep on washing dishes, brushing their teeth, getting sleepy, and so on. Very frequently no one knows that contemporary music is or could be art. He simply thinks it is irritating. Irritating one way or another, that is to say keeping us from ossifying. For any one of us contemporary music is or could be a way of living" (Cage 1973a, 44–45).
- 8. This is a reference to a well-known anecdote told by Cage (1973f, 261) in which Schoenberg told him that his

- absence of feeling for harmony would be an obstacle, like a wall through he could not pass.
- 9. Recall note 3 and Nietzsche's reading of Platonism and Socratism as movements that have determined the course of Western thought and art (Nietzsche 1988, Die Geburt der Tragödie aus dem Geiste der Musik, §14, and Socrates und die Tragoedie, 533-549).
- 10. Further reading on the emergence of abstraction, in particular its connection between the visual arts and music, and in relation to the scientific context of the era, can be found in the magnificent catalogue Aux origines de l'abstraction, 1800-1914 (Lemoine et al. 2003), a work of major importance produced by the Musée d'Orsay in Paris.
- 11. A detailed analysis of this work can be found in Decroupet and Ungeheuer (1998, 97-142).
- 12. In his study of the rationalization process that leads to capitalism in the West, Max Weber (2004, 277) analyzes music as an example of this rationalization. He explains that the harmonic structure, the development of modern instruments and the musical notation are the consequence of the rationalization process.
- 13. The parallelism between map and score is also used to reflect on new relationships between cartography, history, interpretation, and power. For example, Richard Hornsey (2012, 675–693) suggests using urban maps in a manner similar to the use of a musical score.
- 14. In the words of Pritchett, "Rather than being only simple metrical values (such as quarter or eight notes), the durations ... are the result of adding several different simple durations" (1993, 79).
- 15. With regard to the proposals of Xenakis, the work of reference remains the excellent book by Marc Treib (1996).
- 16. For a description of *Zen for Head*, see http://web.guggenheim.org/exhibitions/thirdmind/paik_bio.swf.
- 17. For more on this subject, see Bosseur (1992) and Stévance (2009).
- 18. This is not the place to discuss the spatial implication of tonal music that occurs both in performance and in its graphical representation in the score. Musical vocabulary is full of spatial references, although these may not always be attributed to a physical space that becomes audible. We may find certain exceptions throughout the history of music, such as the polychoric music by Gabrieli in late-Renaissance Venice. Undoubtedly, Neuhaus is referring to the prevailing consideration of music as temporary art and its influence on the listener.
- 19. Neuhaus (Neuhaus and Loock 1994, 130) explains that both he and Cage were focused on sound, but the difference was that Cage decided to take the sound of the street to the concert while he took people to the sounds of the street.
- 20. The same is true with the place pieces. The most famous place piece by Neuhaus is *Times Square* (1997). Information about it is available at: http://www.maxneuhaus.info/soundworks/vectors/place/. There are two videos of *Time Piece Stommeln* and *Times Square* at: http://www.max-neuhaus.info/audio-video/.
- 21. In many of Neuhaus's works, the city is converted into the musical score and our soundscape, reflecting Raymond Murray Schafer's (1994, 5) ideas in the 1970s.
- 22. The consequences of this sound-silence and of the relaxation of the musical space subsequently led to the disappearance of the notion of *the work* and the elimination of the distinction made between art and life.

- 23. For a first approach to the Barber's work, see Fürst-Heidtman (2005).
- 24. For more on the cultural history of music in this period, see Steinberg (2006).
 - 25. For analysis and criticism, see Charles (1978b).
- 26. Subjectivity does appear in relation to these works, but it is dynamic and also conceives its relationship with things as dynamic (Voegelin 2010, 94). In this sense, see also Toop's (2011) description of a work by Janet Cardiff.
- 27. The late development of the history of music and musicology with respect to the history of art in general is an example of the difference between the two areas: sound and visual. As Lydia Goehr (1997, 201-204) explains, before the nineteenth century, the notion of pieces of music-in the sense of works enduring beyond their performance-did not exist. In addition, the ephemeral status of music, before the invention of sound reproduction, meant that any music produced was lacking in historical consciousness. As has been said, music history and musicology did not develop properly until the nineteenth century, and that development owed much to the methodology of art history. Musicology, according to Treitler, was a "parasitic discipline" (1990, 299). Before Beethoven, who redefined the relationship between the patron and composer, a musician was not considered as an independent artist (DeNora 1995, 145). All of this affected the consideration given to music in relation to its place in society and the manner in which it was integrated into the economy.
- 28. Alva Noto is the alias used by Nicolai for his musical creations. See the reference and the video of this installation at: http://www.carstennicolai.de.
- 29. The possibility of the emergence of an aural model is recognized in some texts, such as Slouka, where it is

- explicit that the "sound will have its dominion" (2009, 41), in the vision of the aural walk of Chambers (2009, 98–101), in the function of Voegelin's (2010, 95, 154–155) aural histories, and in LaBelle's (2010) analysis of acoustic territories as sound culture.
- 30. According to Derrick de Kerckhove (1989, 73), the "Toronto School" term was coined by Jack Goody and Ian Watt, and the main contributors were Eric A. Havelock, Harold Innis, Edmund Carpenter, Marshall McLuhan, Northrop Frye, and Walter J. Ong. In his explanation of the characteristics of sound, Ong writes: "The principal one of these other characteristics is the unique relationship of sound to interiority when sound is compared to the rest of the senses" (1999, 67). Jonathan Sterne criticizes this position, considering it an idealization of hearing and referred to it as "the audiovisual litany" (2003, 15). Sacks (2010, 104) criticizes the duality between listening and looking by showing the way in which people who have lost some sensory ability adapt by using other sensory capacities, which shows that the brain works by the interaction among all the sensory organs; he compares it to a big orchestra. See also Sterne (2003, 15).
- 31. On several occasions, Cage (1973bb, 18; 1973e, 158; 1981, 56-57) expresses his conviction that Western civilization is a prisoner of dualism and that it is necessary to open up the ego.
- 32. In the introduction of A Thousand Plateaus, Deleuze and Guattari write: "Principle of multiplicity: it is only when the multiple is effectively treated as a substantive, 'multiplicity,' that it ceases to have any relation to the One as subject or object, natural or spiritual reality, image and world" (1980, 14). See also the analysis of the ritornello by Deleuze and Guattari (1980, 381–433).