
Sound Art: Origins, development and ambiguities

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This article provides an overview of sound art, encompassing its history and artistic development, and the complexities of the term's use as a categorisation. It starts with various definitions employed and the ways that recent museum exhibitions have left the genre's parameters seemingly open-ended, as well as the problems to be faced in finding a 'frame' for sound in an exhibition setting. The article then lays out the roots of the form's aesthetics, including the disjunction between sound and image afforded by the invention of recording, *musique concrète*, and spatialised composition through the centuries. Sound art's relationships to the 60s art movement Earthworks, ambient music, sound by visual artists, architecture, sound sculpture, surveillance, sound design and sound ecology are explored to contextualise its significance not only to different disciplines within the arts to but sound's place in contemporary society. At the conclusion, two recent works by D.A.M.A.G.E. and David Byrne, which loom somewhere in-between music and sound art, are considered in light of the increasingly fluid interpretation of sound art's identity.

1. INTRODUCTION

Sound art holds the distinction of being an art movement that is not tied to a specific time period, geographic location or group of artists, and was not named until decades after its earliest works were produced. Indeed, the definition of term remains elusive. Bernd Schulz has written of it as 'an art form ... in which sound has become material within the context of an expanded concept of sculpture ... for the most part works that are space-shaping and space-claiming in nature' (Schulz 2002: 14). David Toop has called it 'sound combined with visual art practices' (Toop 2000: 107). The glossary of the anthology *Audio Culture* describes it as a 'general term for works of art that focus on sound and are often produced for gallery or museum installation' (Cox and Warner 2004: 415). Bill Fontana has referred to his sound installations and real-time transmissions as 'sound sculptures' but that term has also been applied to sound-producing visual works by Harry Bertoia, the Baschet Brothers, and many others. Unlike music, which has a fixed time duration (usually calculated around a concert programme length, or more recently the storage capacity of LP,

tape, or compact disc formats), a sound art piece, like a visual artwork, has no specified timeline; it can be experienced over a long or short period of time, without missing the beginning, middle or end.

2. RECENT EXHIBITIONS AND DIFFICULTIES IN CURATION AND PRESENTATION

The term itself dates back to William Hellermann's SoundArt Foundation, founded in the late 1970s, which produced a 1983 exhibition at the Sculpture Center in New York, *Sound/Art*. It gained currency in the mid- to late 1990s, when I first heard it, starting perhaps with the first Sonambiente festival in 1996, culminating in three important shows in the year 2000: *Sonic Boom: The Art of Sound*, curated by Toop at the Hayward Gallery in London; *Volume: A Bed of Sound*, curated by Elliott Sharp and Alanna Heiss at PS1, New York; and *I Am Sitting In A Room: Sound Works by American Artists 1950–2000*, curated by Stephen Vitiello as part of the *American Century* exhibition, Whitney Museum, New York. The Hayward show particularly reflected the mix between the art world and the fashionable electronica music scene of the 1990s, with Brian Eno, Scanner, Pan Sonic, Paul Schultze and Ryoji Ikeda included, while the PS1 threw experimental musicians from the rock (Lou Reed, the Residents, Cibo Matto) and jazz (Ornette Coleman, Muhal Richard Abrams, Butch Morris) worlds alongside longstanding sound installationists such as Max Neuhaus (who wrote a note for the exhibition (Neuhaus 2000) disparaging a tendency to 'call what is essentially new music something else – "Sound Art." ... Aesthetic experience lies in the area of fine distinction, 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'). *I Am Sitting in A Room*, by including time-based pieces by composers such as John Cage, Philip Glass, Glenn Branca, Meredith Monk, Steve Reich and Laurie Anderson, made to be heard in performance or on a

recording, further blurred the distinctions between sound art and experimental music.

Of course, Steve Reich and Philip Glass presented concerts at the Whitney in the early 1970s, and Laurie Anderson performed in galleries later in that decade; but the question remains, does a piece of music become sound art simply when it's presented in a museum? The Whitney survey followed a concert programme format, even though it only presented recordings (many, but not all, commercially available), but if the pieces had been presented as installations, would that have 'elevated' them to sound art status? If a DVD of David Lynch's 1978 film *Eraserhead* was shown as an installation, would that then become 'video art'? I think not.

Museums are still working out effective ways to exhibit sound works. In the New Museum's *Unmonumental* (2008), which examined contemporary collage, there were separate sculptural, two-dimensional, online and sound components. The sound pieces were played over loudspeakers but not identified other than a back announcement at the piece's conclusion, which was fairly inaudible above the din of the museum's visitors. The works were reduced to anonymous background music. In PS1's *Organizing Chaos* (2007), the high-volume soundtrack of Christian Marclay's video *Guitar Drag* was audible in every other room of the exhibition, providing an unwitting soundtrack to the rest of the show, even to other sound pieces or films or videos that had their own soundtracks (Marclay perhaps took this into consideration in curating *Ensemble* at the ICA Philadelphia (also 2007), in which he wisely put multiple sound sculptures in one large room and had them create their own collective, ever-changing sound environment). In Jane and Louise Wilson's 2008 sound installation *The Silence is Twice as Fast Backwards* at the 303 Gallery in New York, the piece is heard throughout the space, even as a visitor walks past the keyboard clicking and chatter of the gallery's reception desk, surely an unwanted sonic overlay. For all the interest in sound art, there is still little effort made in exhibitions to distinguish it from music in a decorative mode and present sound works as self-contained pieces.

3. AESTHETIC PRECURSORS TO SOUND ART

The roots of sound art lie in the disjunction of sound and image afforded by the inventions of the telephone and audio recording as well as the ages-old notion of acoustic space. With the experience of hearing each other's voices as well as other sounds divorced from their source, sound became an ever more instantaneous identifier as image had been. In 1925 Kurt Weill called for an 'absolute radio' as an

answer to silent films, which consisted of montages of pure images, consisting of noises, sounds of nature, and 'unheard sounds' (Freire 2003: 69). Futurist F.T. Marinetti's *radio sintesi*, an audio montage of sounds, was made around the same time, and in 1929 Walter Ruttmann created *Weekend*, an 11-minute response to filmic 'city symphonies' that brought together various sounds documented in one weekend in Berlin. By the late 1940s and early 1950s, Pierre Schaeffer and Pierre Henry were taking recordings of documentary sounds and processing them to the point of unrecognisability, divorcing them even further from their original source and initiating the genre of *musique concrète*. The other value of recording tape, besides its malleability, was its capacity for repetition, not only by rewinding and playing a recording over again but by forming tape loops in which the machine would play a given section of tape over and over without interruption. Such repetition made possible the sort of close study of sounds that one would usually associate with a frozen visual image, or with the notation of specific pitches in a musical score.

This sort of careful attention to sound has an antecedent in spatialised music composition and the attention to acoustic design in architecture. Bill Viola has written that 'ancient architecture abounds with examples of remarkable acoustic design – whispering galleries where a bare murmur of a voice materializes at a point hundreds of feet away across the hall or the perfect clarity of the Greek amphitheatres where a speaker, standing at a focal point created by the surrounding walls, is heard distinctly by all members of the audience' (Viola 1990: 41). Certain buildings' echo effects provide a precursor to the tape loop; Bernhard Leitner cites the example of the Taj Mahal's 'huge empty domed space above the crypt. The mass, the weight of the walls, the shape and dimensions of the dome ... and the extremely hard and polished surfaces ... sustain a tone for up to twenty-eight seconds. In this space, a simple melody played on a flute will interweave with itself, going on and on to become an almost timeless sound' (Conrads 1985). In the sixteenth century, composer Giovanni Gabrieli composed for St Mark's Basilica in Venice, which had two choir lofts and two organs facing each other. Such methods were increasingly lost as opera houses and concert halls were developed in the seventeenth to nineteenth centuries, where the sound simply emanated from a central stage. In the middle of the twentieth century, Henry Brant began to compose spatially; his *Antiphony I* (1953) is scored for five orchestras spread across the stage and auditorium. Karlheinz Stockhausen followed by composing the electronic piece *Gesang der Jünglinge* (1956), a tape piece for voices and electronics that utilised five loudspeakers spread throughout the concert hall.

4. DEVELOPMENT OF SOUND INSTALLATION AND SOUND ENVIRONMENTS

The two strains of disjunctive sound and spatialisation were brought together in the Philips Pavilion at the 1958 World's Fair. Edgard Varèse's *Poème électronique*, an electronic composition, and Iannis Xenakis' *Concret PH*, a tape piece made from the sounds of burning coal, were played repeatedly as an installation through 450 loudspeakers inside the Pavilion, which was designed by Le Corbusier (assisted by Xenakis). Slides and films were also shown, making it a multi-media spectacle, but it was also the first significant sound installation. Yasunao Tone had a sound installation in a Tokyo gallery four years later – a tape recorder playing a loop, hidden beneath a white cloth (to disguise the physical source of the sound). That year, 1962, was also when La Monte Young formulated the idea of a Dream House, a building in which continuous sustained tones would be heard in perpetuity, something he put into practice by running sine tones in own loft 24 hours a day in the mid-1960s, and ultimately realised in long-term locations at 6 Harrison St and 275 Church St in New York.

One of Young's friends in California was future land artist Walter De Maria, and the two continued their association when both relocated to New York in the very early 1960s. De Maria's early written sketches for earthworks, such as *Beach Crawl* and *Art Yard* appear alongside Young's conceptual pieces (instructing performers to feed a piano a bale of hay, build a fire in front of the audience, or set butterflies free in the concert hall); his 1962 *Two Parallel Lines* (of chalk, realised in the Nevada desert some years later) resembles Young's *Composition 1960 #10*, which read 'Draw a straight line and follow it'. De Maria also introduced Young to his own benefactor, Heiner Friedrich. Friedrich's gallery realised both De Maria's *Earth Room*, in which two feet of dirt covers the gallery floor, and a short-term Dream House, which of course fills a room with sound.

Nor was this the only similarity between earthworks of the late 1960s and 1970s and the early sound art works of the same time period. The translocation of Robert Smithson's non-sites, in which he took soil from various locations and re-situated it in galleries, is particularly felt in Maryanne Amacher's *City Links* series begun in 1967, in which sounds from urban environments were transmitted in real time to another location, sometimes an exhibition space but later her own home studio; Bill Fontana's *Kirribilli Wharf* (1976), an eight-channel sound installation made from sounds captured in an Australian pier; and Annea Lockwood's *Piano Transplants*, in which pianos were partially buried in her English garden or submerged in a pond (in Amarillo Texas, also the site

of the Ant Farm's *Cadillac Ranch*, a series of Cadillacs planted nose-first into the ground). Bruce Nauman's *Untitled Piece* (1970) instructed drilling a hole a mile into the earth and placing a microphone inside, which would feed into an amplifier and a speaker in an empty room. Alan Sonfist's *Time Landscape* (1965), which took an abandoned lot in downtown New York and re-created its rock and soil formations from centuries before, is reminiscent of later sound works such as Hans Peter Kuhn's installation at the closed steelworks Volklinger Hutte (of sounds recorded when it was still operating) or Ron Kiuvila's installation at Mass MoCA (which recreates the sounds of the factory its building once was).

Max Neuhaus, who like these other artists worked with sound from environment and as environment, is also a pioneering example of an instrumentalist who abandoned performance completely to work with sound as an 'entity'. A percussionist who became an acclaimed performer of experimental music by John Cage, Morton Feldman, Stockhausen, among others, by the mid-1960s he was conducting *Field Trips Through Found Sound Environments*, leading audiences from a meeting place at a concert hall to power and subway stations to listen to the sounds found there. In his *Water Whistle* pieces, listeners heard sounds produced by jets of water by lying on their backs in swimming pools and putting their heads under water. Friedrich's Dia Art Foundation maintains his installation in New York's Times Square, a soothing drone placing under the grating of a pedestrian triangle.

A little over a decade after Neuhaus started his field trips, German flautist Christina Kubisch left performance behind in favour of doing sound installations, at first constructing wire reliefs mounted on walls and a speakerless sound system that utilised magnetic induction, with the sounds heard through receivers or, later, cordless headphones. Rolf Julius emerged in Germany around the same time as Kubisch; he was not formerly a musician at all but a visual artist. Early works such as *Music for a Frozen Lake*, in which he played a tape of piano sounds beside a frozen lake, or *Desert Piece* show an affinity with land art; he is best known for his works using 'small sounds', placing small speakers on stones, bowls, flower pots or glass to make them vibrate, using chirps, whirrs and drones playing through the speakers at a low volume. Julius would prove highly influential to latter-day sound artists such as Stephen Vitiello (whose wave form series, in which he hangs speakers in a wave form as they pulse with subsonic frequencies, seems particularly indebted to Julius) and Steve Roden (who describes his own sound world as 'lowercase'). Julius' and Kubisch's activities laid the groundwork for their homeland's current status as a centre for sound art, boasting not only the month-long Sonambiente festival but several galleries

that showcase sound works (Singhur, Galerie Rachael Haferkamp, Stadtgalerie Saarbrücken), an Institute for Sound Art in Hamburg, an online magazine *Moderne Klangkunst*, and an audio magazine, *Because Tomorrow Comes*.

5. SOUND ART AND AMBIENT MUSIC

At the same time that Kubisch and Julius were moving towards sound installation, rock producer and performer Brian Eno was developing his concept of ambient music. Informed by the ‘music of knives and forks’ of Erik Satie (not to mention his epic repetitive work, *Vexations* (1893), in which a melody and its two harmonisations are repeated over 800 times), Eno created instrumental pieces with an eye towards ‘building up a small but versatile catalogue of environmental music suited to a wide variety of moods and atmospheres’. While much sound art sought to place emphasis on examining the sounds, Eno felt ambient music ‘must be as ignorable as it is interesting’ (Eno 1978). This was realised on a series of albums in the late 1970s and early 1980s, including *Discreet Music*, *Music for Airports* (initially an installation at New York’s LaGuardia airport) and *On Land*; these found little audience with Eno’s progressive rock fan base at the time, but by the early 1990s Aphex Twin and other electronic artists had developed Eno’s ideas into a niche market, with dance clubs creating ‘ambient chill-out rooms’ in which club-goers could just sit and listen to drifting electronic soundscapes. Much of the alignment (or confusion, depending on your perspective) between sound art and electronica stems from this period, where it would be admittedly easy, on first glance, to draw parallels between the ambient chill-out room and the sound installation in a gallery, and ambient music’s emphasis on environment as opposed to melody, harmony or conservative musical structure of any kind. Yet ambient was meant to decorate a room, not redefine it; it was perhaps a commercialisation of some of sound art’s concerns, not an extension or a mirror of them. At the same time, both the ambient chill-out room and a sound art installation can provide a respite from an urban environment, as an atrium would – the sounds are often meant to evoke natural settings.

Ryoji Ikeda, Carsten Nicolai, DJ Spooky and Scanner went back and forth between the art and electronic music worlds, also attracting experimental music fans and more adventurous underground rock listeners. Working with digital detritus – glitches, clicks, and buzzes – they also produce small sounds (albeit sometimes heavily amplified). But at moving parties such as New York’s Soundlab, sound would also be created in various corners of the room – a kind of spatialisation, even if the room’s specific acoustic

were not necessarily accounted for. Soundlab’s co-founder, Beth Coleman, told Philadelphia’s City Paper, ‘I have a friend who lives on the east side near a big power plant. One morning she was walking home from one of our shows, and she heard the hum of that plant and it sounded like music to her’ (Adams 1997). This fulfills John Cage’s desire that all sounds be listened to as music, as well as recalling Neuhaus’ field trips. DJing was also viewed as live aural collage, as in the Happenings of the 1960s, and even referred to as sound sculpture (yet another definition) by DJ Spooky (a more compelling argument could be found in the work of Christian Marclay, who creates ‘recycled record’ sculptures by breaking records apart and gluing different pieces back together and then DJing with the results, rather than Spooky’s own cut-up soundscapes). And the crossover continues to be felt as recently as Christina Kubisch’s *Invisible/Inaudible: Five Electrical Walks* CD (2007), in which she uses recordings of her ‘electrical walks’ (where pedestrians equipped with magnetic induction headphones pick up otherwise inaudible electric signals that are converted into sound, to create studio compositions that emphasise rhythms created by the signals and could easily be associated with electronic instruments), and Stephen Vitiello’s *Listening to Donald Judd* CD (also 2007), in which Vitiello takes field recordings of himself ‘playing’ Donald Judd sculptures at Marfa Texas (i.e. extracting sound from them by physically hitting them or interacting with them) and then drops beats into the mix later in the studio.

In these cases, a sound art piece or gesture becomes material for a music composition. Vitiello and Kubisch were both instrumentalists and composers before turning their attention to sound art activity, and both have consistently released recordings of their work throughout their careers. Earlier sound artists such as Maryanne Amacher and Yasunao Tone resisted recording and releasing their work because they felt its spatiality would be lost in a stereo recording, although both have released CDs since the late 1990s; Trimpin and Bernhard Leitner have not recorded their installation work at all. The time limitations of vinyl records also discouraged them and other artists who were working with installations that were intended to be free of such constraints. This also correlates to video art, where releasing a video art piece commercially would devalue it and erase its identity as an installation work (of course, sound art is even more ephemeral, and therefore difficult to collect, than video art). It should be noted, however, that galleries have released records by visual artists as a kind of multiple; and that Brian Eno has written that the introduction of studio effects to create the illusion of space, such as echo, has brought ‘the process of making music much closer to the process of painting’ (Eno 1996: 294).

This points to the ongoing intermingling of aesthetics between visual art and music that has persisted for centuries. The acceptance of sound art within the art world may be due in part to an increasing feeling that exhibitions or events dealing with sound or music (particularly rock music) will bring people into museums, but the obscure history of sound works by visual artists also helped pave the way. In the Dada era, Marcel Duchamp made three music compositions that pre-date Cage's chance music by decades, while Raoul Hausmann initiated sound poetry, a powerful disruption of language that is still overlooked in Modernist histories. Later, Jean Dubuffet carried his Art Brut practice into improvised cacophony with a variety of instruments, and Yves Klein translated his monochrome paintings into a 'Symphony of Monotone-Silence', which sustained a single chord and a silence for an equal period of time. Fluxus, as a kind of neo-Dada movement, produced a great deal of music performances and scores by Yoko Ono, Young, Philip Corner, Nam June Paik, Takehisa Kosugi, Dick Higgins, Wolf Vostell, and many others, while Vito Acconci used sound extensively in his installation pieces of the 1970s. Artists such as Ono, Laurie Anderson, Julian Schnabel, Rodney Graham and Fischerspooner have also made bids for crossover pop success, with varying degrees of acceptance from the art world.

6. SOUND ART AND ARCHITECTURE

Beyond finding inspiration from the outdoor environment, sound art has also served to articulate indoor spaces. In Alvin Lucier's classic tape piece *I Am Sitting in a Room* (1970) Lucier records and re-records the sound of his own voice, playing the results back into a room over and over until what is heard is no longer the sound of his voice but that of the room's resonances, retaining the rhythms of his speech. While formally a process music work like Steve Reich's early phase pieces, its culmination is an example of sound art, as Lucier shifts the focus from the voice (the 'music' as it were) to the performance space itself.

Bernhard Leitner is a trained architect, who has worked with sound installations since the early 1970s. In his *Sound Cube* (1968, realised 1980) he had a set of speakers on six walls sending sounds travelling through the rooms, making aural lines, circles and planes; in *Sound Field IV* ten loudspeakers are placed on the floor and covered with stone slabs, keeping the sound low to the ground and giving the listener the sensation of wading through sound waves.

Maryanne Amacher has noted the difference between 'structure-borne sound', which travels 'through walls, floors, rooms, corridors' and 'airborne sound', which is experienced by standing before a loudspeaker (Durner 1989: 29). In her *Music for Sound-Joined Rooms*, an ongoing series begun in 1980, she studied specific

buildings' architectural features and then created 'sonic events' for each room, hallway and staircase.

7. SOUND SCULPTURE AND THE LATENCY OF SOUND

Sound sculpture – i.e. sculpture produced with an inherent sound-producing facility, as opposed to a musical instrument crafted to produce specific pitches – is the oldest form of sound art, dating back to the ancient Chinese lithophones (stones that are hit with a mallet to produce vibrations). Its more modern precedents include Marcel Duchamp's 1916 Dadaist work *A bruit secret* (a ball of yarn with a mysterious object inside that makes a sound when shaken), Russolo's *Art of Noises* manifesto of 1913 (which advocates listening to the sounds of car engines and trains as opposed to music) and John Cage's *First Construction in Metal* (1939), which used anvils as part of its score. Its foremost mid twentieth-century practitioners – Harry Bertoia, Francois and Bernard Baschet, and Jean Tinguely – came from different backgrounds (Bertoia a furniture and jewellery designer, Francois Baschet a sculptor, Bernard Baschet a sound engineer, and Tinguely a kinetic sculptor), but each emphasised sonority as a physical property. Bertoia crafted long metal rods that sway and collide to create bell-like tones and metallic drones; the Baschets also used rods, abetted by inflated balloons, cones or sheets of metal to amplify the sounds, which sounded uncannily electronic, despite being produced acoustically; Tinguely used wheels, motors, cans, glasses to create a variety of machines, which he often invited the public to activate.

The latency of sound in sound sculpture is a quality shared with other works of sound art. Consider Kubisch's aforementioned electrical walks, the Japanese art collective WrK's *Phase Difference Between Two Windows by Using Line Vibrations* (2001), in which the vibrations of two windows in a gallery space are amplified to the point of audibility by contact mics, or Alvin Lucier's declaration that 'Every room has its melody hiding there until it is made audible' (Lucier 1990: 196) (as demonstrated in *I Am Sitting in a Room*). So, sound art is concerned with examining not only all apparent sounds of the environment, but all *unapparent* sounds as well. John Cage's famous anechoic chamber experiment, in which he discovered that even in a supposedly sound-free environment he could still hear the sounds of his own circulatory system, confirmed the inescapability of sound and is the cornerstone of these later experiments. It also confirms the association of sound with being alive (and of silence with death); one of the psychological underpinnings of seeking out the latency of sound in objects (or in silence) would be that the object was actually somehow alive – and that if it was alive it was in some sense a companion.

Related to the ideas of both teasing unseen sound or acoustic phenomena out of a space and importing or exporting sounds from elsewhere is that of surveillance, which is a facet of certain sound art works. Brandon LaBelle's *Learning from Seedbed* (2003) revisits Vito Acconci's infamous performance piece where he continually masturbated and vocalised his sexual fantasies, hidden from view under a ramp in a gallery. LaBelle placed contact mics on a ramp to create a steady feedback hum that could be modulated by movement on the ramp but also to transmit visitors' movements and comments into another gallery space. Janek Schaefer's piece *Recorded Delivery* (1995) followed the first 72 minutes of a package's journey through the postal service, via a sound-activated Dictaphone machine enclosed in the package (Bernhard Gal's *Soundbagism* (2004) recorded the journey of a checked bag through an airport in a similar fashion). Scanner (aka Robin Rimbaud) did numerous recordings and performances picking up people's cell phone conversations using a scanner, which he would mix in with electronic music. In these instances sound is used to raise social issues of what is private and what is public, but these works also raise the question of whether sounds themselves have a right to privacy – whether all sounds are meant to be heard.

8. RELATED AREAS: SOUND DESIGN, SOUND ECOLOGY

Sound design is another offshoot of the electronic technologies of sound amplification and reproduction. Certainly the sound effects of radio, in particular for radio plays, are an early example of sound design; Orson Welles used his background in radio to great effect in the soundtrack to *Citizen Kane* (1939), but sound design in film was slow to develop overall. While surround sound had been experimented with in the mid-1950s, it wasn't until the late 1970s, with the introduction of the Dolby system, that film theatres approached high-fidelity sound. Walter Murch became the first person to be credited as a sound designer (as opposed to a sound editor) on a film, for Francis Ford Coppola's *The Conversation* (1974), because of union regulations. His work on Coppola's *The Godfather* (1972) used sounds instead of the customary incidental music to emphasise dramatic passages, and his background in *musique concrète* proved instrumental in his approach to working on the sound in these and other films, layering sounds on tape to achieve unique effects.

Nowadays, everything from computers to theatrical productions to cell phones to greeting cards are sound designed; this is a testament to the rise in the primacy of sound brought about by the technologies of sound reproduction, as well as to the perceived

anthropomorphic traits of sound alluded to above. It also contributes to the overall interest in sound that has led to the higher visibility of sound art since the late 1990s. However, the increase in sounds around us has also led to more density in an already highly saturated ambient soundscape. Sound ecology, a movement which roughly parallels the development of sound art temporally, addresses questions of noise pollution and urban vs. rural soundscapes. Canadian R. Murray Schafer has led the quest, founding the World Forum for Acoustic Ecology (formerly the World Soundscape Project) and writing a seminal text, 1977s *The Tuning of the World*. Schafer and compatriots such as Hildegard Westerkamp and Barry Truax made dozens of recordings of different soundscapes across the globe, coming to the conclusion that the noise of the modern world is often at odds with the environment, and urging that limits be set on ambient sound levels in industrialised societies. They also pioneered soundscape composition, a variant of *musique concrète* in which field recordings were electronically processed to some degree but fundamentally left recognisable. Truax has noted that soundscape composition simulates a journey, or motion, through a landscape; soundwalks by Westerkamp often include narration to make this explicit (artist Janet Cardiff has also done soundwalks, although with an emphasis on a fictional narrative that the listener assumes a role in, rather than the soundscape). The sense of a timeline in soundscape compositions ultimately marks them, to my mind, as music rather than sound art.

Environmental soundscapes provide a key to sound art's progression from music, particularly the compositions of John Cage. While Cage encouraged listening to all sounds (and silence) as music, he still worked with prescribed scores, indeterminate though they may be. There is no score to ambient sound in its raw form, which, if placed in an ongoing exhibition setting, is the aural equivalent to the Duchampian readymade that Cage drew inspiration from. The paradox is that both environment and architecture provide models for sound art works; architecture is of course a subset of environment, but architecture is created by mankind for mankind and other living creatures while much of the environment is naturally formed. Sound and hearing are phenomena that extend far beyond the human experience – all life forms may experience sound, and sound may even exist in areas of the universe where there are no life forms – which leads to the egalitarian nature of sound art. The relationship between the creator of a sound art work and one who experiences it is one of listener-to-listener – a relationship Cage himself established with his groundbreaking 'silent piece', 4'33" – not the traditionally hierarchical relationship of composer or performer to layman.

9. IS IT SOUND ART?

Two recent works – a 2008 installation by artist and musician David Byrne and a presentation by D.A.M.A.G.E. (Misha Mross and David Brown) at the 2007 Cornell University Sound Art Forum – are exemplary of the ambiguities of present-day sound art. Byrne's *Playing the Building* was installed in the disused waiting room of a ferry terminal in lower Manhattan. Visitors were encouraged to play a small, weathered organ, which was hooked up to pipes, plumbing, beams, and other built-in metalworks via long cables. When keys were pressed, the surfaces would be struck to produce clanking sounds, whistling flute sounds, and low rumbles from motors pressed against girders. The room became a giant sound sculpture, with the organ acting as a kind of sampling keyboard. However, because the onus was on the visitor to produce the sounds, in a way the piece was more about non-musicians making music than it was about the sounds themselves. That the piece was titled 'playing the building' and not 'listening to the building' is telling. The relationship of Byrne to the installation's visitors is that of player-to-player, not listener-to-listener. While the sounds were spatialised, it was more for effect than to articulate or outline the acoustic space. The use of the organ, both as a controller and as a signifier, made the installation part sound sculpture, part impromptu music concert.

D.A.M.A.G.E. devised a large plastic beach ball as a controller for a custom sequencer/synthesiser. The ball is passed along to the audience, and as it is bounced around a variety of permutations of a fixed number of tones are generated. Sonically, the result is electronic music, programmed but still leaving a certain element to chance. Yet it is also interactive – there is no 'music' per se unless the audience keeps the ball going, and the music stops if the ball becomes inactive. What once might have been simply regarded as a novelty type of experimental music performance must now be reckoned with in light of the properties of sound art, as the ideas of latency and disdain for traditional performance are at play here. We are now in an era in which the exploration of sound by musicians, artists, sound artists, designers and engineers often falls in between categories such as music or sound art.

10. CONCLUSION

As a term, 'sound art' is mainly of value in crediting site or object-specific works that are not intended as music per se. Much like rock and roll, a purist view of sound art becomes very narrow, and much of what is called or categorised as sound art can be just as easily viewed as a hyphenated fusion of sound art with an

experimental musical style. As sound artist Steve Roden wrote to me in late 2007, 'sound is not a medium that developed through a clean linear trajectory and ended as a real movement like Futurism or even Fluxus ... it's a messy history that includes a lot of wonderful things. Development for most of us was piecemeal and personal, not as a group evolving together.' A universal definition and definitive history of sound art may not be likely, for these reasons; but ultimately it is better to honour sound pieces created in a non-time-based, non-programmatic way as being sound art as opposed to music than to simply shoe-horn any sound work into the genre of experimental music, or to practise the lazy revisionism of blanketing any experimental sound composition, performance or recording under the rubric of sound art.

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