Sound Art: Discourses of Definition in the Contemporary Artworld

Aruna Devi Bhaugeerutty

Submitted for the degree of *Doctor of Philosophy* School of Arts and Cultures, Newcastle University August 2017

Abstract

Since the turn of the millennium, the term 'sound art' has gained increasing prominence while generating persistent discussion and debate. This study explores questions surrounding the definition of sound art through an analysis of these discourses. It also applies a Foucauldian notion of discourse to the concept of genre in order to promote a non-essentialist definition of sound art that is pursued through a project of clarification rather than classification. The research draws from a wide range of sources, from online symposia, magazine articles and publications to art exhibitions and their materials, to expose some of the conflicting and convergent representations of sound art within the artworld. Critical analysis of key ideas and themes identified in this source material is supported through reference to the history and theory of art and music as well as genre and culture.

Sound art is an ambiguous and mutable concept that shares concerns with other forms such as experimental music and sonic art but has also developed specific generic meaning. Despite an apparent reluctance to define sound art, the category plays an active and important role within the institutions, industries and academies of the artworld. High-profile survey exhibitions such as *Sonic Boom* (Hayward Gallery, London, 2000) and *Volume* (MoMA PS1, New York, 2000) have been a major contributing factor to the growth but also uncertainty of sound art's discourse due to their idiosyncratic and inconsistent representations of the genre and the ways in which sound challenges artistic traditions of display. They also highlight ideological tensions relating to the categorisation of contemporary art in postmodernity, which is rooted in modernist concepts of media, in showing how sound art simultaneously invites and resists definition.

Sound art is typically concerned with issues of sound, space and perception. There are many competing interpretations of these definitional ideas, however, arising from a simultaneous association with and differentiation from the traditions of music and the visual arts. The ensuing institutional battle of territories and phenomenological battle of the senses pulls towards and away from the visual respectively. This unique cluster of tensions underpins the discourse of sound art and affords a categorical porosity and liminality that ultimately characterise it.

Issues of definition are therefore central to the identity of sound art. An in-depth understanding of the ontological debates and dialectics within its discourse not only draws attention to sound art as a conceptual, philosophical and material exploration of artistic and human experience but also exposes the way in which the arts evolve and artistic meaning is created to provide an insight into the very nature and value of art itself.

To Anand, Shanti and Meena

For your inspiration, support and love

Acknowledgements

I would like to thank a number of individuals and organisations for their support during this research project.

Funding from the AHRC enabled me to begin my postgraduate journey as a Masters student and then continue my studies at Doctoral level.

I have also received invaluable advice from a range of experienced academics over the course of my studies. Thanks to Christopher Whitehead for encouraging me to pursue research, Bernadette Buckley for focusing my interests, Rhiannon Mason for her guidance on the PhD experience, and Atau Tanaka whose knowledge of the field has provided some helpful perspectives. I am especially indebted to David Clarke for his expert supervision and generous support that has enabled me to complete this project.

Fellow postgraduate students at the International Centre for Cultural and Heritage Studies, Culture Lab, and the International Centre for Music Studies at Newcastle University provided a supportive and stimulating environment in the early years of my doctoral study. I am also grateful to my colleagues from the Ashmolean Museum at Oxford University for their flexibility and support during the years I have been attempting to juggle both work and study.

I would like to thank my friends for their encouragement and patience over the years. A special thanks to Katie Harland, Adam Potts, Amy Hinks and Miles Phillips for their practical help, such as reading through drafts of my writing and contacting image copyright holders, and unwittingly becoming an informal student support team.

My family have provided relentless encouragement and support but also the opportunities and inspiration for me to pursue challenges such as this PhD – I dedicate this study to them.

Contents

	Abstract	iii
	Acknowledgements	v
	List of Images and Sounds	ix
1	Introduction: Sound Art and the Problem of Definition	1
	Research aims and approaches	1
	State of the field	4
2	Beyond Music: Situating Sound Art as a Category	39
	From music to sound: Experimentation in history	39
	From music to art: The emergence of sonic practices	49
3	A Matter of Extremes: Sound Art and the Fear of Definition	69
	Fears of essentialism: Categories of art in theory	69
	Fears of constructivism: Categories of art in action	78
4	Making Waves: Sonic Boom and the Art of Sound	91
	Curatorial rationale: From machines to oceans	94
	Reception problems: The rules of sound art	118
5	Triple the Volume: Sound Art as a Category of Media	139
	Volume: Exhibiting sound art, or music?	139
	Treble: Exhibiting sound art, or art?	152
6	Sensual Territories: The Distinguishing Features of Sound Art	187
	Territorial tensions: From space to place	187
	Sensorial tensions: From sound to reality	197
7	Conclusion: The Significance of Definition for Sound Art	215
	Key findings	215
	Research implications and future directions	216
	References	225
	Appendix: Audio CD	255

List of Images and Sounds

Figures

1.1	Audium 'Theatre Of Sound-Sculptured Space', San Francisco	6
1.2	Engine 27 'sound gallery', New York	6
1.3	Listening post for Jem Finer's Longplayer, Trinity Buoy Wharf Lighthouse,	
	London, 2000	7
1.4	Scenes from Janet Cardiff's sound walk The Missing Voice (Case Study B), 1999	7
1.5	Resonances, Stadtgalerie Saarbrücken, Germany, 2002	9
1.6	Online investigations into the subject of sound art	11
1.7	Online symposia on the subject of sound art	13
1.8	Raw Materials, Tate Modern, London, 2004-5	14
1.9	Sons et Lumières, Pompidou Centre, Paris, 2005	18
1.10	Visual Music, The Museum of Contemporary Art, Los Angeles, 2005	19
1.11	ArtReview magazine sound issue, May 2005	21
1.12	Invisible Geographies, The Kitchen, New York, 2006	23
1.13	Music is a Better Noise, MoMA PS1, New York, 2006	24
1.14	Susan Philipsz at the site of her prize-winning sound installation Lowlands,	
	George V Bridge, Glasgow, 2010	26
1.15	Sound Art: Sound as a Medium of Art, ZKM, Germany, 2012-13	29
1.16	Online archives of sound	31
1.17	Creative mappings of sound art discourse by J. Milo Taylor, 2009-11	37
2.1	John Cage and Pierre Schaeffer	41
2.2	Marcel Duchamp, Fountain, 1917	42
2.3	Score page and detail of John Cage's 4'33", 1952-3	42
2.4	Frequencies [Hz], Schirn Kunsthalle, Frankfurt, 2002	62
4.1	Architectural drawings of Sonic Boom, Hayward Gallery, London, 2000	92
4.2	Installation views of Sonic Boom, Hayward Gallery, London, 2000	93
4.3	Brian Eno, 'Civic Recovery Centre Proposal (Quiet Club)' (stills, and under	
	construction), Hayward Gallery, London, 2000	96
4.4	Lee Ranaldo, 'HWY SONG' nos. 1-3, Vienna Kunsthalle, 2003	96
4.5	Christian Marclay, 'Guitar Drag' (still), 2000	97
4.6	John Oswald, 'Janèad O'Jakriel, after G. Platt Lynes' (still), 2000	97
4.7	Stephan von Huene, 'Extended Schwitters', 1987	99

4.8	Chico MacMurtrie, 'Yoyo Berimbau', 1999	99
4.9	Paulo Feliciano and Rafael Toral, 'Toyzone', Hayward Gallery, London, 2000	99
4.10	Design for Max Eastley and Thomas Köner's 'List of Japanese Winds', 2000	101
4.11	Paul Burwell, 'If You Were Born in '33, You Would Have Been '45 in '78'	
	(under construction), 2000	101
4.12	Details from Project Dark's 'Step', 1998-2014	101
4.13	Philip Jeck, 'Off the Record', Hayward Gallery, London, 2000	102
4.14	Pan Sonic, '2 x 50 Hz Thru Leslie Speaker' (under construction), 2000	102
4.15	Ryoji Ikeda, 'A', Hayward Gallery, London, 2000	104
4.16	Christina Kubisch, 'Oasis 2000: Music for a Concrete Jungle', Hayward Gallery,	
	London, 2000	104
4.17	Disinformation, 'Origin of Painting' (based on 'Artificial Lightning'),	
	Usurp Art Gallery, London, 2011	105
4.18	Max Eastley, Kinetic Drawings (based on the Architecture series),	
	Metropole Gallery, Folkestone, 2008	108
4.19	Max Eastley, 'Phantom Drawings of Procession of Ghosts',	
	Metropole Gallery, Folkestone, 2008	108
4.20	Heri Dono, 'Watching the Marginal People', Hayward Gallery, London, 2000	108
4.21	Scanner and Katarina Matiasek, 'The Collector', Hayward Gallery, London, 2000	111
4.22	Angela Bulloch's pixel boxes in 'Copper Grid 4', 2011	111
4.23	Mariko Mori, 'Miko No Inori' (still), Hayward Gallery, London, 2000	111
4.24	Paul Schütze, 'Third Site', Hayward Gallery, London, 2000	112
4.25	Russell Mills and Ian Walton, 'Mantle', Hayward Gallery, London, 2000	112
4.26	David Toop, 'Decompression Tunnel', Hayward Gallery, London, 2000	116
4.27	Sarah Pierce, 'Sonic Pass', 2008-9	119
4.28	The Wire magazine featuring Sonic Boom, May 2000	121
4.29	Greyworld, 'Stairway', Hayward Gallery, London, 2000	124
4.30	Sonambiente festival, Berlin, 1996	127
4.31	Sonic Process, MACBA, Barcelona, 2002	130
4.32	Ensemble, Institute of Contemporary Art, Pennsylvania University, 2007	135
5.1	Volume, MoMA PS1, New York, 2000	141
5.2	List of works featured in Volume, MoMA PS1, 2000	142
5.3	Visitors at Volume, MoMA PS1, New York, 2000	143
5.4	Example sound installations complementing Volume at MoMA PS1,	
	New York, 2000	147
5.5	Volume exhibition catalogue, MoMA PS1, 2000	149

5.6	Floorplan of Treble exhibition, SculptureCenter, New York, 2004	153
5.7	Drawings by Max Neuhaus, 1992-2002	155
5.8	Grady Gerbracht, 'viaDUCT', SculptureCenter, New York, 2004	156
5.9	Jim Hodges, 'Untitled (Landscape V)', 2000-1	157
5.10	Jorge Macchi, 'Incidental Music', SculptureCenter, New York, 2004	157
5.11	Joseph Grigely and Amy Vogel's 'You' (speakers) with Grigely's 'Jenaba' and	
	'Ed Ruscha', SculptureCenter, New York, 2004	159
5.12	Mungo Thomson, 'The Collected Recordings of Bob Dylan 1963-1995',	
	SculptureCenter, New York, 2004	160
5.13	David Schafer, 'General Theory' expo and lecture, SculptureCenter,	
	New York, 2004	160
5.14	Anton Vidokle and Cristian Manzutto, 'Salto del Agua', SculptureCenter,	
	New York, 2004	161
5.15	Euan Macdonald, 'Poor Blumfeld', SculptureCenter, New York, 2004	161
5.16	Jude Tallichet, 'It's All Good', SculptureCenter, New York, 2004	163
5.17	Erik Hanson's'Disco Songs I Liked When I was a Punk Rock DJ' and	
	'Kraftwerk – Trans Europe Express', SculptureCenter, New York, 2004	164
5.18	Steve Roden, 'Letter Forms', SculptureCenter, New York, 2004	164
5.19	Joseph Beuys, 'Noiseless Blackboard Eraser', 1974	165
5.20	Dario Robleto, 'Fatalism Sutures To A Memory (A Melody)' and	
	'The Minor Chords Are Ours (The Lost Chord)', 2003	165
5.21	Cornelia Parker, 'The Negative of Whispers', 1997	167
5.22	Stephen Vitiello, 'Fear of High Places and Natural Things', SculptureCenter,	
	New York, 2004	167
5.23	Terry Nauheim, 'Curiously Groovy', SculptureCenter, New York, 2004	168
5.24	Jim Hodges, 'Untitled (Bells)', SculptureCenter, New York, 2004	168
5.25	Steve Roden, 'Fulgurites', SculptureCenter, New York, 2004	170
5.26	Paulo Vivacqua, 'Sentinels', SculptureCenter, New York, 2004	170
5.27	Brad Tucker, 'Fuller's Vintage Guitar', SculptureCenter, New York, 2004	171
5.28	Andrea Ray, 'Inhalatorium', SculptureCenter, New York, 2004	171
5.29	Francis Alÿs & Rafael Ortega, '1 Minute of Silence', SculptureCenter,	
	New York, 2004	173
5.30	ArtReview magazine article 'The Sound of Space', May 2005	185

Tracks

- 1.1 Alvin Lucier, I am Sitting in a Room, 1969 [15:23]
- 1.2 Jem Finer, Longplayer, 2000 [5:28, excerpt]
- 1.3 Janet Cardiff, The Missing Voice (Case Study B), 1999 [3:24, excerpt]
- 1.4 J. Milo Taylor and Joel Cahen, A History of Sound Art, 2011 [5:09, excerpt]
- 4.1 Brian Eno, 'The Quiet Club' (from Music for Civic Recovery Centre), 2000 [4:51, excerpt]
- 4.2 Christian Marclay, 'Guitar Drag', 2000 [4:01]
- 4.3 Stephan von Huene, 'Extended Schwitters', 2000 [7:00]
- 4.4 Chico MacMurtrie, 'Yoyo Berimbau', 2000 [1:12]
- 4.5 Project Dark, 'Step 1, Step 2, Step 3', 2000 [2:41]
- 4.6 Philip Jeck, 'Off the Record', 2000 [5:24]
- 4.7 Christina Kubisch, 'Oase 2000', 2000 [7.39]
- 4.8 Heri Dono, 'Watching the Marginal People', 1992 [2:01]
- 4.9 Scanner (Robin Rimbaud), 'The Collector', 2000 [4:01]
- 4.10 Ken Ikeda and Miko No Inori, 'Mariko Mori', 2000 [4:01]
- 4.11 Paul Schütze, 'The Head, The Soles of the Feet, An Arm' (from *Third Site*), 1999 [6:35, excerpt]
- 4.12 Ian Walton and Russell Mills, 'Mantle', 2000 [7:03]
- 5.1 Tod Dockstader, 'Apocalypse', 1961 [2:03, excerpt]
- 5.2 Lou Reed, 'Metal Machine Music' (from Metal Machine Music), 1975 [1:35, excerpt]
- 5.3 Sonic Youth, 'Tamra', 1991 [8:34]
- 5.4 Maryanne Amacher, 'Living Sound, Patent Pending', 2000 [7:04]
- 5.5 ¡Cubanismo!, 'Mardi Gras Mambo' (from Mardi Gras Mambo), 2000 [4:13]
- 5.6 Alva Noto (Carsten Nicolai), 'Untitled' (from Prototypes), 2000 [5:16]
- 5.7 David Schafer, 'General Theory: Lecture #1' (Introduction), 2004 [0:34]
- 5.8 David Schafer, 'General Theory: Lecture #1' (Lecture, excerpt), 2004 [1:35, excerpt]
- 5.9 David Schafer, 'General Theory: Lecture #1' (Finale), 2004 [0:30]
- 5.10 Paulo Vivacqua, 'Sentinels', 2004 [5:12, demo]
- 5.11 Andrea Ray, 'Inhalatorium', 2004 [3.32]
- 5.12 Emmanuel Madan, 'Freedom Highway', 2004 [4:52, excerpt]

Chapter 1

Introduction: Sound Art and the Problem of Definition

And today? Every thing sounds, everyone knows how to work with a sound program, everything is called sound art. This is the challenge now, defining what sound art really means.

(Christina Kubisch, in 'A Personal History of Sound Art 1976-2006', 2006)

While sound's increasing importance in the artworld is evidenced by recent exhibitions and books devoted to the subject, sound art has yet to be accurately defined. (Alan Licht, in *Sound Art: Beyond Music, Between Categories*, 2007)

Sound art is a term frequently encountered in the world of contemporary arts. It first came to my attention just over ten years ago during a flurry of sound-based activity at contemporary art centres around the country. Having previously chosen to study both music and fine $\operatorname{art} - a$ combination that had, at the time, been extremely difficult to orchestrate at the level of higher education – and then gallery studies, it was intriguing to discover an art form that potentially drew inspiration from and also raised questions for all of these areas. As indicated in the epigraphs to this chapter by artist Christina Kubisch and musician Alan Licht, it was nevertheless difficult to grasp what the term sound art actually referred to. Although the field has moved on significantly, a general uncertainty surrounding the meaning of sound art remains. This opening chapter will set the scene for this study by outlining its research aims and approaches and introducing the field of sound art.

Research aims and approaches

What is sound art? How can it be defined? Why has it emerged? Should it exist at all? This study shows that these fundamental questions frequently surround the activity of sound art but are yet to be comprehensively addressed by theoretical literature. This study cannot and does not seek to provide the definitive answer to these questions. It will, however, explore and interrogate some of the key ideas, debates and activity surrounding the emergence of sound art in an attempt to reveal some of its attributes and ambiguities as well as the underlying causes of such uncertainty.

While the arts and humanities are an obvious point of reference for this investigation, the methods and approaches of the social sciences are equally relevant. Howard Becker's *Art Worlds* (2003), for example, is a seminal text in its presentation of art as a social phenomenon. Becker writes:

Art worlds typically devote considerable attention to trying to decide what is and isn't art [...]; by observing how an art world makes those distinctions rather than trying to make them ourselves we can understand much of what goes on in that world. (Becker, 2003: 36)

Becker's approach highlights the fact that art is not just produced by an artist, but through a whole 'network of cooperation' with shared interests, promptings, expectations and conventions that can and should be analysed. The idea of an 'artworld' was coined by philosopher Arthur Danto, who identified the significance of cultural context in the definition of art (1964). This concept facilitates a consideration of sound art as a social creation that exists within a complex social network. It also allows a pragmatic approach to the understanding of sound art through observation of the way in which the artworld makes such distinctions. Pierre Bourdieu's investigations of the assumptions, values and ideologies of art are another key reference for a sociological approach to the arts. Remarking that 'sociology and art do not make good bedfellows' (1993: 139), he asserts that the denial of the social in favour of the aesthetic is in fact one of the ideological illusions of the arts. Bourdieu's work shows that artistic practices are in fact cultural practices carrying their own set of values, and raises further questions about whether there is a culture of sound art, and what its assumptions, values and ideologies might be. Michel Foucault's concept of 'discourse' is also significant to an understanding of the social construction of meaning and knowledge. In considering 'practices that systematically form the objects of which they speak' (1972: 49), Foucault highlights the importance of language in its social context, and suggests that cultural categories such as sound art are created through a particular context and historical moment. That sound art is, to some extent, created by the ways in which it is discussed and represented is an idea central to this study, which will consult a wide range of sources - from online symposia, magazine articles and publications to art exhibitions and their materials – to investigate the definitional discourse of sound art. By approaching sound art as a cultural concept that is created socially by the people who produce, present and consume it, this study therefore views the project of definition as a task of clarification rather than classification.

The subject under scrutiny requires an interdisciplinary approach, and this study (similarly aimed at a multidisciplinary readership) will draw upon a range of ideas, from the history and theory of art and music as well as theory of genre and culture, in order to provide sustained critical analysis of its source material. While this navigation through different disciplines and bodies of thought presents challenges in the positioning of this study, it also becomes a key contribution of this research. The absence of an established field of study for sound art has in fact supported an exploratory approach that also brings a degree of reflexivity to the enquiry. The literature on sound art, for example, is not only a point of reference for this study but will also become an object of study in itself, and the idea of discourse will not only inform the approach

2

to the study but will also become a subject of investigation. This organic approach has also allowed the slow trickle of academic work on sound art to be integrated during the course of the study, a challenge faced when writing about any contemporary phenomenon. As fertile objects for analysis, the few monographs on sound art will feature in several chapters of this study, scrutinised from different angles as relevant. Reference to a range of online material is also worthy of note. Although often avoided in academic study, the incorporation of this material allows the consideration of an emerging field of sound art prior to the release of any publications on the subject, and has the potential to highlight key attitudes and debates leading to the formation of certain discourses.

Although this research is concerned with a form of contemporary art, it will approach sound art historically in order to support a critical and discursive perspective. Chronologically, the study will begin in the 1980s, which is the decade in which the term was first used. The turn of the millennium will emerge as a point of focus in relation to activity preceding this time and up to the present day. This focus on twenty-first century activity means that earlier movements such as Futurism, Dada and Fluxus are not discussed, although historical influences from the 1950s onwards will be considered in relation to sound art activity where appropriate.

The exhibitions considered at the heart of this study will provide significant, practical examples of the discourse of sound art and its definition in history. Approaching these exhibitions as another key text for analysis will also enable a more focused and concrete interrogation of sound art alongside the broader and more theoretical investigations. Reconstructing the discursive milieu of these exhibitions in history will form a key aspect of their analysis, and require the synthesis of multiple layers of evidence such as photos, diagrams, recordings and text relating to their production and reception. An examination of exhibition content will also provide the opportunity to encounter a selection of works by artists within a particular context of criticism and display. The curatorial examples, through their combination of sound art works, will also demonstrate shared characteristics and other aspects of the categorical that would not be present in a consideration of individual works. A compact disc also accompanies this study containing soundtracks from works mentioned within the chapters (see page xii for a listing). The assembly of such diverse material to demonstrate the conflicting and convergent representations that make up the discourse of sound art is regarded as another key contribution of this study.

State of the field

Ten years ago, it was almost impossible to identify a field of study for sound art. Theorisation on the subject was practically non-existent, although a whole range of activity seemed to suggest that such a thing did exist and had, in fact, existed for some time. Before turning attention to the emerging research and scholarship on sound art, it would therefore be useful to consider this activity. While it is impractical to provide an exhaustive account, especially in light of the everincreasing breadth and pace of activity, the aim of this chronological overview is to provide a taste of the discourse of sound art as well as highlight the context and purpose of this study.

Activity and events

From 2000

The turn of the millennium was a significant moment for sound art, with a number of highprofile exhibitions taking place in major art centres in the global cities of London, New York, and Tokyo. The Hayward Gallery's *Sonic Boom: The Art of Sound*, for example, was hailed as Britain's first ever sound art exhibition, and received major press coverage in newspapers such as *The Guardian, The Observer, The Independent, The Times,* and *The Daily Telegraph* (Romney, 2000; Maddocks, 2000; Sturges, 2000; Judah, 2000; Wolfson, 2000). In the same year, the exhibition *Volume: Bed of Sound* took place at MoMA PS1, one of the largest and oldest institutions dedicated to contemporary art in the US (PS1, 2008: n.p.), in conjunction with its critically acclaimed annual series of live experimental sound, music and performance *Warm Up* (PS1, 2012: n.p.). The year 2000 also brought *Sound Art: Sound as Media*, a third exhibition of 'experimental sound artists who have come into prominence in the 1990s and musicians who have pioneered the field of sound art' (Hatanaka, 2000: 47), which took place at Japan's NTT InterCommunication Center (ICC).

Newspaper coverage also exposes national activity in addition to these international shows. *I Am Sitting in a Room: Sound Works by American Artists 1950-2000* (2000), for example, was an exhibition of sound that took place in New York earlier in the year as part of the Whitney Museum's twentieth century survey of American art. One reporter for the *New York Times* wrote:

When the performance art genre appeared in the 1970's, the playwright and novelist William Hogeland commented cynically, "We already have a performance art: it's called 'theater". One could similarly dismiss the term "sound art" as just a vaguely glorified name for weird music. And yet "sound art" has served as a useful historical euphemism, a safe harbor for works too outre for the ever-conservative classical music world. (Gann, 2000: 41)

These remarks present an early consideration of the possibility of and rationale for sound art as a new genre within the artworld. The curator of *I Am Sitting in a Room*, sound artist Stephen Vitiello, nevertheless also observed reluctance on the part of the museum to acknowledge, document or tour this contribution to *The American Century 1950-2000* show. Poet Kenneth Goldsmith describes how the exhibition therefore 'simply vanished into thin air' (2000: n.p.). Its occurrence still nevertheless pointed to the significance of sound in the history of the arts. It also raised the profile of seminal work such as Alvin Lucier's piece from 1969, after which the exhibition was named, in which the artist re-records a recording of himself speaking until only the resonant tones of the room remain (Track 1.1).

The three international sound exhibitions that year inspired another journalist for the US *XLR8R* magazine on music and culture, Justi Echeles, who 'delves into the world of Sound Art and music installations – the cutting edge where ideas, music and theory are currently being played out in contemporary art' (2000: n.p.). Echeles' article introduces the works of seven sound artists, mainly from Germany but also from the UK, US and Canada, as well as some specialist venues catering to sound presentation. It mentions, for example, the Audium theatre in San Francisco, developed in the 1960s by composer Stan Shaff, which contains 169 speakers for sculpted sound (Figure 1.1). It also refers to Engine 27 sound gallery, 'the first fully flexible laboratory and presentation environment in which artists can control the acoustical, lighting and spatial parameters using familiar instruments and friendly interfaces' (Weisberg, in Echeles, 2000: n.p.), which was conceived by sound engineer Jack Weisberg and due to open in New York that autumn (Figure 1.2). Echeles observes that 'sound art is, of course, as varied in definition and practice as any artistic medium' (2000: n.p.), but also seems to infer from this sample that there is a shared artistic mission.

In 2001, sound art became a topic for the British press as part of a series in the *Guardian* on "'difficult" art forms' (Poole, 2001: 9). In this article, the journalist Steven Poole explores works and ideas that might be associated with sound art, discussing installation artist Alvin Lucier, futurist artist Luigi Russolo, composer John Cage, turntablist Philip Jeck, filmmaker David Lynch, and musician and *Sonic Boom* curator David Toop. He also mentions some recent and now celebrated commissions by the London-based organisation Artangel, such as Jem Finer's endless computer-generated sound composition *Longplayer* (1999) at the London Docklands lighthouse (Figure 1.3; Track 1.2). Another example is Janet Cardiff's 'sound walk' *The Missing Voice (Case Study B)* (1999), created for participants to listen to on a route from nearby East London's Whitechapel Gallery to Liverpool Street Station (Figure 1.4; Track 1.3). Poole's article draws attention not only to the growing activity but also the uncertainty surrounding sound art at the time. 'Just listening to interesting sounds has struck me as the sort of thing an ultra-stoned hippy might do', Poole begins, but then eventually decides that this is 'the primary value of sound art:



Theatre interior. Photo: Stan Shaff (2006: n.p.) © Audium. Used with permission. Figure 1.1 – Audium 'Theatre Of Sound-Sculptured Space', San Francisco



Gallery exterior (a converted fire station). Photo: © Andy Sutcliffe (2015: n.p.). Used with permission.

Figure 1.2 – Engine 27 'sound gallery', New York



Photo: Steve Pyke (2000: n.p.) © The Longplayer Trust. Used with permission.

Figure 1.3 – Listening post for Jem Finer's *Longplayer*, Trinity Buoy Wharf Lighthouse, London, 2000



Installation views (artist's reconstruction). Photos: Gerrie van Noord © The Artangel Trust/Janet Cardiff (1999a: n.p.). Used with permission.

Figure 1.4 – Scenes from Janet Cardiff's sound walk, *The Missing Voice* (*Case Study B*), 1999

that it encourages you to pay attention to how you listen, and to experiment with new ways of listening' (2001: 9). He concludes:

I'm not going to start sitting down and listening to CDs of traffic and iron-smelting every evening, but perhaps I will take more interest in the uncontrollable sounds around me, rather than blocking them out as unwanted noise. If nothing else, it makes waiting for a bus less boring. Having decided this, I get home through a noisy London rush hour and then listen to Glenn Gould playing Bach's Goldberg Variations. Suddenly it seems even more impossibly beautiful than ever. (Poole, 2001: 9)

Poole's evaluation of sound art provoked a mixed response from readers, whose letters, published a week later, ranged from criticism to curiosity to praise (Vassie et al., 2001: n.p.).

Around the same time, Nigerian-American artist Keith Obadike was invited to write a brief essay on sound art for *Art Journal*. In this, he describes the disciplinary divisions that grounded his predecessors and muses that the label 'sound artist', rather than 'composer' or 'visual artist', is useful for him to indicate the interdisciplinary nature of his practice, which cuts across experimental and electronic music as well as conceptual visual practices (Obadike, 2001: 4-5). Obadike's account, written from the artist's perspective of black visual traditions, provides an interesting and personal justification of sound art to this early public debate.

In 2002, some smaller-scale international exhibitions of sound also made an impression on the discourse of sound art through their accompanying catalogues. A range of theoretical essays, for example, was presented alongside information about participating artists from the *Resonances* exhibition at the Stadtgalerie Saarbrücken (Figure 1.5). This early publication, subtitled *Aspects of Sound Art*, includes a contribution by German musicologist Helga de la Motte-Haber on sound art aesthetics, an essay by Canadian artist and composer Robin Minard on the relation of *musique concrète* to the visual arts, an article on Duchamp and Cage in relation to noise, and also an interview with the Austrian sound artist Bernhard Leitner (Schulz, 2002b). Another example is the *Sonic Process* exhibition at the Pompidou Centre in Paris (and previewed at MACBA, the Museu d'Art Contemporani de Barcelona), which provoked essays on the subject of electronic music in relation to the visual arts by theorists such as David Toop, the German music critic Diedrich Diederichsen, and French art critic Nicolas Bourriaud (Van Assche, 2002a). These contributions not only point to wider theoretical activity on sound in the arts, especially from Germany, but also generate further discussion on the subject of sound art.

Around this time, tentative explorations around the very existence of sound art began to emerge online. Mark Garry's 'Survey of Four Contemporary Sound Artists' (2002), for example, was published on the site *Vibrö*, which aimed, until 2009, to document the growing presence of sound in the arts (Figure 1.6a). Garry, an Ireland-based artist, explains that his intention is not to provide an overview of contemporary sound art but rather to 'investigate a number of the



Selected works, from left to right: Steve Roden's 'Moon Field', Rolf Julius's 'warum grau, warum gelb, warum grün', Martin Riches's 'Interactive Field', Christina Kubisch's 'Fünf Felder', Ed Osborn's 'Swing Set', and Bernhard Leitner's 'Innen-Weiten/Selbst-Vermessung'. Photos: Tom Gundelwein © Kehrer Verlag Heidelberg/Tom Gundelwein (Schulz, 2002b: 113, 120, 124, 133, 145 & 136). Used with permission.

Figure 1.5 – Resonances, Stadtgalerie Saarbrücken, Germany, 2002

processes and intentions of contemporary artists who work with sound' (2002: n.p.). Garry questions the artists Dennis McNulty, Slavek Kwi, Jody Elff and Randall Packer about their methodologies and technologies, and asks other leading questions about the influence of the architectural space and critical listening in their work. He also specifically asks these artists for their thoughts on the difference between music and sound art, including the influence of cultural context, process, and intention on this distinction. Although basic and uncritical, the questions as well as the responses in this essay provide some indication of the general concerns of sound art.

A year later, a similar article entitled 'What is Sound Art?' (Aldrich, 2003) was published on the Electronic Music Foundation's educational online resource *EMF Institute* (Figure 1.6b). In an attempt to answer this question, US-based new media artist Nate Aldrich interviewed five sound artists: Jeph Jerman, Annea Lockwood, Chris Mann, Alvin Lucier and Stephen Vitiello. Despite not consciously starting out with an agenda, Aldrich realises that he is subconsciously attempting to differentiate between sound art and music in his interview questions through characteristics such as material, structure, intention and presentation. He concludes:

There is no definitive consensus. That in itself is an important acknowledgement. Sound Art is as diverse as the group of artists that it comprises. But Sound Art is a categorical reality. It has arrived and it has arrived from somewhere and, much like me with this project, it too has its agenda. The artists I interviewed are motivated to inquire and to present their works in a context we previously considered music. So, what is Sound Art? (Aldrich, 2003: n.p.)

These online enquiries indicate a general drive to understand more about sound art and its appearance as a category, as well as a tendency to compare sound art with music, which will be seen to persist in the discourse.

In the years to follow, online events were also held by some major visual art institutions in order to discuss the trend of sound art and sound culture. *Artforum*, for example, hosted the symposium 'Sound Art Now' (2004) in light of the 'tremendous explosion of interest in sound art' witnessed by the art world (Figure 1.7a). The symposium not only recognised the increasing number of younger artists working with sound but also the way in which 'pioneers such as Max Neuhaus, Alvin Lucier, Christian Marclay, Maryanne Amacher, and Christina Kubisch have moved from the margins to the centre of critical discourse and curatorial practice' (Artforum, 2004: n.p.). An upcoming major festival of sound art, *New Sound, New York* (2004), organised by multi-disciplinary art and performance venue The Kitchen, is also mentioned as part of the *Artforum* discussion. This particular programme of performances, installations, conferences and exhibitions on sound art is later described by one *New York Times* reporter to have 'reached critical mass in terms of what might be called listening-looking opportunities' (Smith, 2004: n.p.). Some fundamental questions are raised by the symposium:



a) Screenshot of Vibrö site essay 'A Survey of Four Contemporary Sound Artists' by Mark Garry, 2002. Image: the author © Association Double Entendre/Mark Garry (2002: n.p.). Used with permission.



b) Screenshot of The EMF Institute site essay 'What is Sound Art?' by Nate Aldrich, 2003. Image: the author © Electronic Music Foundation/Nate Aldrich (2003: n.p.). Used with permission.

Figure 1.6 - Online investigations into the subject of sound art

It seems a good time to ask: Why sound now? What are the key antecedents to current practices in audio art? Where is sound art heading? What are its most exciting manifestations? (Artforum, 2004: n.p.)

This so-called roundtable discussion, which will be revisited later in this study, was moderated by philosopher and critic Christoph Cox, and also included art historian Branden W. Joseph, composer and author David Toop, curator Anthony Huberman, and sound artists Carl Michael von Hausswolff, Steve Roden, Marina Rosenfeld, and Stephen Vitiello.

A similar event was hosted at the Tate Modern as part of its <u>d_cultuRe</u> season. This focused on audio production and distribution, and considered sound art and the museum context among a broad range of topics in an online panel discussing the 'form, practice, and politics of sound' within a digital culture (Tate, 2005: n.p; Figure 1.7b). The discussion was introduced and moderated by Lina Džuverović, co-founder of Electra, an organisation that curates and commissions artists working across sound, moving image, performance and the visual arts, who expressed a particular interest in the 'why now and why here' in relation to sound work and its distribution in a museum context (Tate, 2005: n.p.). The panel also included sound and media art theorist Douglas Kahn, 'plunderphonics' composer and media artist John Oswald, and Kenneth Goldsmith, founder of the UbuWeb online resource of avant-garde poetry, film and sound. This discussion was held in conjunction with a range of events at the Tate, such as an exhibition of sound from the multimedia works of Bruce Nauman in Raw Materials (2004-5; Figure 1.8), a live performance of Christian Marclay's albums by People Like Us for The Sounds of Christmas (2004), a performance curated by artist and critic Seth Kim-Cohen of compositions by Luc Ferrari, Kaffe Matthews, David Grubbs, Achim Wollscheid, Eric Roth and Olias Nil called The Sound of Heaven Earth (2005), and the lecture series Sound and the Twentieth Century Avant-Garde. These online and offline events indicated the beginnings of a critical engagement with sound art and its emergence by the artworld.

At this point, some of the key thinkers in the areas of sound, music and art began to write articles for online publications. Goldsmith, for example, provided 'A Brief Survey of Sound Art' (2004) in a dedicated edition of an online magazine on contemporary American music, *New Music Bax*. This observes the difficulty in defining sound art in relation to forms such as experimental music, spoken word, and operatic performance. 'It's a fabulous mess', Goldsmith writes, 'where the lines are ill-defined and disciplines overflow into one another and co-mingle in ways that are not easily categorized' (2004: n.p.). In an article on 'The Art of Noise' (2005), published in art magazine *Tate Etc.*, Toop stresses the importance of distinguishing sound art from similar concepts such as art and sound, and observes its potentially complex history. He singles out Christian Marclay as 'an example of a sound artist, a musician, an artist who uses sound, who can

12



a) Screenshot of Artforum online symposium Sound Art Now, 2004. Image: the author © Artforum (2004: n.p.). Used with permission.



b) Screenshot of Tate's online panel on sound for d_cultuRe, 2005. Image: the author © Tate (2005: n.p.). Used with permission.





Installation view. Photo: © Ivar Hagendoorn (2004: n.p.). Used with permission.



Installation view. Photo: Fiona Hanson (2004: n.p.) © PA Images.

Figure 1.8 – Raw Materials, Tate Modern, London, 2004-5

move fluidly between these *irritating definitions'* (Toop, 2005: n.p., emphasis added). Toop also remarks on the lack of dialogue between practices. He concludes: 'But new musics, sound art and art and sound all grow from different starting points and address a vast range of issues, so we have to ask if a better understanding can be reached between all the factions. Could it be that the gallery is a good place to start?' (Toop, 2005: n.p.). There is a sense here that Toop has conflicting feelings towards the benefits of definition, but also leans towards the gallery as a potential site for convergence and analysis. Kahn also presented his thoughts about the distinctions between 'Sound Art, Art, Music' in an article for a special online issue of American literary magazine *The Iowa Review* (2006):

I am not particularly fond of the term *sound art*. I prefer the more generic *sound in the arts*. My last book was subtitled *a history of sound in the arts*; there was no mention of sound art and not only because it was outside the historical scope of the book. (Kahn, 2006b: n.p.)

Kahn voices a suspicion of the term 'sound art' in light of the major exhibitions from the year 2000 claiming to have "discovered" this thing called sound art' (2006n: n.p.). He argues that sound art existed and featured in exhibitions and events long before the millennium. These contributions show scholars beginning to grapple with the complexities of sound art and its definition, and also raise some interesting questions over the beginnings of sound art and the development of its discourse that would benefit from further consideration.

Pre-2000

It is worth taking a brief interlude at this point to consider activity preceding the millennium. There is in fact reference to a sound art exhibition as early as 1984 in the *New York Times* (Page, 1984: n.p.). *The Sound/Art Show* took place at New York's SculptureCenter and presented artists such as Les Levine, Carolee Schneemann, Sari Dines and Pauline Oliveros. The show was curated by sculptor and composer William Hellermann, who, for its opening night, conducted a chamber orchestra that played conceptual pieces using a calculator as a stopwatch (Page, 1984: n.p.). The reporter, Tim Page, explained that the exhibition featured 'many intriguing contraptions, one of the most captivating being a musical pinball machine, loaded with chimes, bells and xylophone keys, constructed by Bill and Mary Buchen' (1984: n.p.). He also suggested that the exhibition 'underscores recent attempts to combine elements of the visual arts with music and raw sound' (Page, 1984: n.p.). The director of the Stadtgalerie Saarbrucken in Germany, Bernd Schulz, nevertheless stakes a claim for 'the first synoptic exhibition on Sound Art' in a show that took place at his gallery in 1988 (2002a: 18). He also considers 'the first individual presentation of a Sound Artist' to have been at the annual meeting of the International Artists' Committee in Cologne, three years earlier in 1985, during which artist Gunter Demnig

15

presented a sound machine (Schulz, 2002a: 18). While it is likely that there was sound art activity even before these dates, retrospective claims for the beginnings of sound art are another indication of its growth as a discourse. Exhibitions clearly play a significant role in this, perhaps because they are public and therefore often publicised events and, in turn, more memorable and traceable.

By the 1990s, a few publications on sound art began to emerge. *Sound by Artists* (Lander and Lexier, 1990), for example, is a compilation of essays by artists and theorists working with sound across different fields. The volume contains around thirty contributions by the likes of John Cage, Max Neuhaus, Christina Kubisch, Alvin Lucier, Douglas Kahn and Christian Marclay. Dan Lander, who edited the book with fellow artist Micah Lexier, explains:

The desire to compile this anthology was driven by the noticeable lack of information and critical analysis regarding an art of sound. Although there has been an abundance of activity centred around explorations into sonic expression, there is no sound art movement, as such. (Lander, 1990: 10)

For Lander, 'Sound by Artists is a collection of information pertaining to a disparate art form, presented in the hopes of stimulating dialogue' (1990: 10). A few years later, the collection Interviews with Sound Artists (Peer, 1993) was released. This presented the ideas of artists who took part in the festival ECHO: Images of Sound at Apollo House in Eindhoven, Netherlands in 1987, including Terry Fox, Christina Kubisch and Paul Panhuysen. These publications are another indication of early sound art activity and a felt need to build on an absent discourse.

In 1995, another sound art exhibition took place at Australia's Museum of Contemporary Art. *Sound in Space: Adventures in Australian Art* had little exposure in the international artworld, although the curator's catalogue essay was made accessible through the *Australian Sound Design Project* website (Coyle, 1995: n.p.). This reveals an interrogation and overview of sound art as a genre as witnessed in the high-profile exhibitions some five years later.

Shortly afterwards, an article entitled 'Can you hear me? What is sound art?' was published in Australian contemporary art magazine *RealTime* in response to the *SoundCulture* festival (Gebhardt, 1996: n.p.). Initiated by a group of artists and art organisers based in Sydney 'to advocate, develop and produce a "culture of sound art", the first of these festivals took place in 1991, the second in Tokyo in 1993, and the third in San Francisco in 1996 which featured 228 artists from around the Pacific region across thirty-three sites (SoundCulture, 2004: n.p.). In attempting to 'draw out some of the conceptual questions that emerged over what was a large and often diffuse event', popular music lecturer Nicholas Gebhardt observes 'the difficulty of locating (and organising) a specific concept of art in favour of a highly deregulated field of artistic production in which, ultimately, anything (and everything) goes' (1996: n.p.). In his opinion, 'the attempt to draw together such apparently disparate elements as contemporary music, sculpture,

screen-based art, sound design, radiophonic arts, performance, scientific research, philosophy and DJ culture into an argument about the encompassing nature of sound was bound to run into all sorts of conceptual, sensory and geographical problems' (Gebhardt, 1996: n.p.). This article, and the debate it provoked on a mailing list dedicated to the philosophy of sound, *philosound*, was reprinted in the first issue of the e-publication *SoundSite*. The conversation, entitled 'What's Wrong with Sound Art', revealed concerns about the delineation of a field for both sound theory and sound art practice and argued for a need for sound art to 'dance from one body of knowledge to another' (Andrews, 1996: n.p.; Art, 1996: n.p.). This provides an indication of the politics and practicalities of definition.

Sound art festivals nevertheless continued to appear. The *Sonambiente* festival 'for the eyes and ears', for example, was held in Berlin first in 1996 and again in 2006. Another example is the annual festival *Activating the Medium*, which has been organised by the San Francisco Museum of Modern Art since 1998. It is revealing that one reporter, on the fifth occasion of this festival in 2002, stated that 'the legitimization of sound art is a recent phenomenon' (Veltman, 2002: n.p.). This comment highlights how it has taken time for sound art to enter into the public consciousness, and it will be seen below how the perceived novelty of sound art activity has persisted in reporting almost a decade later.

Towards the end of the last century, Douglas Kahn presented one of the most significant contributions to the academic field of sound in the arts: *Noise, Water, Meat: A History of Sound in the Arts* (1999). This theoretical study of sound in twentieth-century art 'concentrates on the generation of modernist and postmodernist techniques and tropes among artistic practices and discourses' in Europe and the US including noise, immersion, visual sound, panaurality, musicalisation of sound, sound reproduction and imitation, silence, and bodily utterance and screaming' (Kahn, 1999: 2). Kahn takes a broad view of sound and of the arts, including literature, music, visual arts, theatre and film in his analysis. Although the subject of sound art is beyond the historical scope of his study of sound in the arts, it nevertheless presents sound as a serious topic for consideration in the theorisation and critique of modern art. Sound art clearly existed some time before the millennium, as Kahn argues elsewhere, although it was perhaps not yet sufficiently established to receive the same kind of scholarly attention.

From 2005

Some five years after the initial surge of sound art exhibitions came a range of prominent shows considering the relationship of sound and music to the visual arts. *Sons et Lumières* at the Pompidou Centre in Paris, for example, aimed to provide a history of sound in twentieth-century art (2005; Figure 1.9), and *Visual Music* at the Museum of Contemporary Art in Los Angeles focused more specifically on cases of synaesthesia in art and music since 1900 (2005; Figure 1.10).

17



Selected works, from left to right: Frantisek Kupka, 'Nocturne', 1911 (oil on canvas). Photo: © MUMOK (2016: n.p.). Used with permission; Joe Jones, 'Bird Cage', 1964 (mixed media). Photo: © MUMOK (2014: n.p.). Used with permission; Peter Moore, 'Charlotte Moorman and Nam June Paik performing John Cage's 26'1.499" for a String Player', 1965 (photograph). Photo: © Estate of Peter Moore (1965: n.p.); Pierre Huyghe, 'L'Expédition Scintillante, Act 2 (Light Show)', 2002 (light and smoke installation). Photo: © Pierre Huyghe (2006: n.p.). Used with permission.

Figure 1.9 - Sons et Lumières, Pompidou Centre, Paris, 2005



Selected works, from left to right: Installation view including Frantisek Kupka 'Organization of Graphic Motifs II' (1912-13), Stanton Macdonald-Wright 'Conception Synchromy' (1914) and Morgan Russell 'Four Part Synchromy, Number 7' (1914-15) (oil on canvas); Jim Hodges, 'Corridor', 2003 (installation in 'colorsound'); Jennifer Steinkamp and Bryan Brown, 'Swell', 1995 (computer generated projection with soundtrack); Nike Savvas, 'Anthem (The Carney)', 2003 (light installation). Photos: Brian Forrest © MOCA, Los Angeles (2005: n.p.). Used with permission.

> Figure 1.10 – *Visual Music*, The Museum of Contemporary Art, Los Angeles, 2005

This prompted an article on 'Art and Music in the Twentieth Century' in the international art magazine *Artforum*, in which contemporary art curator Harry Cooper notes that 'the dark secret of high-modernist visual art and theory has always been (shhh!) sound. No surprise, then, that the twenty-first century has already brought us two major shows devoted to the connections between eye and ear in the twentieth' (2005: 10). Although sound art was not the focus of these exhibitions, it is perhaps not coincidental that these historical explorations of sound and the senses occur around the same time that sound was attracting increasing interest from visual art institutions.

The British media returned specifically to the subject of sound art in an article in *The Daily* Telegraph entitled 'Listen - It's the Sound of a New Art', which discusses the steady growth of sound art in the UK since the Sonic Boom exhibition (Davies, 2005: n.p.). 'The buzz around sound art is growing', writes reporter Serena Davies, 'going from a whisper to something to shout about - and, finally, the rest of the art world is listening' (2005: n.p.). She references major projects at the Tate Modern, such as Bill Fontana's recording of the Millennium Bridge (to become Harmonic Bridge, London, 2006) and Bruce Nauman's sound-based retrospective Raw Materials (London, 2005). In the same year, the Tate also hosted events relating to the Her Noise exhibition, held at the South London Gallery (London, 2005), which brought together women artists using sound as a medium. Other activity included the exhibition Shh...Sounds in Spaces at the Victoria and Albert Museum (London, 2004), which replaced its audio guides with new sound works relating to the collections, and an exhibition of works by artist and musician Christian Marclay at the Barbican (London, 2005). Upcoming projects by Fontana, Toop (Sound Out, Cork, Ireland, 2005) and the Glasgow-based arts organisation NVA (The Storr, Isle of Skye, 2005) were also mentioned in Davies' article, as well as the sound art-based shortlist for the New Music Award that year (Davies, 2005: n.p.). An article in the Observer in fact suggests a new wave of 'Brit Art-cum-Music' by playfully nicknaming some leading new musicians and sound artists as the 'YBMAs' (O'Hagan et al., 2006: n.p.). Here a range of authors write about work such as Jem Finer's sound sculptures, the sound sample collages of Vikki Bennett (also known as 'People Like Us'), the collections of everyday sound by 'Dream of Tall Buildings', and an installation of sound and light at Baltic Centre for Contemporary Art by Alex Bradley and Charles Poulet (Whiteplane, Gateshead, 2005). These reports clearly demonstrate the increasing popularity of sound art as an activity five years into this century.

That same year, sound art became the focus of a special edition of *ArtReview*, the Londonbased international magazine of contemporary art and style (May 2005; Figure 1.11). The editor explains: 'In this issue we examine sound art from its beginnings in the 1960s to the current practice of contemporary artists working in the field' (Wilson, 2005b: 13). Anthony Huberman 'assesses the impact and legacy of the '60s sound art pioneers' (Wilson, 2005a: 8), Laurie



Used with permission.

Figure 1.11 – ArtReview magazine sound issue, May 2005

Anderson and Christian Marclay are recorded in conversation, Kim-Cohen writes about the importance of the work of Stephen Vitiello, and the magazine also carries out the survey 'When does sound become art?' with fifteen experimental musicians and artists. This dedicated issue signals sound art gathering weight as a discourse as well as continued curiosity about its existence.

Around this time, online forums such as SoundasArt emerged, allowing wider discussion around such issues. This mailing list 'concerning the emerging artform sound art' attracted hundreds of participants from across the globe, and eventually culminated in a conference organised by its founder, sound artist Bill Thompson. SoundAsArt: Blurring of the Boundaries, which took place at Aberdeen University in November 2006, assembled a wide range of participants active in the field of sound. The subject of sound art and its definition was therefore approached from a variety of different angles, including music, visual art, theatre, performance, architecture, radio and philosophy. Keynote speaker Christina Kubisch presented a personal survey of her work over the previous thirty years 'within and of the art practice that eventually came to be known as Sound Art', and noted the challenge of definition now that 'everything is called sound art' (2006: n.p.). Jonty Harrison, director of the Birmingham ElectroAcoustic Sound Theatre (BEAST), was the other keynote. In his paper, Harrison discussed the identity crisis of acousmatic music, its difference from sound art, and the importance of such labels (2006: n.p.). Academic events also took place elsewhere in Europe. The seminar Sound Art in the White Cube in Norway (Oslo, 2006), for example, was organised by sound artists Jana Winderen and Maia Urstad for the Young Artists Society (UKS), and focused on the development of sound art over the last five years (Winderen, 2006: n.p.). These events demonstrate a developing discourse community for sound art that is also conscious of the problem of its definition.

In the same year, the work of Kubisch and three other German artists – Stefan Rummel, Jan-Peter E. R. Sonntag, and Jens Brand – was presented in *Imisible Geographies: New Sound Art from Germany* (2006; Figure 1.12). This exhibition was curated by Christoph Cox and hosted by the experimental art space The Kitchen (Wilson, 2006: 298). Also in New York, MoMA PS1 presented *Music is a Better Noise* (2006; Figure 1.13), an exhibition of drawing, painting and video by 'musicians who make art and artists who make music, or for whom music is an integral part of their creative process' (PS1, 2006: n.p.). Shortly after this, MoMA announced the creation of a separate media department, previously part of the department of film, whose role was to focus on works using sound and moving images in gallery installation. In the *New York Times*, Chief Curator Klaus Biesenbach explains the increasing prominence of time-based media words following international art fairs and exhibitions over the last two decades: 'artistic practice is evolving', he writes, 'and so museums are evolving as well' (Biesenbach, in McElroy, 2006: n.p.). This is an indication of how the development of discourses such as sound art can have an impact on the artworld in very practical terms.



Selected works, from left to right: Jan-Peter E. R. Sonntag, 'GAMMA green/xsea-scape', 2006. Photo: Eileen Costa © The Kitchen (Wilson, 2006: 299). Used with permission; Christina Kubisch, 'Electrical Walk', 2008. Photo: © Christina Kubisch and Galerie Mazzoli (Kubisch, 2008: n.p.). Used with permission; Stefan Rummel, 'Schattengemeinde (Shadow Community)', 2006. Photo: © Stefan Rummel (2006: n.p.). Used with permission; Jens Brand, 'G-POD/G–P4', 2004. Photo: Anya Gerecke © Jens Brand (2004: n.p.). Used with permission.

Figure 1.12 - Invisible Geographies, The Kitchen, New York, 2006









Installation views. Photos: © MoMA PS1 (2006: n.p.). Used with permission.

Figure 1.13 - Music is a Better Noise, MoMA PS1, New York, 2006
One year later, artist and critic Andrzej Lawn attempted to 're-examine' sound art for *NYArts Magazine* through Kubisch's *Electrical Walk* at The Kitchen as well as Bruce Odland and Sam Auinger's *Harmonic Bridge* at Mass MOCA and Perry Hall's 'Sound Drawings' at Williams College Museum of Art (2007: n.p.). In this brief 'investigation to see how far sound art has come', Lawn considers sound art as an area of 'great potential' (2007: n.p.). He nevertheless describes works as 'technologically saturated' so that the ideas are 'being left behind' (Lawn, 2007: n.p.). Lawn concludes: 'It is time to take a step back and re-examine the roots of sound art in order to forge ahead' (Lawn, 2007: n.p.). Another call for a critique can be seen in the special 'sound issue' of *The Iowa Review* (2006). The online issue included videos of works by artists such as Paul DeMarinis, Kahn's essay on the emergence of sound art (2006b), and an article about the social significance of sound in public spaces through the work of artists such as Hildegard Westerkamp, Max Eastley and William Louis Sørensen by artist and theorist Brandon LaBelle (2006b). Its editor, Ben Basan, explains:

The pieces in this issue of *The Iowa Review Web* are by no means a complete representation of the various trends in sound art. My hope was to at least represent a few threads and to hopefully bring to the attention of all of us who have a stake in New Media that sound is not just a decoration or a vehicle to add flavor to a piece (though it can be that too!) (Basan, 2006: n.p.)

These examples demonstrate attempts to engage with sound art activity in a more critical way, and it will be seen below that more sustained theoretical research started to emerge around this time by the likes of Labelle.

From 2010

The end of the first decade of this century marked a key historical moment for sound art in terms of institutional recognition, when Glaswegian sound artist Susan Philipsz won the Turner Prize. The nominated work, *Lowlands* (2010), was a site-specific sound installation situated beneath three of the bridges of the River Clyde. From here, the artist's voice could be heard singing a haunting traditional Scottish dirge with lyrics such as 'my love is drowned in the windy lowlands' (Figure 1.14). It was the first time a sound installation had been considered for this prestigious award, which was established in 1984 to celebrate new developments in British contemporary art (Tate, 2004: n.p.). The event not only raised the profile and increased the activity of sound art, but also revived some of the discussion and debate surrounding its existence. After the work was shortlisted, for example, the cultural director of Sound and Music, John Kieffer, was featured in both the *Independent* and *Guardian* newspapers. In these, he described sound art as a 'new kid on the cultural block' that was 'taking over galleries across the land' (Kieffer, 2010a: n.p.), and suggested that Britain should therefore 'sit up and listen' (Kieffer, 2010b: n.p.). Following the



Photo: © Murdo MacLeod (2010: n.p.). Used with permission.

Figure 1.14 – Susan Philipsz at the site of her prize-winning sound installation *Lowlands*, George V Bridge, Glasgow, 2010 announcement of the winner, the BBC reported on the mixed reactions, from the Stuckist art group claiming 'It's not art. It's music' to the critic Adrian Searle's defence of the panel's decision (BBC, 2010: n.p.). Describing Philipsz work for the *Guardian*, Searle writes, 'her sense of place, and space, memory and presence reminds me, weirdly, of the sculptor Richard Serra at his best. Her art makes you think of your place in the world, and opens you up to your feelings' (Searle, 2010: n.p.). In another article for the BBC, Kieffer suggested that the win might create a market for sound art, which 'operates in the hinterland' between the two worlds of the visual arts and the contemporary music world (Smith, 2010: n.p.). Matthew Cain, Culture Editor for Channel 4 News, similarly remarked that 'the high-profile win for Susan Philipsz might just build this up to the tipping point needed for sound art to really take off' (2010: n.p.). These reactions indicate the recurring issue of sound art's relation to music, which will be explored in this study. They also show that, some ten years after the high-profile exhibitions first appeared, sound art was still considered new and controversial.

Evidence of gradual institutional acceptance can be found in the emerging organisations dedicated to contemporary sound art. Sound*Fjord*, for example, was founded by London-based artist Helen Frosi in late 2009 to promote a better understanding of the sonic arts in the cultural sector and by the wider public (Sound*Fjord*, 2010: n.p.). Its website, subtitled 'the online home of the United Kingdom's only sound art devoted gallery and research unit', suggests the need for an open-minded and curious approach to sound art from its institutions:

As part of the gallery's progressive and universally receptive stance on the essence of what sound art is and can be, Sound*Fjord* seeks to nurture and develop artists whose work shows its own vision, but equally questions itself and the world around it. Indeed, the gallery wishes to be seen as a place to highlight what is challenging in the sound art world. (Sound*Fjord*, 2010: n.p.)

This mission also implies that sound art has not only challenged the artworld, but has also developed a world of its own to be challenged.

The Engine Room is another London-based initiative that functions as a 'platform for the exploration, education and promotion of sound art' through its annual events at Morley Gallery (Morley, 2016a: n.p.). An international competition in 2015 attracted over 130 entrants from 33 countries as diverse as Mexico, Nigeria, Finland, India and Brazil, and culminated in an exhibition featuring works by 'emerging sound artists from Singapore, Russia, Germany, Colombia, Italy, Canada, France, the United States and the United Kingdom' (Morley, 2015b: n.p.). Competition winners were chosen by a panel including electroacoustic composer Simon Emmerson, artists and composers Ray Lee and Mira Calix, and sound artist Janek Schaefer who also exhibited a newly commissioned installation (Morley, 2015a: n.p.). A call for works for a second international competition of sound art will open in September 2016 (Morley, 2016b: n.p.). The Engine Room,

which developed out of the adult education courses in music and visual arts at Morley College, is one recent example of growing institutional research and support for sound art.

Among an ever-increasing number of sound art events, the major survey exhibition *Sound Art: Sound as a Medium of Art* at the Center for Art and Media in Karlsruhe, Germany (ZKM), from March 2012 to January 2013, might also be cited as a significant example (Figure 1.15). In its aim to present the development of sound art in the twenty-first century (ZKM, 2012: n.p.), the show and its forthcoming publication arguably signify the continued relevance of the genre and its definition in the artworld. The international nature of this burgeoning discourse is also indicated by the ongoing stream of major sound art exhibitions and festivals around the world, such as the US (*Soundings* at New York's MoMA in 2013), Italy (*Art or Sound* at Venice's Fondazione Prada in 2014), UK (*Soundscapes* at London's National Gallery in 2015), Australia (Tasmania's *MONA FOMA* in January 2015 and 2016) and Peru (*Hacer La Audición* at Lima's MAC in March 2016) (Pollack, 2013: n.p.; Tatolli, 2014: n.p.; Yeung, 2015: n.p.; Madeleine, 2015: n.p.; The Wire, 2016: n.p.).

It is evident that the idea of sound art has gained momentum over a period of thirty years through a range of exhibitions, festivals, symposia and events. These activities have nevertheless also raised a number of questions concerning the emergence, existence and nature of sound art that would clearly benefit from scholarly research.

Research and scholarship

Despite thirty years of sound activity, a specific field of study arguably did not emerge until around 2005. University engagement with sound in the arts is nevertheless evident from the late twentieth century. One example is the Sonic Arts degree programme established at Middlesex University in 1995. Its leader, Tony Gibbs, explains that 'sonic art is a new field that is still defining itself. Studies at Middlesex are themselves part of that process. By so doing, we aim to help refine, explore and extend both the scope and meaning of this new and significant art form' (2002: n.p). Having emerged from electroacoustic music traditions, the expansion of the Middlesex sonic arts programme to sound art is nevertheless indicated through its symposium series *The State of Affairs* in 2003-4, which considered the relationship between sonic and visual arts practice.

The Sonic Arts Network (now 'Sound and Music'), established in 1979 to enable both UK audiences and practitioners to engage with the art of sound through a programme of commissions and events, has similarly grown to accommodate the work of sound artists (Matthews, 2012: n.p.). Opportunities have also arisen for sound art practitioners in research centres such as STEIM (the Studio for Electro Instrumental Music), which has provided a programme of residencies and workshops for contemporary musicians to develop instruments in







Installation views. Photos: Steffen Harms © ZKM (2012: n.p.). Used with permission.

Figure 1.15 – Sound Art: Sound as a Medium of Art, ZKM, Germany, 2012-13

Amsterdam since 1969, and the Sonic Arts Research Centre (SARC), a purpose-built facility which opened in 2004 at Queen's University Belfast to unite 'the fields of musical composition, signal processing, Human Computer Interaction and auditory perception' (SARC, 2004: n.p.). While several courses and interdisciplinary programmes accommodating sound art and sonic art have emerged over the years, the arrival of sound art in the academy is perhaps best signalled by the creation of a centre specifically dedicated to 'Creative Research into Sound Arts Practice' (CRiSAP), founded at London College of Communication in 2005, which aims to 'extend the development of the emerging disciplinary field of sound arts and to encourage the broadening and deepening of the discursive context in which sound arts is practised' (CRiSAP, 2005: n.p.).

Another indication of a developing research community can be found in the emergence of online databases of works and writing relating to sound in the arts (Figure 1.16). UbuWeb, for example, was founded by Kenneth Goldsmith in 1996. It began with an MP3 archive of sound poetry and has 'grown to encompass all types of sound art, historical and contemporary' (2001: n.p.). The site explains that, 'as the practices of sound art continue to evolve, categories become increasingly irrelevant, a fact UbuWeb embraces. Hence, our artists are listed alphabetically instead of categorically' (Goldsmith, 2001: n.p.). This statement seems to point to a conscious disregard of categories, albeit through the evolving category of sound art. Rhizome is another online archive dedicated to digital art that was founded in 1999. In 2004, it held an inaugural exhibition of sound art works from the database, Ya Heard, curated by artists Keith and Mendi Obadike (2004: n.p.). The ElectroAcoustic Research Site (EARS) launched for the study of electroacoustic music in 2002, and provides some useful resources relevant to the topic of sound art, whilst highlighting the challenges in attempting to classify as well as capture such a broad range of activity. Its authors explicitly note 'a current imbalance in the field' in what they describe as 'the "arts" side of electroacoustic studies' and express aims to address this in the future (Landy and Atkinson, 2005: n.p.).

The eventual appearance of anthologies of sound is also revealing. *The Auditory Culture Reader*, for example, was published in 2003 and attempted to redress the lack of sound in discussions of cultural experience by publishing 'classic texts, interviews and original contributions by leading social and cultural theorists' on the subject of sound in culture (Bull and Back, 2003: 511). *Aural Cultures* was published one year later in response to a 'sonic turn' (Drobnick, 2004: 10), and presents a small collection of essays written by authors from a wide variety of backgrounds, including anthropology, philosophy, art history, communication, and film studies. *Audio Culture* is another reader, published in 2004, which presents writings by composers, philosophers and cultural theorists on the theory and practice of modern music as well as 'this new culture of sound' (Cox and Warner, 2004: 455). A final example is *Open*, a cahier on art in the public



a) Screenshot of Ubuweb sound section, founded 1996. Image: the author © UbuWeb (Goldsmith, 2001: n.p.). Used with permission.



b) Screenshot of the inaugural sound exhibition Ya Heard on the Rhizome ArtBase, founded 1999. Image: the author © Rhizome (Obadike, 2004: n.p.). Used with permission.



c) Screenshot of the EARS Electroacoustic Resource Site, founded 2002. Image: the author © De Montfort University (Landy and Atkinson, 2005: n.p). Used with permission.

Figure 1.16 – Online archives of sound

domain, which focused on *Sound in Art and Culture* in its ninth issue (Seijdel, 2005: n.p.). This special issue in 2005 presented the work and ideas of artists such as Susan Hiller, John Cage, and Max Neuhaus. The emergence of these collections certainly indicates a growing academic interest in sound in art and culture.

Having attracted critical attention in newspapers and magazines for some years, sound art also began to feature as a subject in peer-reviewed journals. In 2004, for example, musician Margaret Anne Schedel wrote about 'Alternative Venues for Computer Music' in *Organised Sound*. In this article, she concludes that the use of museums and galleries as well as the term 'sound art' may be the best way to generate interest in new music (Schedel, 2004: 303). One year later, in the same journal, curator Laura Heon provided an historical overview of sound art at MASS MoCA in the article 'In Your Ear: Hearing Art in the Twenty-First Century' (2005). In 2006, composer and artist Ros Bandt wrote about sound installation through his own practice in *Contemporary Music Review* (2006). In the same year, a special issue of the *Leonardo Music Journal* considered the 'expanded role of sound in art, science, business and other aspects of everyday life' (Collins, 2006: 7). Here, the editor Nicolas Collins remarks that 'museums, galleries and artists' studios are getting noisier: It is not that there is so much more "Sound Art" now than ten years ago, but rather that so much more art has sound' (2006: 7). While it is likely that there was more sound art in 2006 than 1996, given the observable growth in its discourse, its eventual recognition within the academy is nevertheless most pertinent here.

A small number of extended writings specifically on the subject of sound art also surfaced around this time to form what might be considered a nascent field of study. Background Noise: Perspectives on Sound Art (2006a), for example, is the direct result of Brandon LaBelle's PhD research at The London Consortium at Birkbeck College, in which he attempts to sketch out the chronological development of sound art practice from the 1950s (2005). In his opinion, 'the current surfacing of a prominent auditory culture' observable in the number of sound art exhibitions and an increasing range of academic programs 'reveals the degree to which sound art (and related auditory studies) is lending definition to the twenty-first century' (LaBelle, 2006a: 295). LaBelle nevertheless also recognises that 'ironically, sound art still lacks related literature to compliment [sii] and expand the realm of practice' (2006a: 295). This historical overview of sound art is positioned in relation to the history and theory of both visual art and contemporary music and the exchange and influence between these fields. Rich in theory and reference to artists and their works, LaBelle's account of sound art loosely revolves around ideas of space, sitespecificity and the social aspect of listening and, whilst idiosyncratic in its approach, remains one of the main scholarly accounts of the practice to date. This critical history not only 'lends support to deeper consideration of sound art's place within contemporary culture' (LaBelle, 2006a: 295), but also contributes to the recognition of sound art as a term and practice. LaBelle's study does

not, however, dwell on the debate or discourse surrounding its existence. Only in a footnote does he recognise that 'sound art has taken a definitive surge in cultural attention in the last five years' and how 'such entrance occurs tentatively and ambivalently', which is something that he ascribes to visual institutional structures and their difficulty in incorporating an 'intensely sonic medium' (LaBelle, 2006a: 153).

One year later, another history of sound art was presented in Sound Art: Beyond Music, Between Categories (2007). The author of this book, musician and composer Alan Licht, acknowledges in its introduction that 'Sound Art is a term that has been used with increasing frequency since the late 1990s but with previous little in the way of an accompanying, agreed upon definition' (2007: 9). He also recognises that 'while artists frequently resist categorisation, in this case, it also points to the confusion over what - and whom - "sound art" really refers to' (Licht, 2007: 9). However, Licht's account focuses on forms from which sound art may have developed (such as music, sculpture, film and performance), and the dialogue between these (namely the crossover of musicians into the visual world and vice versa), rather than on sound artists and their works per se. While his argument that sound art falls between these existing media categories is a potentially compelling idea, Licht's explanations lack theoretical grounding and appear to ignore the rich complexities of the artworld, which he otherwise seems to revel in describing. The anecdotal nature of this account, alongside the high proportion of illustrations, leaves Licht's contribution reading more like a catalogue of interdisciplinary and experimental artists working with sound than an academic essay on sound art. The publication does nevertheless at least highlight the difficulties surrounding the acceptance and location of sound art in the artworld, signalling the need for further theoretical enquiry.

Further publications on sound in the arts have since appeared. In Understanding the Art of Sound Organisation (2007), for example, composer and musicologist Leigh Landy provides academic justification for the EARS online database and its approach to the aesthetics and analysis of electroacoustic music. The study not only recognises but also aims to remedy the issues surrounding the classification and terminology of sound-based artworks, which are considered detrimental to their study. It proposes an interdisciplinary and holistic framework to replace current musicological approaches, which takes into account a work's history and theory as well as technological and social aspects. Despite taking a broad perspective of sound-based practice, Landy is keen to point out both the overlaps and the distinctions between different practices. His study also highlights an urgent need to address issues of definition within the academy:

Debating our means of classification more often would do this body of work a world of good. It is important that people recognize that these questions of placement are as urgent today as they were in the 1950s when sound-based works came rapidly to the fore; that is, one might investigate why after so many years this question seems to have been left unattended as if the relevant genres are all still

new, rather unknown. I have yet to discover a discussion concerning genre theory that focuses specifically on issues related to works of sound organization; for the sake of achieving more appropriate classification systems for, and thereby, greater accessibility of the artworks, a collaborative effort to achieve better genre terminology would be very much worth the effort. (Landy, 2007: 9)

In confronting the issue of sound art's definition, and using an interdisciplinary approach that will also draw upon genre theory, it is hoped that the present study can also alleviate some of the confusion and contribute to the wider debate surrounding the classification of sound-based practices.

Seth Kim-Cohen's *In the Blink of an Ear: Toward a Non-Cochlear Sonic Art* is another study cast within the wider net of the 'sonic arts' (2009). This account draws on examples from experimental popular music as well as sound art in order to challenge the critical approach to and reception of sound in the arts. Here, Kim-Cohen describes sound art as 'a discrete category of artistic production' emerging in the 1980s (2009: xix). He also observes that an aesthetic for sound, distinct from music, did not begin to establish itself theoretically until the 1990s and that there is still 'a dearth of serious thinking on the subject' (2009: 91). Building on the developments of minimalist criticism within art history, which in his opinion have largely been neglected within the discourse of the sonic arts (Kim-Cohen, 2009: 89-120), Kim-Cohen regularly refers to examples of sound artists and their work in order to make a case for a conceptual rather than phenomenological approach to the sonic arts. In spite of its broader scope, this is a persuasive theoretical account of sound art and will be drawn upon within the present study.

Through the same publishing company, Continuum, an almost opposing philosophy is presented in *Listening to Noise and Silence: Towards a Philosophy of Sound Art* (2010). Its author, sound artist and writer Salomé Voegelin, argues that a critique of sound art should be approached through the sonic experience. A number of sound works are discussed in relation to a range of philosophical ideas about listening, and a disinterest in categorical distinction and canon-making is also expressed. These differing approaches reflect some of the emerging debates within the discourse of sound art to be explored in this study. They also point to the gradual development of a critical academic field.

Around this time, sound art made a noticeable appearance in academic journals. The first issue of *Organised Sound* in 2009, for example, was dedicated to the subject. Its editor, Jøran Rudi, begins:

Sound art is a slippery term, not well defined and absorbing new artistic practices so rapidly that it is in danger of collapsing as a meaningful category. Perhaps a lack of definition and clear delimitations is also what makes sound art so attractive, allowing for its large diversity and offering few of the taxonomy restraints that generally characterise music and art historical academic discourse. Yet this sensed freedom does not mean that the genre is free from institutionalisation. Thus, the increasing

number of artistic productions broadly labelled sound art that are penetrating both white cubes and public spaces is a phenomenon that warrants closer investigation. (Rudi, 2009: 1)

This introduction clearly acknowledges the problem of sound art's definition and the urgent need for scholarly attention in this area. The articles in this issue highlight the significance of sound, listening, space and site for sound art, as well as its relationship with music and the visual arts, while conveying the wide variety of issues, ideas and approaches that sound art can encompass (Campesato, 2009; Demers, 2009; Iosafat, 2009; Tittel, 2009; Ouzounian, 2009; Chapman, 2009; Madsen, 2009; Klein, 2009). Some articles raise broader questions as to whether sound art refers to any sonic practices that 'go beyond what we might conventionally term musical,' such as the use of sound design in film (Escriván, 2009). Others present more specific accounts of sound art as a genre and the linguistic differences within its discourse (Engström and Stjerna, 2009). In one article, called 'Sound Art: Origins, Development and Ambiguities', Licht offers an abridged version of the argument presented in his book. He again notes 'the complexities of the term's use as a categorisation' resulting from gallery exhibitions, and considers compositions by D.A.M.A.G.E. and David Byrne as a way to illustrate the 'increasingly fluid interpretation of sound art's identity' (Licht, 2009: 3).

In this issue of *Organised Sound*, Cox also presented an article discussing the ontological aspects of sound revealed by sound art (2009), and later develops these ideas in the *Journal of Visual Culture* (2011). Observing the increased prominence of sound art over the past decade – which he considers to have 'emerged in the late 1960s as a confluence of experimental strategies in music with Postminimalist installation practices in the visual arts' (Cox, 2011: 146) – Cox specifically asks the question: 'Why does sound art remain so profoundly undertheorized, and why has it failed to generate a rich and compelling critical literature?' (2011: 146). While he regards Kim-Cohen's study as 'one of the very few sustained theoretical examinations of sound art and kindred musical forms' (Cox, 2011: 147), Cox also considers its adoption of theories of representation and signification to be problematic. He argues that 'the prevailing theoretical models are inadequate' since they have been 'developed to account for the textual and the visual' and therefore 'fail to capture the nature of the sonic' (Cox, 2011: 146). Cox instead draws on philosophical ideas to propose an alternative theoretical framework within which to analyse the sonic arts – a materialist account of sound art – which will also be considered in this study.

These theoretical accounts indicate that artists working with sound, from Russolo through to Merzbow, often negotiate the ontology of their practice as much as theorists. This situation is equally evident in sound art. The blur between theory and practice, for example, is particularly apparent in artist and theorist J. Milo Taylor's *A History of Sound Art* (2011). Comprising eighty minutes of sound, extracted from works, dialogue and recorded text of significant artists and

theorists working with sound, this composition traces the development of sound art over one hundred years (Track 1.4). The audio collage, mixed by sound designer Joel Cahen, is also mapped onto a timeline in an accompanying booklet containing brief biographies of the artists (Figure 1.17a). Presented as 'an informative and engaging listening session' (Cahen, 2011: n.p.), the work toured various arts institutions across the UK in 2011. Taylor was CRiSAP's first PhD graduate, and his doctoral project involved the creation of a database specifically dedicated to sound art. *ImMApp* was conceived as an immersive and interactive environment in its own right, which 'aimed to deliver an innovative re-presentation of sound art discourse from a digitized, post-modern, post-Cageian perspective' through the use of contemporary technologies (Taylor, 2008: 426-7; Figure 1.17b). Taylor's critical mapping of artists, works and writing can also be accessed through the beta site *Sound Art Archive* (2011b: n.p.). These projects demonstrate creative attempts by researchers to negotiate the complex and disparate nature of sound art discourse.

It is clear that there is a lack of sustained critical analysis to accompany the steady growth of sound art as a phenomenon in the twenty-first century. While the few existing theoretical studies are invaluable contributions to the field, they have either avoided or inadequately addressed some of the fundamental questions concerning the emergence, existence, definition and recognition of sound art that have been raised repeatedly within its discourse. Chronicling the emergence of sound art has illustrated not only the relevance of this contemporary art form but also the way in which it might be understood historically. Through a critical investigation of some of this discourse, which has occurred across a wide range of journalistic, artistic and scholarly platforms in history, the present study aims to provide its own unique contribution to the discourse of sound art.

Having established the aims, approaches and context of this study, the following chapter will consider the situation of sound art in relation to contemporary music and other sound-based practices that have emerged in the twentieth century (Chapter 2). Subsequent chapters will explore various aspects of the definitional discourse of sound art, from a reluctance to define (Chapter 3) to its representation in some major exhibitions (Chapters 4 and 5). The penultimate chapter will examine what the definitional traits of sound art might be (Chapter 6), and the final chapter (Chapter 7) will reflect on the findings and implications of this research.



a) Pages from A History of Sound Art booklet, 2011. Image: © Newtoy (Taylor, 2011a: n.p.). Used with permission.



b) Screenshot of the ImMApp 'Immersive Database of Sound Art', 2009. Image: © J. Milo Taylor (2009: n.p.). Used with permission.

Figure 1.17 – Creative mappings of sound art discourse by J. Milo Taylor, 2009-11

Chapter 2

Beyond Music: Situating Sound Art as a Category

When faced with the musical conservatism at the beginning of the last century, the composer Edgard Varèse responded by proposing to broaden the definition of music to include all organised sound. John Cage went further and included silence. Now even in the aftermath of the timid 'forever Mozart decades' in music, our response surely cannot be to put our heads in the sand and call what is essentially new music something else – 'sound art'.

(Max Neuhaus, in liner notes to Volume: Bed of Sound, 2000)

Some people resist labels or categories. I generally don't mind them. I just try to be as aware as possible of how that category has been defined historically.

(Stephen Vitiello, in interview with Nate Aldrich, 2003)

The relationship between sound art and music is clearly significant to the debate surrounding its definition. As seen in the previous chapter, this issue often surrounds the activity of sound art, and since musical practices often referred to as 'experimental', 'contemporary' or 'new' have been relatively well-documented in comparison to sound art, they can in fact provide a useful point of departure for this investigation. This chapter will explore sound art's relationship with music through the two concepts that make up the category: 'sound' and 'art'. It will begin with a brief consideration of historical figures popular within the discourse of sound art whose experimental approaches to sound challenged the traditions of music. In the second and main part of the chapter, attention will shift onto a range of artistic practices involving sound that appeared from the end of the twentieth century assuming the label of art instead of music. Rather than resisting the category of sound art in the manner of Max Neuhaus (1939-2009), one of the first artists to use sound as an autonomous medium (whose opinions will be examined over the course of this study), this inquiry therefore adopts a position akin to that of sound artist Stephen Vitiello in attempting to understand the emergence of sound art as a category through its situation in history.

From music to sound: Experimentation in history

It is perhaps inevitable that the linguistic distinction between musical and non-musical sound that was traditionally upheld for centuries in the Western world was eventually problematized following experimentation in the field. As Cox and Warner explain in *Audio Culture*, 'over the course of the twentieth century, it became increasingly difficult to distinguish music from its

others: noise, silence, and non-musical sound' (2004: 5). This broader view of musical sound was influenced by a range of developments, from an increased exposure to other cultures and technological advancements to challenges to the tonal system and the general concept of music by the radical avant-garde (Cox and Warner, 2004: 5; Kahn, 1999: 4-13). In a relatively early theoretical contribution to sound art in the form of a catalogue to the *Resonances* exhibition at the Stadtgalerie Saarbrücken, gallery director Bernd Schulz notes that sound art 'owes much to the dissolution of the border between sound (in the sense of musical sound) and noise' (2002a: 14). He explains:

In the context of music, sounds are regarded as messengers of subjective inner worlds; noises on the other hand, are conceived of as symbols indicating trivial occurrences or objects of everyday life. Yet this distinction is arbitrary and a product of cultural learning. Physically speaking, they are one and the same thing, for every sound or noise can be comprehended as the sum or integral of its sinus tones. (Schulz, 2002a: 14)

In order to reflect further on this fraught relationship between sound art and music, it would therefore be useful to consider briefly two historical figures who not only feature prominently within the discourse of sound art but who have also been described as 'key nodal points to which most of the developments in contemporary music can be linked' (Cox and Warner, 2004: xvi): John Cage and Pierre Schaeffer (Figure 2.1).

John Cage

The American composer, artist and theorist John Cage (1912-1992) is arguably one of the most prolific figures within the history of contemporary music, but also the contemporary visual arts. As theorist Douglas Kahn asserts, '[Cage] would occupy a central position within any discussion of sound and art in [the twentieth] century because of the importance and influence across the arts of his music, writing and ideas about sound throughout his long and prolific career' (1999: 13). In a similar way that the artist Marcel Duchamp is known for his questioning of the visual aesthetic through notorious works such as *Fountain* (1917), in which he presented a urinal as a 'ready-made' gallery exhibit (Figure 2.2), Cage is known for questioning and ultimately extending the notion of the musical. His most notorious composition is 4'33'' (1952), which appears to consist of four minutes and thirty-three seconds of silence (Figure 2.3). The work nevertheless illustrates some of Cage's most influential ideas about sound. By instructing a performer not to play his or her instrument for the duration of the three-movement piece, 4'33'' draws attention to the everyday 'non-musical' sounds coming from the audience, such as breathing, coughing, or rustling paper. It also highlights the active role usually played by audiences in filtering out these sounds as 'noise' and concentrating on the 'musical' sounds of the performance, and therefore



John Cage (1912-1992) preparing a piano, 1960. Photo: Ross Welser © John Cage Trust (Toronyi-Lalic, 2010: n.p.). Used with permission.



Pierre Schaeffer (1910-1995) with the phonegene in his studio, 1951. Photo: Serge Lido © Ina. Courtesy of the Institut National de l'Audiovisuel, Paris. Used with permission.

Figure 2.1 – John Cage and Pierre Schaeffer



Photo: Alfred Stieglitz. Public domain (MoMA, 2010: n.p.). Figure 2.2 – Marcel Duchamp, Fountain, 1917

-	4'33'			
	EOR, ANY INSTUISENT	98 соцых <u>і</u>	ation of I	:HSTRUMENT\$
4.2	^{13'}			
reg. i Thus	aat monoraat sa consolikiteed op zensemaanst Ge			

Photos: © 1960 Henmar Press, Inc. (Vartanian, 2013: n.p.). Used with permission from C.F. Peters Corporation.

Figure 2.3 – Score page and detail of John Cage's 4'33", 1952-3

fulfils one of the key aims of Cage's aesthetic: to break down the divisions between composer, performer and audience (1973: xi).

Although it is known as the silent piece, 4'33" questions the possibility of silence. Cage famously recounts an experience inside an anechoic chamber where he discovered that he could still hear the sound of his blood pumping through his veins (1961b: 8). Later, he also describes how 'it had been clear from the beginning that what was needed was a music based on noise, on noise's lawlessness' (Cage, 1973: xi). The work is therefore as much about noise as it is about silence. Cage was also interested in ideas about chance found in Zen philosophy, which he later establishes as a compositional technique through methods such as indeterminacy (1961a: 35-40). 4'33" incorporates all of these ideas, since the ambient sounds produced and heard during the piece are beyond the control of the composer and performer, and it is these non-intentional sounds that become the focus. The work also points to the theatrical and therefore visual aspects of musical performance. For example, at the premiere of the work, as part of a concert of contemporary piano music in Woodstock, New York, the pianist David Tudor sat motionless at the piano on stage, signalling the start and end of movements by opening and closing the piano lid in front of a bemused audience (Nyman, 1999: 3). By following the conventions of musical presentation, the piece created a tension between *playing* music and *hearing* music. Perhaps most significantly, the work highlights the act of listening, and the way in which the human ear is culturally attuned to discern which sonic material is or is not relevant. As Cage explains:

I had taken steps to make music that was just sounds, sounds free of judgements about whether they were "musical" or not, sounds free of memory and taste (likes and dislikes), sounds free of fixed relations between two or more of them (musical syntax [...]). (Cage, 1973: xiii)

By questioning the distinction of the 'musical' and 'non-musical' in 4'33", Cage therefore sought to position noise as sound, and sound as music, to allow *all* sounds into the musical domain.

The impact of Cage and his work on the development of the music tradition cannot be overstated. In the seminal text, *Experimental Music: Cage and Beyond* (1999), the minimalist composer and musicologist Michael Nyman (b. 1944) uses 4'33" as a point of reference with which to build a definition of experimental music. He firstly distinguishes experimental practices from those of the avant-garde (1999: 1-30). For example, the Second Viennese School composer Arnold Schoenberg (1874-1951) sought to abandon a crucial element of the established musical system through the compositional technique known as Serialism. By using all twelve pitch classes as part of the compositional palette, this method removed the necessity of a tonal centre, or key, to enable what Schoenberg described as the 'emancipation of the dissonance'. While this avant-garde aesthetic marked a revolution in Western art music, Nyman argues that it was nevertheless 'conceived and executed along the well-trodden but sanctified path of the post-Renaissance

tradition' (1999: 1). An experimental approach, however, developed alongside, and perhaps in opposition to, the resulting post-war modernist practices of composers such as Stockhausen, questioning the enduring traditions of composition, performance and listening. For Nyman, Cage's 4'33" contains 'the extremes of Cageian indeterminate open systems and the closed systems of the minimalists' and therefore serves as a locus from which to classify experimental music (1999: xv).

In an overview of *Modern Music*, Cox and Warner suggest that this specific sense of the term 'experimental music' has persisted: 'While often used to characterise unusual or avant-garde music of any sort, the phrase "experimental music" refers more specifically to a particular genre of vanguard music initially developed in Britain and the United States during the 1960s' (2004: 207). So while 'experimental' is sometimes used in a general manner to describe musical practices departing from the conventions of the tradition, the term has also acquired specific sense. This is perhaps unsurprising given that Cage himself eventually chose to adopt this term to describe his work: 'Times have changed; music has changed; and I no longer object to the word "experimental". I use it in fact to describe all the music that especially interests me and to which I am devoted, whether someone else wrote it or I myself did' (Cage, 1961b: 7). It is interesting to note that Cage objected to the term before he subscribed to it. The term 'experimental' could certainly have negative connotations, and be seen as a marginalising term used to refer to 'difficult' works. Others, however, might see such works in a more positive light, in that they challenge and explore the norms and possibilities of music. Such is the case for Nyman, who explains that 'John Cage had thankfully already defined the term in relation to music' (1999: xv). Alluding to Duchamp, Nyman states that Cage presented him with a "ready-made" – a definition and an aesthetic practice that I then set out to re-define, describe, contextualise, analyse and expand' (1999: xv).

Nyman's genre-defining overview and subsequent accounts show how Cage's aesthetic is centred on the idea of music as *process*, whereby music is seen as an act full of possible outcomes. This is different to the idea of music as *product*, whereby the ideal outcome has already been predetermined, as in the case of traditional instrumental scores upon which composers and performers traditionally focus their attention (Nyman, 1999: 4-8; Eno, in Nyman, 1999: xi-xiv; Cox and Warner, 2004: 207-208; LaBelle, 2006a: 7). The 'experimental' approach instead places importance on the sounds that actually occur. Cage's 'open' works, for example, were originally developed as a way 'to place himself in the role of listener and discoverer rather than that of creator' (Cox and Warner, 2004: 176). Here, the absence of a traditional, definitive score demands that the composer and performer assume more of a collaborative and participatory role and that the particular performance situation becomes part of the work itself. Most musical works that employ techniques of indeterminacy to enable the composition or performance to unfold

organically could therefore be placed within the category of experimental music (Cox and Warner, 2004: 207). Cage's influence also extends beyond experimental music to other contemporary musical practices such as improvisation, minimalism and electronic music (Cox and Warner, 2004: 208).

Cage's inspiration and influence also goes beyond music. Nyman explains, for example, that chance procedures were not only integrated into compositions by Morton Feldman, Earle Brown and Christian Wolff, but also the works of early Fluxus artists, who investigated the possibilities of performance and the arts (1999: 72-88). In turn, such activity engendered new explorations and reactions within the field of music, such as Cornelius Cardew's 'scratch orchestra', which incorporated everyday materials and activities into its repertoire, and the 'new determinacy' of minimal music, which looks back to Western art music composers as well as ethnic musical traditions and focuses specifically on tonal material governed by rigorous and often repetitive procedures (Nyman, 1999: 139). Needless to say, the various experimentations with performance eventually lead to the creation of a new genre within the visual arts.

An important aim of experimental music, and also 'performance art', is the extension of the arts to everyday life, not only through the types of sound used as artistic material, but also in the general approach to music-making. Cage in particular was interested in removing the distinction between the artist and audience:

The next steps were social, and they are still being taken. We need first of all a music in which not only are sounds just sounds but in which people are just people, [...] we need a music which no longer prompts talk of audience participation, for in it the division between performers and audience no longer exists: a music made by everyone. (Cage, 1973: xiii)

Such comments, and the example of 4'33", highlight the conceptual nature of the practice, where a work expresses more than a score or the sounds produced in its performance, but in fact attempts to comment on the very condition of music. The relationship between Cage and the concerns of 'conceptual art' is explicitly discussed by Brandon LaBelle, who explains that 'the development of chance operations and indeterminacy as methods of composition and performance sets the stage for self-referentiality in which the very means of composing and processes of performing become part of the content of the work itself' (2006a: 5). LaBelle also notes that 'sound, as distinguished from harmony and pitch, short-circuits the traditions of musical understanding, and in doing so provokes an implicit critique of such traditions' (2006a: 5). Furthermore, 'silence within musical composition can be heard in terms of a "'dematerialisation" of the musical object, revealing a suspicion toward representational structures' (LaBelle, 2006a: 5). These observations emphasise the critical nature of Cage's practice, whereby attention is directed to the context of listening and interpretation. Parallels can

again be drawn with Duchamp, who was driven by the aspiration to bring art and the art-making process above the merely visual or 'retinal'. His appropriation of mass-produced objects, later referred to as 'ready-mades', abandoned the traditional tools and techniques of painting, to allow almost anything to be used as material (Maur, 1999: 106). In doing so, he questioned art's preoccupation with the 'aesthetic', and called for an expansion of the definition of art, eventually leading to a monumental change in the way in which art was perceived (Naumann, 2005: n.p.). In shifting attention towards context in order to question the distinction between objects of art and the everyday, the notion of Cagean silence can be equated to Duchamp's ready-mades, as one curator describing the use of sound in the arts explains: 'Cage revealed the concert hall as a place with its own Duchampian readymade aural personality' (Huberman, 2005: 56). Such a comparison also draws attention to the fact that the art and ideas of Cage exemplify a conceptual approach to the music-making process, as much as Duchamp's works do for the art-making process.

Just as Schoenberg encouraged 'the emancipation of the dissonance' by releasing music from its tonal vocabularies, Cage promoted the emancipation of sound from music by obscuring distinctions between the composer, performer and audience, 'fine' and 'popular' musical forms, music and visual art traditions, and even art and everyday life. This led to a conceptual and critical experimental practice that aimed to escape the trappings of traditional music. For example, musician, producer and artist Brian Eno explains, 'we concluded that music didn't have to have rhythms, melodies, harmonies, structures, even notes, that it didn't have to involve instruments, musicians and special venues' (Eno, in Nyman, 1999: xii). Much early work was therefore presented outside conventional musical situations. As Eno notes, 'the music colleges were not at all interested, whereas the art colleges – with their interest in happenings, pop and performance – were soaking it up' (Eno, in Nyman, 1999: xi). Eno's record label in fact provided an unexpected niche and exposure for experimentalism in the world of popular music, an influence that can be seen in rock, punk, hip hop and electronica (Cox and Warner, 2004: 207). Experimental music therefore influenced a range of musical and artistic forms and their audiences.

It is clear that the activities of John Cage have largely defined what is now known as 'experimental music', a term he initially rejected but eventually subscribed to. Simply by focusing attention to actual sounds, his experimental approach questioned and ultimately extended the notion of the musical. In commenting upon the condition of music and attempting to escape its traditional trappings, his approach drew parallels with conceptual art, and therefore not only influenced contemporary musical practice but also the contemporary arts. This conceptual approach to sound across both artistic and musical traditions is fundamental to the development of sonic practices.

Pierre Schaeffer

Another important historical figure who considered sound beyond the traditional tropes of music-making was the French composer, musicologist, acoustician and broadcaster, Pierre Schaeffer (1910-1995), whose unique compositional style named *musique concrète* entailed working with recorded sound and its associated technologies and techniques. Experimental music was also using recorded sound around this time since the use of electronic systems assisted the removal of subjectivity from the composer (Nyman, 1999: 89-109; Kahn, 1999: 113). Schaeffer shared similar aims to establish 'a sensitivity to sound, and listening in general, by showing us the direct place from which it springs' (LaBelle, 2006a: 25), although he took a very different approach that involved the isolation of sound from its very instant and location.

Schaeffer developed the concept of acousmatic or 'reduced listening' – inspired by the story of Pythagoras, who placed himself behind a curtain when delivering his lectures to enable his students to focus on the sound of his voice and the meaning it conveyed – which can be defined as 'listening for the purpose of focusing on the qualities of the sound itself (such as pitch or timbre) independent of its source or meaning' (Chion, 1994: 223). This reveals the significance of sound recording for its isolation of acoustic events from their inherent time and space. Composer and artist Robin Minard explains that 'this represented an entirely new and up to then unthinkable phenomena [*sia*], one which eventually changed the history of music and even artistic thought' (2002: 44). Schaeffer's theoretical ideas fuelled his exploration into the possibilities for sound that arose out of phonographic developments of the time, and his background as a radio engineer and announcer gave him the practical skills to work with sound as a raw material.

The notion of the 'sound object', whereby sound becomes an object for artistic use in its own right, also resonates throughout Schaeffer's philosophy. It has been argued that the term 'concrete' not only refers to the use of 'real' sounds recorded on a 'fixed' medium, but also the direct way in which the composer works with the sound material (Harrison, 1998: 117; Minard, 2002: 48). As Minard suggests, 'at a time when John Cage was freeing music from the constraints of traditional forms, concepts and venues, Pierre Schaeffer was also opening the doors to approaching sound in a sculptural way' (2002: 48). He compares the composition methods of *musique concrète* – in which the 'sound object' on a magnetic tape or phonograph record is manipulated through recording and sampling techniques such as loops, interruptions, and alterations of speed – with the creation of fine art, whereby artists work into their materials alone in their studios with the tools at hand. This is compared to the 'usual constellation of the composer, the written score, the instrumentalist and the interpretation of a completed work' traditionally involved in the production of musical sound (Minard, 2002: 47). Although perhaps an ideological view of artistic production, questionable in a sociological account of the arts, this is

an interesting comparison between the worlds of music and art. It has also been argued that the label 'concrete' is paradoxical, since the composer of *musique concrète* separates sounds from their original contexts and then transforms them, thus moving from the concrete to the abstract (Harrison, 1998: 117; Minard, 2002: 47). In more traditional methods of composition, however, one begins with a concept and ends with a performance. For this reason, Kahn aligns the practice to abstract painting, with its concern to 'disrupt the system of potential meanings of which these phenomena are the elements' (1999: 111). Through its ideas of the sound object and acousmatic listening, it therefore appears that the approach of *musique concrète* is more comparable with approaches within the visual arts than art music traditions.

The influence of Schaeffer is apparent across a range of contemporary music practices that manipulate recordings, sample sound, or 'sculpt' sound through the movement of static sound objects in virtual space (Harrison, 1998: 117). Having 'prefigured today's music producer' and 'the age of the remix' (Cox and Warner, 2004: xiv), Schaeffer is also considered to have influenced popular forms of music. His distinct compositional style elevated sound to an object for aesthetic use and contemplation in its own right and is therefore also significant in the development of artistic practices involving sound.

Experimental music

The contributions of both John Cage and Pierre Schaeffer challenged prevailing attitudes and approaches to music and are significant in the move towards sound as an aesthetic category in its own right. A useful distinction between the two protagonists is one of reception and production, since Cage exercised the consideration of everyday sound as an aesthetic object while Schaeffer utilised and manipulated everyday sound as an aesthetic object (Kahn, 2006b: n.p.). The complex genealogy and influence of their ideas, which cut across both contemporary music and contemporary art, seems particularly significant in the discourse of sound art.

In one of the earliest theoretical contributions to the subject of sound in art, it is observed that 'the terms experimental music and sound art are considered by some to be synonymous and interchangeable' (Lander, 1990: 10). Later studies on sound art have also observed 'a tendency to apply sound art to experimental music of the second half of the twentieth century, particularly John Cage and his descendants' (Licht, 2007: 12). In this particular case, Alan Licht argues that experimental music should instead be seen as the 'godfather' of sound art (2007: 218). This brief reflection on experimental music is therefore a useful first step towards an understanding sound art. It also highlights some of the ambiguities surrounding the definition of experimental music, which is sometimes used in a generic sense to refer to all contemporary vanguard practices, and sometimes refers more specifically to the process-focused tradition of composition promoted by Cage. It is nevertheless perhaps telling that Brandon LaBelle observes in his history of sound art that 'to demarcate "experimental music" as a special category reflects a greater recognition that some kind of separation is, and was, necessary' (2006a: 9). Might the same logic therefore also apply to 'sound art' and other categories that have emerged since last century?

From music to art: The emergence of sonic practices

Developments from within the tradition of music evidently exposed the limitations of its own discourse and called into question its status as the art of sound. It is therefore unsurprising that, once sound was considered and treated as aesthetic material in its own right, various forms began to emerge on the fringes, and potentially outside, of music. The chapter's epigraph by Max Neuhaus illustrates a question often raised within the discourse of sound art as to why certain contemporary works are not labelled as 'music'. Douglas Kahn, best known for his history of sound in the arts, observes that 'music, of all the arts, fancied itself as having an artistic monopoly of sound, but during the 1980s it was only able to muster up the ideas of two old warriors – musique concrète and John Cage – to lay aesthetic claim to the new activity' (2006b: n.p.). It has been observed that the activity stemming from these 'old warriors' was welcomed more within visual arts than in musical institutions. Kahn explains that 'the recourse to art was because it was more capacious, discursively and institutionally, than music' and that 'the generalised notion of "art" seemed to be the most innocuous way to talk about this activity, since it provided plenty of rhetorical room to move' (2006b: n.p.). He reflects: 'From my own experience, during the 1980s the term art was valued for its ability through its different forms - art, the arts, artists, artistic - to be generalised beyond the fine arts, visual arts and the so-called artworld' (Kahn, 2006b: n.p.). These comments show that established aesthetic categories such as music and art have shifted in meaning over time, and also point to the expanding notions of the arts around this time. Just as the tradition of music faced expansion through the inclusion of sound, for example, Rosalind Krauss was describing an expanding field of sculpture to accommodate a range of new aesthetic activities in the visual arts (1979: 30-44; see also Chapter 5). The on-going debate about the relationship between music and sound art is clearly much more than a simple question of semantics.

The use of language can be extremely revealing. While 'sound art' did not find a firm footing in the literature until the twenty-first century, similar terms, such as 'audio art' and 'sonic art', as well as phrases such as 'the art(s) of sound' and 'sound in the arts', emerged from the late twentieth century onwards. Kahn observes that 'people working in sound used a variety of terms referring to art: radio art, audio art and sound art. All of these terms have their own geneses' (2006b: n.p.). The consideration of contemporary music categories above also points to the significance of the particular circumstances in which these terms have emerged. The remainder of

this chapter will use the literature as a way to explore occurrences of these various terms, and shed light on the emergence of sonic practices in the arts and their relation to sound art. Some terms will be revisited, in cases where it is helpful to retain the chronology and nuances of different discourses. This overview could therefore be said to resemble a Foucauldian 'archaeology of knowledge' (1972) in its attempt to expose the different iterations, transformations, irregularities and interrelations within the discourse of sound in the arts. Surveying the terminology in the theoretical literature will also facilitate a more detailed consideration of the wider discourse in which sound art is situated.

Art of sound

Sound by Artists (1990) is one of the earliest accounts of artistic activity with sound outside music, in which artists Dan Lander and Micah Lexier present a collection of writings by protagonists regularly referenced in the contemporary discourse of sound art, such as John Cage, R. Murray Shafer, Bill Viola and Christina Kubisch, 'in the hopes of stimulating dialogue' (Lander, 1990: 10). Observing that 'there is no sound art movement', despite a wealth of activity, Lander suggests that the lack of accompanying critique for an art of sound might result from the diversity of this activity as well as its connection to music:

In fact, it is difficult to identify an art of sound precisely because of its historical attachment to music. Although music is sound, the tendency has been to designate the entire range of sonic phenomenon to the realm of music. (Lander, 1990: 10)

Lander traces the 'art of sound' back to the Futurist Luigi Russolo (1883-1947), whose 'art of noise' acknowledged musical qualities in the sounds of everyday life and aimed to incorporate them into music (1990: 10-11). He also notes the influence of John Cage and Pierre Schaeffer, although Schaeffer's aim to disassociate sounds from their source to encourage their aesthetic appreciation is considered to impose a 'musical template' onto sounds that otherwise have day-to-day meanings. This, in Lander's opinion, 'leads us to a dead end conclusion: all sound is music' (1990: 11). He argues that 'if a critical theory of sound (noise) is to develop, the urge to ''elevate all sound to the state of music'' must be suppressed' (Lander, 1990: 11). While accepting that 'there is no sound art movement as such' (Lander, 1990: 10), this publication is a call for the liberation of sound from music and therefore anticipates the emergence of such a thing. It also suggests that an interest in the social contexts of sound might distinguish artistic explorations from musical ones.

Audio art

An essay by Douglas Kahn entitled 'Audio Art in the Deaf Century', which is published in *Sound by Artists*, recognises the potential of an autonomous artistic practice of recorded sound, and draws an interesting comparison between the acceptance of art photography with that of an 'art phonography' (1990: 301-328). One year later, in an article on 'The Contours of Acoustic Art' (1991) for *Theatre Journal*, German radio play writer and director Klaus Schöning discussed the potential of radio to open up the contemporary arts to sound:

After a history of nearly 100 years, the contours of acoustic art are beginning to be distinguished and to carve themselves into the general cultural consciousness. Radio now has both the opportunity and the responsibility to embrace the future development of the 'Ars Acustica' which it has so long nurtured as the challenge of its own utopia. (Schöning, 1991: 324)

Schöning observes that innovative tendencies in radio drama or *Hörspiel* ('hear-play') are often referred to as 'the New Hörspiel' or 'audio art', and states his preference of the term 'acoustic art' in parallel with the international use of '*Ars Acustica*' and to take into account the fact that these activities are not necessarily confined to radio. These examples indicate the significance of phonography and radio in earlier categorical separations of sound from music. Lander's involvement in *Sound by Artists* and a subsequent anthology *Radio Rethink: Art, Sound and Transmission* (Augaitis and Lander, 1994) was also fuelled by his interest in composing with recorded sound. It appears that 'audio art' was more commonly used to represent such interests at the time, although individuals were evidently also grappling with a range of alternative terms, meanings, and translations.

Audio Arts was also the name of a unique project established by artist William Furlong in the 1970s, which commented upon the activity of sound in the arts through interviews, conversations, reportage and works, presented in the format of an audio-cassette magazine. As a product of the new possibilities of sound storage and distribution that it investigated, the project was considered both documentary evidence and a creative work in itself (Gooding, 2007: 8). In a publication later documenting the project, entitled *Audio Arts: Discourse and Practice in Contemporary Art* (1994), Furlong explains:

Although it has been used consistently by artists throughout this century, there has never been an identifiable group working exclusively in sound, so one is not confronted with an area of art practice labelled 'sound art' in the same way as one might be with categories such as Pop Art, Minimal Art, land art, body art, video art and so on. (Furlong, 1994: 128)

It is curious that Furlong should choose 'sound art' instead of 'audio arts' as a potential name for such an art practice, given the name of his own project, although his observation serves to illustrate how the category of sound art was still not accepted around this time. Like Lander, Furlong notes the increasing volume of work that has emerged since the mid-70s as a result of artists being able to 'completely engage in the medium of sound through access to recording technology' (1994: 128), and also considers the diversity of sound practices as a potential explanation for the lack of a category. In contrast to Lander, however, he sees this absence as beneficial:

The failure of sound to construct a distinct category for itself has in fact proved an advantage, given that categories in the end become restrictive and the work circumscribed and marginalised. Therefore, in spite of the frequency with which sound has been utilised within artists work, it remains remarkably clear of prior associations, historical precedent or weight of tradition. (Furlong, 1994: 128)

Furlong's comments point to the potential problems that accompany categorical distinction, which have been observed in relation to music. There is nevertheless also an implication that such distinctions will inevitably occur.

Perhaps due to the rise of terms such as sonic art and sound art in later years, the terms 'audio art' and 'acoustic art' appear to have fallen out of favour, at least in the English-speaking world. An aesthetic discourse based around the medium of radio has nevertheless continued to flourish. In the 1990s, Ian Murray, one of the first visual artists to create work for the medium of radio, produced a manifesto for the *Kunstradio-Radiokunst* program, a weekly radio program broadcast from Austria since 1987, entitled 'Towards a Definition of Radio Art'. This clearly aims to distinguish the aesthetics of radio art, and one of its twelve key principles states: 'Radio art is not sound art - nor is it music. Radio art is radio' (Murray, 1990s: n.p.). In 2000, the scholar Kersten Glandien provided 'A Profile of New Radio Art', which observes that the development of digital is leading to structural changes in media that could either free up radio for experimental work or else herald the end of radio (2000: 188). It is significant that her conclusion acknowledges not only the difficulty of predicting what form the changes may take but also the fact that sound art seems to thrive on such developments: 'May theory draw comfort from the fact that everything has already moved on!' (Glandien, 2000: 188).

Sonic art

In the late 1990s, musician and composer Trevor Wishart coined the term 'sonic art' with the specific aim of widening the field of musical debate. In his book, entitles *On Sonic Art* (1996), he explains:

One problem I have had in my own musical career is the rejection by some musicians and musicologists of my work on the ground that 'it is not music'. To avoid getting into semantic quibbles, I have therefore entitled this book *On Sonic Art* and wish to answer the question what is, and what is not, 'sonic art'. (Wishart, 1996: 4)

This is a clear example of the terminological shift from music to art as part of a rhetorical gesture. For Wishart, the key reason for creating such a term is to escape some of the restrictions associated with the idea of music. At the same time, however, he makes clear that his practice is still closely tied to music:

I have chosen the title *On Sonic Art* to encompass the arts of organising sound-events in time. This, however, is merely a convenient fiction for those who cannot bear to see the use of the word 'music' extended. For me, all of these areas fall within the category I call 'music'. (Wishart, 1996: 4)

Wishart therefore essentially describes a felt need to create a label different to music because attitudes have not necessarily evolved at the same rate as practice.

Wishart's own compositional practice focuses on the construction of sounds themselves, working creatively with their 'internal architecture'. He is also particularly interested in the physiological and psychological effects of the resulting sounds. His book discusses the use of natural sound and the voice as an instrument, the potential to subvert the traditional acousmatic listening experience through representational sound images, and the impact of moving sound through virtual space using loudspeakers (in other words, diffusion techniques). Strong links with Schaeffer's sound object and use of technology are evident here. Wishart recognises that these concerns align with practices that commonly fall within the label of electroacoustic music, but also identifies areas that fall outside of this label: 'We can begin by saying that sonic arts includes music and electro-acoustic music. At the same time, however, it will cross over into areas that have been categorised distinctly as *text-sound* and as *sound effects*' (Wishart, 1996: 4). This comment indicates the presence of several creative practices involving sound outside the fringes of music at the time. It shows how artistic exploration with sound can straddle many areas and at the same adopt a distinct aesthetic.

In the same year that Wishart's *On Sonic Art* was published, the Music Technology programme at Middlesex University changed its name to Sonic Arts. Course leader Tony Gibbs explains that it was felt that music technology 'was no longer appropriate and often misunderstood' while sonic arts reflected 'its ethos and objectives' more accurately (Gibbs, 2002: n.p.). Conscious of the possibility of defining the field, Gibbs explains that the practices of sonic art might include sound composition, ambient music, sound design for film or video, interface design, sound-based installations, and issues as acoustic ecology or acousmatics (2002: n.p.). This demonstrates an

expansion of the sonic art defined by Wishart to a wider range of approaches, influences and practices.

The Grove Dictionary of Music also arguably participates in the debate about contemporary sonic practices in placing the definition of sonic art within the wider definition of 'electroacoustic music'. Wishart's ideas resonate in this entry, which was written by composers Simon Emmerson and Denis Smalley. Emmerson and Smalley explain that, 'since the late 1980s, "sonic art" has been adopted to situate electro-acoustic music within a wider framework' (2005: n.p.). They also note that 'although electro-acoustic resources are not obligatory for creating sonic art, the term has the advantage of indicating an openness to all types of sound' (Emmerson and Smalley, 2005: n.p.). The authors observe that the term electroacoustic music is often misused to define the approach rather than the tool, arguing that electroacoustic music uses electronic technology 'to access, generate, explore and configure sound materials' and also 'loudspeakers are the prime medium of transmission' (Emmerson and Smalley, 2005: n.p). Some also consider electroacoustic music as a discipline in its own right, with a historical trajectory that would include *musique concrète* and the German form *elektronische Musik*, in which Karlheinz Stockhausen generated sounds synthetically (Emmerson and Smalley, 2005: n.p.). Gibbs's working definition of sonic art cites musical influences such as rock and pop alongside the electroacoustic tradition, and he argues that 'these two strands have existed in parallel with, until quite recently, little or no acknowledgement of each other's existence or of the increasingly universal technical and aesthetic concerns that they share' (Gibbs, 2002: n.p.). Emmerson and Smalley also assert that 'this blurring of differentiation among genres, and sharing of practice among genres, is inevitable as common electroacoustic means become cheaper and more readily available' (2005: n.p.). These descriptions highlight the ambiguous nature of many contemporary musical practices, as well as the potential diversity of the sonic arts. It is apparent, however, that different practices have emerged with their own discourses, and that the emergence of sonic arts from electroacoustic music has resulted in particular associations with electronics and computer technology.

Gibbs later published a book on *The Fundamentals of Sonic Art and Sound Design* (2007). In this, he explores the history and development of sonic art through figures such as Luigi Russolo, Edgard Varèse, Steve Reich and John Cage. He also asks a range of established contemporary artists working with sound, such as Max Eastley, Janek Schaefer, Vicki Bennett and Simon Emmerson, to define their own practice and reflect on its relationship with technology. Practical approaches to working with sound, whether in a studio or lab or with computers, as well as the exhibition and preservation of sound works are also discussed. This account conveys a difficulty in defining sonic art given the diversity of genres and wide range of practices that come under this heading; the relationship of sonic art to sound art also remains unclear. Gibbs's particular interest in technologies and their application, and inclusion of 'sound design' in the title of the

book, points to his background in music technology and the electroacoustic roots of 'sonic art' seen at its inception. Later in this chapter it will be seen how the definition of sonic art has continued to evolve.

Klangkunst

In 1999, following a catalogue entitled *Klangkunst* consisting of biographies of artists participating in Berlin's *Sonambiente* festival in 1996, scholar Helga de la Motte-Haber produced a small anthology of essays in German by the same name, which attempted to address the history and theory of this form. In its introduction, Motte-Haber traces influences in both visual art and music, noting the crossing of boundaries as important. She also places emphasis on the audience in describing how *'Klangkunst* is intended to be seen and heard' (Grant, 2005: 90). The publication suggests that the significant features of *Klangkunst* include its inter-media form, its debt to technology, its location, and its interactive nature (Grant, 2005: 90), and points to the existence of something within the Teutonic discourse that might potentially be translated as 'sound art'.

In a review of Motte-Haber's book, composer and musicologist Leigh Landy describes the translation of *Klangkunst* as a problem 'at the heart' of the matter (2000: 191). "*Klangkunst*", he writes, 'could be translated into English as either sonic art or, much less used today, sound art, its literal translation' (Landy, 2000: 191). Landy determines that sound art 'seems to come close', especially since the book appears within a series on twentieth-century music in which the subject of electroacoustic music is already covered (2000: 191). He explains:

The latter term, sound art, is hardly used these days in English. It did exist and had a bit of a gallery favour from the 1960s until the 1980s and concerned sculptures and installations in the first instance perhaps the occasional form of performance art as well. In today's terms, it would include most forms of site-specific and public art. It is ironically this dated notion that seems to come closest to what Helga de la Motte's edited volume considers, especially taking its subtitle, 'Sounding Objects and Spaces' into account. Confusing, perhaps. (Landy, 2000: 191)

That Landy perceives sound art to be a 'dated' notion at the turn of the millennium is particularly interesting in relation to the claims of other exhibitions in that year. His account in fact indicates activity some twenty years before the first recorded exhibition explicitly on sound art in the early 1980s. Motte-Haber apparently advises against a precise definition for *Klangkunst*, due to its boundary- and media-crossing nature. Landy, however, argues that a basic explanation of the term would be helpful. He also suggests that this particular understanding of *Klangkunst* is not necessarily reflected in other contexts. These observations point to the youth of the German discourse, although, since it would be another seven years before the appearance of a publication specifically on the subject of sound art, it was evidently more advanced than the English

discourse at this point in history. This account highlights the potential for confusion between languages, cultures and discourses as well as the specific meanings that develop around terms.

In providing translations for both a German and English readership, the *Resonances* exhibition catalogue provides some further insight into the problematic relationship between *Klangkunst'* and its Anglophone equivalent 'sound art'. In its introduction, Bernd Schulz illustrates the way in which certain ideas can be lost in translation:

The German designation, "Klangkunst", is no more than a rough translation, as the word "Klang" is usually associated with musical sound in the context of a certain traditional cultural form. "Sound", on the other hand, can also refer to noise. And indeed, Sound Art owes much to the dissolution of the border between sound (in the sense of musical sound) and noise. (Schulz, 2002a: 14)

Schulz also points to the work of Motte-Haber as an existing body of research that 'has accompanied Sound Art since its beginnings' and 'can provide us with a solid foundation' with which to gain access to this new form (2002a: 15). In discussing historical figures such as Cage and Schaeffer and contemporary artists such as Bernhard Leitner and Christina Kubisch, the catalogue suggests the possibility of an international discourse of sound art. Its essays address issues concerning music and the visual arts, sculptural space, and the phenomenology of perception.

A later article that investigates both the German and English language literature on sound art suggests that two slightly different discourses have in fact emerged between Klangkunst and sound art (Engström and Stjerna, 2009). Authors Andreas Engström and Asa Stjerna note that in the German discourse of Klangkunst there is a specific focus 'upon the sound material's relation to a spatial location', with an emphasis on sound sculptures and installations, and the way in which these forms transcend the traditional spatial and temporal divisions of the arts and require both the eye and the ear (2009: 11-13). In the English literature, however, there is often reference to 'sound's inner aesthetical qualities', and the authors observe that the idea of sound art is 'often very vague' and 'the aspects of space and locality are diversified and pluralistic' (Engström and Stjerna, 2009: 13-15). The current study will investigate this complex discourse of sound art found in English literature as well as other sources. Engström and Stjerna suggest that Klangkunst has achieved the status of a genre through 'a strong intellectual infrastructure' and because the study of this form in Germany has developed within the field of musicology (Engström and Stjerna, 2009: 17). This comparison points to the important role of the academy in the development of aesthetic discourses. It also indicates that, like the different terms discussed in this chapter, foreign equivalents such as Klangkunst, Arts Sonores or even ljudkonst (noted by these Swedish authors) will not necessarily directly translate into sound art and will probably each have their own slightly unique discourse.

Sound in the arts

In 1999, Douglas Kahn provided one of the first theoretical accounts of sound in the arts. Noise, Water, Meat: A History of Sound in the Arts presents a unique perspective on how sound, and ideas about sound and listening, have influenced the arts. It begins with the experiments of Dadaist and Futurist poets and turns to the presence of 'noise' in the screams and bombs within the novel of war veteran Erich Maria Remarque. The work and ideas of Cage are central to the book, and Kahn focuses in particular on his performance piece Water Music, and the 'fluid' experiments that followed by Fluxus artists and composers such as Le Monte Young and Tony Conrad. The word 'meat' in the title refers to a concern with the body, and Kahn looks at viral tropes in the writing of William Burroughs, primitivism in Antonin Artaud's plays, and the physical beast language in Michael McClure's poetry to explore the voice. The study therefore broaches the arts in the broadest sense, including literature, poetry, film, and theatre. Through this range of elaborate examples, and references to philosophy, aesthetics and cultural history, Kahn 'concentrates on the generation of modernist and postmodernist techniques and tropes among artistic practices and discourses' such as 'noise, auditive immersion in spatial and psychological domains, inscription and visual sound, the universalism of all sound and panaurality, musicalization of sound, phonographic reproduction and imitation, Cagean silence, nondissipative sounds and voices, fluidity at the nexus of performance and objecthood' as well as viruses, bodily utterances, and screaming' (1999: 2-3).

In its focus on 'the latter half of the nineteenth century into the 1960s' (Kahn, 1999: 2), Kahn's study refers to a generation of techniques and tropes preceding that of sound art. He later confirms that 'there was no mention of sound art and not only because it was outside the historical scope of the book' (Kahn, 2006b: n.p.). Elsewhere, he explains: 'I was pretty careful not to mention the term. The book was not about sound art, it was about sound in the arts' (Kahn, 2006a: n.p.). These comments highlight Kahn's awareness of a difference between these two concepts. '*Sound in the arts* is a huge topic', he explains, which must take into account 'the various intersecting social, cultural, and environmental realities wittingly and unwittingly embodied in any one of the innumerable factors that go into producing, experiencing and understanding a particular work' (Kahn, 2006b: n.p.). He continues:

Sound art is a smaller topic, if what is meant is that moment that artists, in the general sense of the word, began calling what they were doing sound art. In my opinion, artists started to use sound art in this way during the 1980s, although there were plenty of artists doing similar thing with sound earlier. (Kahn, 2006b: n.p.)

While Kahn does not clarify here what these artists were doing, his comments point to sound art as a specific movement in artistic history. Even more significantly, he adds: "The topic becomes smaller still if what is meant is the term that refers to what began a few years ago, and it is this meaning that has become well known' (Kahn, 2006b: n.p.). This comment implies another wave of discourse after the millennium, although again Kahn does not clarify what this is. These observations nevertheless acknowledge sound art as a term, and also indicate the ways in which its meaning has changed and developed over time.

In spite of his defence, there is a brief mention of sound art in the introduction to Kahn's *History of Sound in the Arts*:

The emergence of sound art in the 1980s was characterised by a problematic attitude toward Western art music – in particular, the avant-garde and experimental work claiming a relationship to sound per se. The idea of the *musicalization of sound* arose as a means to identify and supersede techniques in which sounds were made significant by making them musical. (Kahn, 1999: 18)

It is intriguing that Kahn links the creation of sound art as a term with 'the musicalization of sound'. He explains, for example, that this concept was a tactic to encourage and support creative approaches to sound, both inside and outside music, and examine (and potentially destabilise) the tropes of music (Kahn, 1999: 18). The 'musicalization of sound' might therefore be regarded as the postmodern alternative to the categorical distinction of 'sound art' in the 1980s. As Kahn explains in a footnote to his study, 'those involved in sound were clearly intent on not repeating the same type of demarcating procedures they criticised in others' (1999: 364). Later, in a forum about sound art, Kahn suggests that, rather than criticising music, people were trying to open up a fuller range of artistic possibilities and also seeking more precision in their thinking, but not through the route of a name (2006a: n.p.). This historical precursor to sound art therefore demonstrated an attempt to find conceptual mobility as well as clarity, without necessarily abandoning music altogether. Kahn actually attributes the musicalization of sound idea to Dan Lander (Kahn, 1999: 363). Although Lander does not explicitly reference the musicalization of sound in his introduction to Sound by Artists, he does express a wish to suppress the urge to elevate all sound to the state of music (1990: 11). Kahn's explanations call into question whether or not Lander endorsed the creation of a term such as sound art, and might also explain his own reservations: 'I am not particularly fond of the term sound art. I prefer the more generic sound in the arts' (Kahn, 2006b: n.p.). The emergence of sound art as a term nevertheless suggests that the tropes of music were eventually sufficiently destabilised to warrant it.

Sound art

Background Noise: Perspectives on Sound Art was the first theoretical account specifically and explicitly devoted to the subject of sound art, published in 2006. Concerned with the rising prominence of sound as an aesthetic category from the early 1950s, its author Brandon LaBelle traces the development of sound as an artistic medium across both music and the visual arts. To consider the complex cross-pollination of these practices, the study begins with the experimental music of John Cage, which 'stimulated adventures in electronics, field recording, the spatialization of sonic presentation, and the introduction of alternative procedures' (LaBelle, 2006a: xii). It then asserts that this activity influenced developments such as 'Happenings, Environments, and Fluxus, as well as Minimalist sculpture and music and Conceptual Art' (LaBelle, 2006a: xiii). In LaBelle's opinion, sound art 'took its defining steps from the mid to late 1960s' alongside the development of site-specific methods and Performance and Installation Art (2006a: xii), and the central sections of the book are therefore dedicated to these practices. It is argued that these practices developed as art became critical of its own structure, thus moving towards the 'dematerialised potential of events, actions, ideas, ephemera, and the politics inherent to space' (LaBelle, 2006a: xii), and the use of the voice and sound is explored in relation to architecture. The final sections of the book extend to an investigation of sound in the environment and on the internet. Here, LaBelle finds parallels in sound art's preoccupation with natural and built surroundings and the artistic response to the growing awareness and negation of noise to landscape art and acoustic ecology. He also observes parallels between electronic media and the very nature of sound, sound production and approaches to listening, thereby positioning sound art within media art. This unprecedented overview indicates the potential scope of 'sound art' as an aesthetic category, and the diversity of influences and practices both inside and outside of the arts that it might encompass, while potentially forming a canon of artists and works.

While LaBelle does not directly address the definition of sound art, certain characteristics can be teased out of his expansive and rather complex account. It is, for example, derived from his doctoral thesis 'Background Noise: Sound Art and the Resonance of Place' (2005), which was motivated by a thematic thread relating to architecture, place and space. An interest in the relational nature of sound through its interaction with space is therefore used as a binding motif, and while the ideas of sound and spatiality are interpreted very loosely and diversely by LaBelle within this equally diverse and disparate account of sound art, they nevertheless emerge as a significant theme. In his introduction, LaBelle makes the brief remark that the ideas of Cage and Schaeffer 'come to initiate a vocabulary by which experimental music slips into sound art' (2006a: xii-xiv), and he later asserts that 'sound art finds definition' with sound installation, 'which enables it to demarcate itself from the legacy of experimental music and entering into a more

thorough conversation with the visual arts' (LaBelle, 2006a: xii-xiv). A potential explanation for LaBelle's reticence to explicitly define sound art can however be inferred from his conclusion:

The recent interest in sound art [...] brings with it a plethora of sonic materials that seem to, in turn, draw into relief the absence of categorical distinction, which may in the end only lend to sound's ability to infuse art with a level of charged ambiguity while also remaining impartial to any form of fashionable aesthetics or rhetoric. (LaBelle, 2006a: 297)

Although his publication appears to distinguish sound art as a genre in its own right, LaBelle not only observes the absence of such a categorical distinction at that point in history but also, like Furlong, notes the potential benefits of this absence in offering a certain character to the arts as well as a freedom for sonic discourse. LaBelle also notes the lack of literature to complement and expand a practice that is 'lending definition to the twenty-first century' (2006a: 295). He therefore presents a quandary surrounding the situation of sound art as a category and, whether consciously or not, his contribution arguably marks the beginnings of an aesthetics and rhetoric of sound art *per se*.

One year later, another book was published on the subject, and its title, Sound Art: Beyond Music, Between Categories (2007), provides a good indication of how its author, musician and composer Alan Licht, positions sound art within the artworld. The book opens by noting the absence of a definition to accompany the increased use of the sound art term, and quotes three eminent artists who use sound - Annea Lockwood, Christian Marclay and Max Neuhaus - to illustrate the confusion surrounding it (Licht, 2007: 9). Licht blames the 'rash' of high-profile exhibition at the turn of the century, which 'brought the term to greater familiarity while causing a lot of confusion as to what it actually referred to', for this situation (Licht, 2007: 11). In his opinion, these diverse exhibitions have led to a tendency to apply the term to any experimental music of the second half of the twentieth century (Licht, 2007: 12). Licht offers his own thoughts surrounding the distinction between music and sound art. Essentially, he considers music to be time-based, in that it has a beginning, middle and end, and presented in a concert or performance situation, whereas sound art is open-ended and site-specific and presented in an exhibition setting (although can include real-world sounds or those presented within the gallery or museum) (Licht, 2007: 14). Licht also places significance in the visual arts context for the identification of sound art (2007: 16-17).

In spite of its title and promising introductions, this book is less an in-depth study of sound art and more a personal account of historical precursors in providing descriptions, anecdotes and illustrations of boundary-defying work and artists encountered by Licht. Topics include the disjunction and combination of sound and image in life and cinema, the links between painting and music, and the introduction of sound in contemporary art through Cage. One chapter is
dedicated to natural sound and soundscapes, since 'sound art comes from the appreciation of the total environment of sounds, both wanted and unwanted' (Licht, 2007: 116), and the final chapter considers examples of sculpture, video art and sound design for film. Licht's publication provides a useful introduction to sound art insofar as it recognises the issue of definition, brings disparate ideas concerning sound together into an accessible narrative, and draws out certain themes relating to aurality, sound and the arts. It does not, however, provide adequate explanation for the issues and ideas laid out in the introduction and title of the book. Instead, a subjective account is provided that arguably contributes to the confusion of sound art and its definition. The current study aims to tackle the same issues observed by Licht but in a critical manner as well as analyse the kind of assumptions that can be found in his account.

Arts of sound (reprise)

As 'sound art' has gained prominence and specificity, a return to more generic terms can also be observed. In an article on 'The Love Affair Between the Museum and the Arts of Sound' (2007), for example, curator Lina Džuverović describes a preference, following Douglas Kahn, for the term 'arts of sound' to describe practices often referred to as 'sound art', since this is just one of various models of engagement with sound by visual arts institutions (2007: n.p.). She observes that 'some of the most prominent exhibitions showcasing sound based work over the past decade have been those that engage with the arts of sound as a genre - these are often the more formal outputs in which they contextualise the work within the narrower definitions of "sound art" (Džuverović, 2007: n.p). Other models of institutional engagement identified by Džuverović include using sound as a form of outreach or entertainment during private views, within the exploration of themes such as popular culture or sensory experience (namely synaesthesia), or as the result of artistic collaboration. Džuverović therefore explains that 'the term "the arts of sound" at this stage seems to me to be the only acceptable term for the wide spectrum of artistic practice being discussed here' (2007: n.p.). This particular line of enquiry not only indicates the alternative ways in which sound has appeared within the visual arts, but also points to the development of generic meaning for sound art, specifically through the medium of the exhibition. As an example of the 'sound art exhibition' model, Džuverović cites the example of Frequencies [Hz] (Schirn Kunsthalle, Germany, 2002), which she describes as an exhibition concerned with the 'properties and relationships between sound, space, and architecture and light' (2007: n.p.; Figure 2.4), thus indicating her particular understanding of the characteristics of sound art as a genre. Džuverović concludes that exhibitions of sound art seem to guarantee the highest institutional commitment, with 'considerable technical and financial resources being put towards installation and the needs of the work', while other forms of engagement have been more superficial (2007: n.p.). The study not only highlights the significance of these large-scale





Selected views: Installation by Ryoji Ikeda, 'Spectra II', 2002 (above); Exhibition architecture by Nikolaus Hirsch and Michel Müller, 2002 (below). Photos: Norbert Miguletz © Schirn Kunsthalle (2002: n.p). Used with permission.

Figure 2.4 - Frequencies [Hz], Schirn Kunsthalle, Frankfurt, 2002

exhibitions for sound art, as they represent serious engagement with sound as an artistic medium from the visual arts, but also points to the political implications of categories since the difference between 'sound art' and the 'arts of sound' might have serious repercussions.

In his book Understanding the Art of Sound Organisation (2007), Leigh Landy directly tackles the ambiguity surrounding the artistic classification of sound-based practices. In his view, sound art is a subset of sonic art, which is potentially synonymous with electroacoustic music (2007: 17). As seen in other accounts, Landy's description of sound art suggests that the form of the work and its venue are important in making such a distinction. He nevertheless argues for a more integrated approach in order to improve access to as well as appreciation of the aesthetic, and proposes a new umbrella term - 'sound-based music' - as a way to encompass the broad range of works of organised sound which tend to be placed within disparate and yet overlapping categories (2007: 9). This new 'super-class' is seen as an extension of 'sonic art', since it 'typically designates the art form in which the sound, that is, not the musical note, is its basic unit', and follows a more 'liberal' view that such practices are themselves a subset of music in the aftermath of its expansion to organised sound (Landy, 2007: 17). For Landy, then, the 'art of sound organisation' is essentially music. This suggests that the discourse surrounding sound-based practices, especially relating to the move from music to art, might have come full circle. Arguably, the emergence of terms such as sound art and sonic art nevertheless indicates the improbability of an imminent wholesale reappropriation of music as a term.

Sonic art (reprise)

In the Blink of an Ear: Toward a Non-Cochlear Sonic Art (2009) is another theoretical contribution aiming to redress a problem in the critical reception of sound. Its author, artist and lecturer Seth Kim-Cohen, connects sonic practices to developments in the visual arts, and specifically the conceptual turn since the 1960s. It is significant that Kim-Cohen consciously chooses to use the term 'gallery arts' instead of 'visual arts' after observing how conceptualism 'allows art to volunteer its own corpus, its own ontology, as a test case for the definition of categories' so that 'what once could be comfortably referred to as "visual" art now overflows its retaining walls' (2009: xxi). He draws on a range of theories and ideas from art critics such as Clement Greenberg and Rosalind Krauss, as well as philosophers such as Merleau-Ponty and Jacques Derrida, to argue that the sonic arts were also subject to this conceptual turn. In his opinion, this has largely been resisted in the theorisation and criticism of the sonic arts, resulting in the adoption of modernist and essentialist phenomenological approaches that focus on the perception of sound, rather than more postmodern and conceptual approaches engaging with cultural, linguistic and social context of sound. The current study might be said to engage in this latter approach,

although later chapters will show that this tension forms part of the definitional discourse of sound art itself.

With its focus on the 'gallery arts', *In the Blink of an Ear* considers works by figures commonly referenced in the discourse of sound art and artists such as Alvin Lucier, Christina Kubisch, Stephen Vitiello, Bruce Nauman and Janet Cardiff. It also occasionally provides examples from popular music, such as Bob Dylan, and it is possible that Kim-Cohen's choice to frame his book as 'sonic art' stems from his decision to include a blues musician, Muddy Waters, alongside Cage and Schaeffer as the historical foundations for the study (2009: xix). In the aims of the book, sound art is explicitly mentioned as a discrete category of artistic production that came into being in the 1980s (2009: xix). Later, Kim-Cohen also asserts:

One could easily argue that sound art, as a discrete practice, is merely the remainder created by music closing off its borders to the extra-musical [...] Sound art is art that posits meaning or value in registers not accounted for by Western musical systems. (Kim-Cohen, 2009: 107)

These factors combined suggest that Kim-Cohen's use of 'sonic art' might therefore be similar to Landy's suggestion of 'sound-based music', as a term wide enough to encompass both music and sound art, but also to enable the development of a general theory and practice for sound with an alternative mode of engagement to music. This example illustrates the shifting relationship between terms such as sound art, sonic art and music within the overall discourse. In its particular quest for a unique space of praxis that is neither music nor visual art, through conceptualism, this call for a 'non-cochlear' sonic art implies that the act of questioning existing definitions is at the heart of the matter. Kim-Cohen's ideas will be revisited in relation to the definitional discourse of sound art later in this study.

Sound art (reprise)

Listening to Noise and Silence: Towards a Philosophy of Sound Art (2011) is a more recent theoretical contribution to the field of sound art by artist and writer Salomé Voegelin. Despite drawing on similar figures to Kim-Cohen, such as Cage, Merleau-Ponty, and Cardiff, Voegelin arrives at a very different conclusion and advocates a phenomenological approach that focuses on the reception of sound art. Her aesthetic is based on the view that the experience of listening must lead any investigation of sound art. It is therefore integral to Voegelin's philosophy that the listener must 'suspend, as much as possible, ideas of genre, categories, purpose and historical context' in order to engage with the perceptual experience of the work (2011: 3). She claims to 'have no interest in facilitating the building of canons, but only wish to encourage a listening practice' (Voegelin, 2011: 199). This is all part of a philosophical effort to strip away an ideology

of the visual and give sound the attention it deserves (Voegelin, 2011: xi). It would not, however, be judicious to ignore Voegelin's choice of works and use of sound art as a label for her book. In the chapters to follow, it will become clear that this account is inevitably a product of as well as a contribution to the discourse of sound art.

The ideas of critic Christoph Cox, who has regularly written on the subject of sound for art journals and magazines (2003, 2004, 2005, 2006, 2007, 2009, 2011), offer an interesting perspective to this developing discourse of sound art. Having appeared to express dissatisfaction with 'theorists of the audio arts whose tools are generally restricted to physical and phenomenological description', which he argues was generally the case before the arrival of more serious theoretical contributions from Kahn and then LaBelle (Cox, 2007: 127), Cox later develops a similar viewpoint to Voegelin in criticising the way in which the prevailing theoretical models, including Kim-Cohen's study, are based on representation and signification and therefore fail to capture the nature of the sonic (Cox, 2011: 145). Rather than returning to phenomenological description, however, Cox proposes a theoretical framework for sound that instead 'provokes us to conceive difference beyond the domain of 'culture', signification, and representation, and to see these as particular manifestations of a broader differential field: the field of nature and matter themselves' (2011: 157). In his opinion, a consideration of sonic material reality might enable us to move beyond a focus on objects and meaning towards events, change and the 'dynamic flux of becoming', and could potentially enable a rethink of the arts in general. It might be argued that Cox's idea of sonic materiality is not dissimilar to Voegelin's phenomenological focus on the contingent encounter of listening rather than fixed identities and meaning. His theory is also a call to operate beyond cultural categories and discourses, such as sound art or sonic art (which Cox seems to use interchangeably), although again it is also important to acknowledge that such theories arise from these discourses. As the present study illustrates, issues of classification, discourse and meaning are in fact part of the rhetoric of sound art.

Another interesting angle on the matter is provided by music theorist Brian Kane, in an article entitled 'Musicophobia, or Sound Art and the Demands of Art Theory' (2013), in which he criticises both Kim-Cohen and Voegelin for positioning sound art as 'other' to music (2013: 7). He observes that 'both authors explicitly theorize sound art as a practice that is distinct from music – distinct not by its use of sound, but by the perceptual, conceptual and institutional issues raised by soundworks. Both authors attempt to differentiate sound art from music in quite distinct, and quite incompatible, ways' (Kane, 2013: 1-2). Kane notes that, for Kim-Cohen, the ontology of sound art occupies the 'extra-musical' and is therefore necessarily in opposition to music, and for Voegelin an auditory mode of listening is defined for sound art in opposition to a visual mode for music (2013: 3-6). He suggests that these authors 'utterly disagree', since Kim-

Cohen eschews sounds-in-themselves to concentrate on social contexts whereas Voegelin does the reverse; the former views sound art as conceptual and an act of reading whereas the latter sees it as perceptual and an act of listening (2013: 7). Kane argues that this 'Musicophobia' can be remedied by bringing attention back to the work, 'the only thing that the listener's ear and expanded situation have in common' (2013: 12). He writes:

Perhaps the only way to avoid a theory of sound art that simply reiterates the demands of art theory, or music theory (for that matter), is to require that it meet the only set of demands that matter - those adequate to the unavoidable, unruly, unfashionable thing that we used to call "the work." (Kane, 2013: 13)

This not only highlights the continuation of the music-sound art debate, but also suggests a return to more traditional approaches to the criticism of sound art, albeit accepting that it requires a different set of theories to music. Given the novelty of sound art as a category, however, the 'demands' of a sound art work are unsurprisingly a moot point and would benefit from further investigation.

Conclusions

An investigation of the concepts which make up 'sound art' reveals that both 'sound' and 'art' have a long and complex history in relation to the tradition of music, in which experimentation led to the emancipation of sound and eventually the development of new artistic practices. The work of John Cage and Pierre Schaeffer presents key examples of the ways in which experimentation began to problematize the very condition of music. Almost ironically, their focus on sound and listening seems to extend their practice beyond the traditional boundaries of music, and to align with developments in the visual arts. It is interesting that, in spite of his aim to redefine music to encompass all sound, Cage himself subscribed to the label 'organised sound' rather than music, following Varèse, for very similar reasons to those choosing alternative labels such as 'sonic art' discussed in this chapter. He states: 'If this word "music" is sacred and reserved for eighteenth- and nineteenth-century instruments, we can substitute a more meaningful term: organization of sound' (Cage, 1961c: 3). Schaeffer also arrives at similar conclusions regarding the musical establishment: 'Unfortunately it took me forty years to conclude that nothing is possible outside DoReMi...In other words, I wasted my life' (Schaeffer, in Hodgkinson, 1987: n.p.). In reference to these historical figures, Kahn is keen to point out that 'although they were marginal to the stodgy project of Western art music, they were still attached to it', and therefore warns that 'sound artists separate themselves from music at their peril' (2006b: n.p.). The epigraph by Neuhaus indicates that there are many who consider sound art as

part of new music. The continued appearance and also persistence of alternative terms in the literature over the last twenty-five years nevertheless also indicates a potential paradigm shift, following the centuries of 'music', that is perhaps anticipated in the resolutions of Cage as well as purported despair of Schaeffer. It is therefore probably more productive to consider practices like sound art to have 'grown out of' music in order to acknowledge *both* the shared and distinct influences and concerns.

Exploring a range of analogous terms as they appear in the literature, from experimental music to sonic art, has also provided further insight into the wider landscape in which sound art is situated. Like sound art, these concepts are often ambiguous and mutable and occasionally used interchangeably, and yet they also seem to have emerged in particular circumstances and developed specific meanings accordingly. As sound art has slowly gained specificity in its relation to the visual arts and aspects of space, for example, phrases such as 'sound in the arts' and the 'art of sound' have been re-appropriated to refer to something broader. The term 'audio art' appears to be connected with phonography and, more specifically, 'radio art'. 'Sonic art', originally coined to situate creative practices involving music technology and sound design within a wider framework, seems to be associated with electroacoustic music. More recent accounts imply that the 'sonic art' term might be considered as a kind of super-class for all artistic genres of sound, including new music as well as sound art. Many other terms could potentially be included in this discussion, including those that have retained the label of 'music', such as 'visual music', 'acousmatic music' and 'noise music', which again display shared concerns as well as their own particular connotations (Shaw-Miller, 2006; Harrison, 2006; Hegarty, 2007). The issue of translation between the English and German concepts of sound art and Klangkunst illustrates the complexities of language and meaning at play here in general.

This review of similar terms has also provided some further details relating to the tentative appearance of sound art as a category. The idea was anticipated in one of the earliest theoretical attempts to define an art of sound distinct from music, which points to the absence of sound art as a category in the artworld in 1990 (Lander, 1990). There is evidence of its continued absence four years later (Furlong, 1994), although a discussion in 1999 about sound art's German equivalent suggests that the term may have had a short appearance from the 1960s until the 1980s (Landy, 1999). Others recall the use of sound art from the 1980s and note its heyday from 2000 (Kahn, 2006b), which was also observed in the introduction to this study. The first theoretical account of sound art in 2006, however, still suggests the absence of the nebulous way in which discourses such as sound art emerge, through stops and starts and also more informal registers, beginning with a small set of individuals and entering the consciousness of niche artworld communities before more general and then formal engagement. Subsequent

writings indicate the eventual acceptance of sound art as a genre (Licht, 2007), but situated within a broader spectrum of activity relating to sound in the arts (Džuverović, 2007; Landy, 2007; Kim-Cohen, 2009). More recently, there appears to have been a desire to move beyond the category altogether (Voegelin, 2011; Cox, 2011), which, curiously, has also brought attention back to the issue of its separation from music (Kane, 2013).

The similarities and differences between accounts in the literature are as revealing as the arguments they present, highlighting inconsistencies in the ways in which terms are applied and understood, ideas can overlap, and meanings can change over time, which can all lead to ambiguity and confusion. This problem of vocabulary presents certain issues for the scholar. As electroacoustic music composer Jonty Harrison argues, 'labels are important because they grant or deny access to information and understanding' (2006: n.p.), and Landy in observing 'the lack of universal acceptance of definitions' for sound-based artistic practices argues that there is a need for a more integrated approach in order to improve access to and appreciation of the aesthetic (2007: 10). It is therefore likely that the lack of information and critical analysis on the subject of sound art, repeatedly noted within its discourse (Lander, 1990; LaBelle, 2006a; Cox 2011), directly results from the infancy of the discourse itself and the associated ambiguity surrounding the category. Despite all of these ambiguities and inconsistencies, the emerging studies suggest that people are using terms such as sound art in a particular way. As genre theorist Carolyn Miller writes, 'when a type of discourse or communicative action acquires a common name within a given context or community, that's a good sign it's functioning as a genre' (Miller and Shepherd, 2004: n.p.). Whether it be experimental music versus new or contemporary music, or audio versus sonic or sound art, each term has its own particular nuances, meanings, and ways of understanding; what some might describe as a 'discourse' or 'genre'. Lander's initial call for a sound art distinct from music points to the significance of the social contexts of sound; later accounts suggest this may in fact be fundamental not only to its aesthetics but also its ontology. Some of these issues surrounding the definition and emergence of sound art as a category will be considered in more detail in the following chapter.

Chapter 3

A Matter of Extremes: Sound Art and the Fear of Definition

I think the value of using a label like 'sound art' is more of a practical concern really than a definitive one. After all, art theorists and philosophers still haven't agreed on what 'art' or 'music' are definitively, so trying to define sound art I think is futile really.

(Bill Thompson, artist and founder of SoundasArt mailing list, 2005)

If I may be so bold as to make a suggestion, it would be to jettison the endlessly looping discussions moving towards exclusive definitions of sound and music. It really is of no consequence what you call what you are listening to – and definitions lead us towards closed systems and narrow views. (Steve Roden, in *Soundwalk* catalogue essay 'Active Listening', 2005)

Defining genres may be problematic, but even if theorists were to abandon the concept, in everyday life people would continue to categorize texts.

(Daniel Chandler, in 'An Introduction to Genre Theory', 1997)

A study on the definition of sound art must at some point cast its gaze upon the wider project of definition in the arts. Observing developments in the philosophy of art as well as genre theory can in fact provide an opportunity to investigate a reluctance to define sound art that can be found within its own discourse. This chapter will use a binary of essentialism versus constructivism to mirror and address explicitly the concerns found in the discourse of sound art (although this study shows that such delineations are not always so straightforward in reality). The first part of the chapter will explore how the established model of definition is based on scientific principles that have been problematised in relation to changing approaches to the classification of culture. The second and larger part of the chapter will consider a very different approach to categories that is concerned with social contexts, and the communicative and discursive properties these bring. By examining the act of definition and the function of categories, rather than the theories of art (or sound art) themselves, this account aims to answer some of the questions relating to how and why categories such as sound art develop as well as understand the broader implications of this.

Fears of essentialism: Categories of art in theory

In an online roundtable discussion on the subject of *Sound Art Now*, hosted by *Artforum* in spring 2004, moderator Christoph Cox attempted to draw out some key issues relating to the definition of sound art that were raised by a number of the eminent artists, curators and theorists

participating in the symposium. Cox explicitly observed the problem in asserting 'definitions in terms of essences and natures', noting that some contributors had rightly warned about doing so, and assured his peers that he also generally avoided this (2004a: n.p.). He nevertheless also expressed dissatisfaction with what he described as 'the thoroughly anti-essentialist route', which suggests that sound art is 'just sound of any sort that shows up in contexts usually devoted to visual art' (Cox, 2004a: n.p.). While Cox acknowledges that 'it's probably silly to look for some essence of sound art', he also describes a felt need to find 'some kind of middle ground' (2004a: n.p.). He explains:

I think that, without such heuristic distinctions and definitions, you'll be stuck with a slack, anythinggoes attitude toward what you're trying to investigate, or with accepting someone else's choices about what music, sound, etc., are. I think it's better to offer up a set of distinctions/definitions and see where they take you. (Cox, 2004a: n.p.)

While Cox is aware that such definitions will always fail at some point, he feels they may open up interesting perspectives, and suggests that such distinctions might 'allow you to hear, see, think, and do' (2004a: n.p.). These ideas situate the question of sound art's definition within a wider conversation about definitions and categories. They also highlight a potential dilemma for the present study as well as the arts in general. Observing approaches to definition and categorisation in the arts may therefore make further sense of these issues relating to the pursuit of sound art's definition.

From art to genre

From classification to resemblances

For centuries, philosophers have grappled with the question 'what is art?'. The quest to create a watertight definition immune to criticism is believed to stem from Socrates, who saw the inability to do so as a reflection of the skill of the philosopher rather than a logical feature of the thing under scrutiny (Warburton, 2003: 66). Philosophers therefore once believed that art had essential qualities, so that it was possible to identify certain features intrinsic to all works of art. This search for precise definitions is evident in the analytic tradition of philosophy, which attempts to identify a set of conditions that are necessary and sufficient for a concept to be applied, and exists as a branch of art theory.

The ideas of philosopher Ludwig Wittgenstein (1889-1951), however, called into question essentialist assumptions that had persisted for over 2000 years. Through an exploration of language, and using the concept of 'game' as an example, he was able to demonstrate a looser and more complex connection between things belonging to a category. In looking for something

common to all games – whether card games, ball games, board games, or games like ring-a-ringa-roses – Wittgenstein instead saw 'a complicated network of similarities overlapping and crisscrossing' that were best compared to the resemblances within a family (1958: 31). He writes:

I can think of no better expression to characterize these similarities than "family resemblances"; for the various resemblances between members of a family: build, features, colour of eyes, gait, temperament, etc. etc. overlap and criss-cross in the same way. – And I shall say: "games" form a family. (Wittgenstein, 1958: 32)

Such observations jeopardised the very existence of art theory, since art was therefore no longer definable in the classic sense. In likening the concept of 'art' to that of 'game', aesthetician Morris Weitz illustrates the difficulty in finding a common feature that could apply to all cases, and therefore argues that art should be identified on the basis of Wittgenstein's 'family resemblance' instead of being confined to necessary and sufficient conditions (1956: 31). Weitz concludes that art must be an 'open concept', since every addition to the category will occasion its amendment. He also observes that, since artists by their very nature tend to challenge the current concepts of art, definition 'forecloses on the very conditions of creativity in the arts' (Weitz, 1956: 32). Weitz's apparently anti-essentialist stance towards the definition of art ironically seems to align with an essentialist attitude towards its generic categories, in which ideas of convention are seen to threaten ideals of creativity. This point will be considered again later.

However, true to the spirit of art theory, these philosophical developments did not pass undisputed. One critic, for example, asks where to draw the line of *dis*-similarity if anything, to some extent, can resemble anything (Miner, 1986: 24). Another argues that this approach might account for the discernible physical characteristics of a family, but then asks about the possible non-exhibited common features between works of art (Mandelbaum, 1965: 219-228). Although this particular criticism of the family resemblances approach returns to a biological analogy akin to blood-ties, for art theory such arguments were enough justification for the project of definition to continue.

George Dickie's 'institutional theory', one of the better-known art theories of the twentieth century, demonstrates the way in which changing ideas about categorisation have influenced the definition and understanding of art:

A work of art in the classificatory sense is (1) an artifact (2) a set of the aspects of which has had conferred upon it the status of candidate for appreciation by some person or persons acting on behalf of a certain social institution (the artworld). (Dickie, 1974: 464)

In placing significance in the social contexts of art, this theory appears to respond to the idea of art as an 'open concept', as well as the activities of postmodern art movements, by stipulating

definitional conditions that are *external* to the work. The theory has, however, been criticised for its circularity (Levinson, 1987: 145), since it raises questions around what defines the artworld if the artworld defines the artwork. In his book *The Art Question*, philosopher Nigel Warburton concludes that 'all recent major philosophical attempts at defining art have been inadequate to some extent. No one has yet come up with a convincing account of what art is' (2003: 118). This is probably a good indication that the traditional models of classification, based on biological ideas of species and evolution, are not suited to concepts of culture. At this point it is useful to turn to the theoretical situation of genre.

From resemblances to prototypes

Theorists originally believed not only that 'art' had essential qualities, but also that its subcategories shared this characteristic. The study of genre, which developed from the field of literature, was therefore traditionally devoted to taxonomical classification and description similar to that which may be imposed upon the natural world by a scientist (Dubrow, 1982: 46; Allen, 1989: 44). As genre theorist John Frow explains, 'it has been above all the model of the biological species, building on the organic connotations of the concepts of 'kind' and 'genre', that has been used to bring the authority of a scientific discourse to genre theory' (2006: 52). This scientific lineage resulted in fastidious notions of classification based on the premise that there was a complete, consistent and workable system of classification enabling mutually exclusive categories (Bowker and Star, 1999: 10-11). In its consideration of genres as natural categories within which certain attributes intrinsically existed, the definitional model of taxonomy was therefore present in genre theory in much the same way as in art theory.

The realisation that a scientific model of classification could not apply to concepts such as art also initiated a transformation in the approach to the taxonomy of the arts. Instead of naming a small set of properties that were 'individually necessary and cumulatively sufficient to identify all the members and only the members of a particular category from everything else in the world' (Swales, 1990: 49), the genre theorist instead attempted to identify common features and various relationships between texts of a genre. As well as taking on this family resemblance approach, accepted biological notions regarding genetic continuity, fertility and group stasis were replaced with the understanding that genres were necessarily open-ended, could be crossed with other genres, and were modified by each text (Frow, 2006: 53). The word 'text' is adopted here in a wider sense, beyond the original reference to literature, to describe any cultural entity that has the potential to be 'read'. These developments eventually enabled theorists of genre to move beyond the typological and towards issues of convention, language and rhetoric.

Wittgenstein's idea of family resemblances also led to the exploration of categorical distinction in the field of cognitive science. Experiments by Eleanor Rosch demonstrated, for instance, that subjects would more frequently cite 'chair' as an example of 'furniture'. This led to the development of 'prototype theory', based on the idea that a category is typified through a central member – what Rosch calls the *prototype* (1975: 192-233). These findings draw attention to the use of categories in practice, and how this is based on a gradient of certainty: a concept might fall into several categories, but it will usually sit more comfortably in one than another. This application of a scientific research method to cultural categories but without the application of biological criteria presents a radical alternative to analytic philosophy. Unlike the 'classical' theories of art and genre, prototype theory permits commonality without essentialism, and difference without eliminating similarity (Fox, 2011: 328). It highlights the open-ended and imprecise nature of cultural categories, as first indicated by Wittgenstein, but also another social dimension to classification based upon recognition, resemblance and experience. The idea of the prototype allowed 'a course between trying to produce unassailable definitions of a particular genre and relaxing into the irresponsibility of family resemblances', and therefore held much appeal to theorists of genre (Swales, 1990: 52).

From prototypes back to perception

A paper by Kendall Walton on the 'Categories of Art' (1970), written before the first version of Dickie's institutional theory of art and the experiments of Rosch, considers issues of psychology and perception in relation to the field of aesthetics. In this paper, Walton asks:

How is it to be determined in which categories a work is correctly to be perceived? There is certainly no very precise or well-defined procedure to be followed. Different criteria are emphasised by different people and in different situations. (Walton, 1970: 357)

This question is prompted by Walton's observation that some features determine the category of a work, and yet others do not. As well as evoking post-Cagean debates on the difference between sound and music and, subsequently, sound art and music, his writing is significant in bringing the role of perception and subjectivity to the fore in relation to the definition of art.

Walton argues that there are some features that determine categorical allocation, which he describes as *standard*, as well as non-determining features, which he describes as *variable* (1970: 338). It is implied that all works placed within a particular category will possess the standard features, although they may also possess other varying features. This idea is not too distant from Rosch's idea of the prototype, which might arguably display only the standard features of a category and yet could sit among works with other variables in the same category. Walton's suggestion that the 'correct' allocation of categories is more likely to occur when more standard features are present is, however, more characteristic of the analytic tradition. Less characteristic is

his acknowledgment of intuition in the act of allocation, and the complexity of perception as a means of understanding art and its categorisation.

Walton also questions the traditional view that a work 'must stand or fall on its own' by observing that comparison with other works is necessary for categorical allocation, as is the need for historical precedent (1970: 334). While 'the intentional fallacy' problematises the widely held belief that the 'correct' interpretation of a work is reached by assuming the intent or purpose of the artist (Wimsatt and Beardsley, 1952: 3-18), Walton's argument reveals that an individual's perception and judgement of a work also relies on external information about the wider context of art. More recent theories of art, such as Jerrold Levinson's 'historical definition', appear to be based on an 'intentionalist' view in stating that 'an artwork is a thing (item, object, entity) that has been seriously intended for regard-as-a-work-of-art' (1990: 38). Like the institutional definition of art, however, this historical definition also points to the social nature of art that was obscured in traditional intentionalist accounts.

Walton presents essentialist notions of value as problematic as the definitions he renounces. This is evident in his suggestion that 'the correct way of perceiving a work is likely to be the way in which it comes off best' (1970: 357). His theoretical essay is nevertheless unique in its consideration of issues around perception, subjectivity and meaning in relation to the definition of art, and the use of categories of art in their social context:

A category is well established in and recognised by a society if the members of the society are familiar with works in that category, consider a work's membership in it a fact worth mentioning, exhibit works of that category together, and so forth – that is, roughly if that category figures importantly in their way of classifying works of art. (Walton, 1970: 357)

From this practical perspective, Walton speculates that familiarity 'has important consequences concerning how best to approach works of art of kinds that are new to us – contemporary works in new idioms, works from foreign cultures [...]' (1970: 366). He specifically acknowledges borderline cases in which works 'fall between well-established categories' or are difficult to accept (Walton, 1970: 361). In Walton's opinion, 'it is important to notice just where these intuitions and precedents are inconclusive, for doing so will expose the sources of many critical disputes' (1970: 362). He adds: 'the most that we can do is to point out just what sort of a difference of perception underlies the dispute, and why it is unresolvable' (Walton, 1970: 362). Walton's final words on the matter are also reassuring for the present study: 'The occurrence of such impasses is by no means something to be regretted. Works may be fascinating precisely because of shifts between equally permissible ways of perceiving them' (Walton, 1970: 362). Such observations are especially pertinent to the case of sound art, which has been shown to provoke disputes around

the perception of works as sound art or music, and raises questions as to how and why categories become established and recognised at all.

An investigation of theoretical developments relating to the definition of art provides useful insight into the situation of sound art, revealing that longstanding essentialist assumptions of art and genre based on ideas of scientific classification have eventually been replaced with issues of comparison, societal structures, and perception. More recently, in observing the sheer variety of proposed definitions of art, Walton concludes:

It is not at all clear that these words – 'What is art?' – express anything like a single question, to which competing answers are given, or whether philosophers proposing answers are even engaged in the same debate. (Walton, 2007: 148)

It will later be shown that the formation and function of artistic categories and the politics associated with this, as implicated in Walton's reference to 'disputes', has attracted the attention of theorists of genre, who can provide numerous insights applicable to the case of sound art.

From definition to identity

Characterisation

The reservations voiced through the *Sound Art Now* symposium reveal the sheer influence of the analytic tradition in the definitional project of art, where a discussion of sound art's definition is quickly connected with, and then quickly disassociated from, an historic essentialist premise. Theorists of genre have noted 'how deeply rooted the biological model remains in our thinking about cultural taxonomy' (Frow, 2006: 54), and discussions of sound art show that simply the concept of 'definition' seems to connote essentialism. The suggestion of Christoph Cox 'to offer up a set of distinctions/definitions and see where they take you' (2004a: n.p.) might therefore be seen as an attempt to escape the dogmatism associated with traditional methods of classification.

The notion of the *prototype* nevertheless encourages a consideration of perceived dominant 'characteristics', 'traits' or 'features' but without the prescriptive 'conditions' or 'rules' more traditionally associated with the theory of art and genre. An attempt to define the most central member of the category 'sound art', for example, can enable speculation about how sound art is generally perceived, while accepting the likelihood of a whole host of variations in members towards the edge of the category. Theorist Heather Dubrow provides a useful analogy:

Genres are strikingly similar to human personalities. Like different personalities, different genres are distinguished from one another by which characteristics predominate. (Dubrow, 1982: 7)

The concept of *identity* popular within cultural theory places an emphasis on contextual and relational factors rather than essentialist notions that someone holds their defining properties within themselves (Hall, 1996: 1-17). Although usually applied to people and places, the idea of genres as personalities as well as recent definitions of art that privilege the social context of the work suggest its potential relevance to the situation of sound art. It might therefore be more productive to perceive the updated project of *definition* as a project of *identification*.

Differentiation

The concepts of prototypes and identification are useful in considering not only matters of characterisation, but also the aspect of differentiation. In previous chapters, for example, it has been established that the category of sound art emerged through a differentiation from music. Later in this study, it will be shown that many of the widely held features that define sound art have developed around a seemingly essentialist premise of exclusivity from these kinds of established categories. A classic example is the space-time dualism between sound art and music (see Chapter 6). Although such binaries are inevitably unsustainable – the component of space is not necessarily exclusive to sound art, nor is the aspect of time to music – they nevertheless seem to contribute to the identification of the genre. The idea of sound in space, for example, cannot simply be dismissed in relation to the definition of sound art. Although these definitional binaries appear to subscribe to an essentialist view of exclusive categories, they are not so problematic if considered in relation to the idea of the prototype, which suggests that a category will simultaneously contain dominant traits but also fade into 'fuzziness' at the edges. A work might therefore fall into several categories at once, such as experimental music *and* sound art, if sitting at the 'fuzzy' edge of one or both these categories.

The dissolution of clear boundaries does not, however, equal the dissolution of difference, since to assume the presence of a complete continuum would in fact call into question how categorical distinction occurs at all. French philosopher Jacques Derrida observes this necessary demarcation of both sameness and difference as a principle of genre (1980: 204), and Frow also explains that 'we can identify a genre because we are at some level aware of other genres that it is not' (2006: 125). If difference predicates definition as much as similarity, a category such as sound art will be identified as much through its relationship to other categories as through the members that fall within it. It is therefore unsurprising that binaries, which are dependent upon difference, have developed as part of the definitional discourse of sound art. This may appease potential concerns that the emergence of sound art is grounded in misguided premises of essentialism, although it raises further questions, such as how and why such distinctions form in the first place and the significance of the relationship between different categories.

Mutation

Prototypicality accounts for the ordered and yet open-ended state of categories and, through its acknowledgement of the blurry edges of a category, also indicates a pragmatic negotiation of the unfamiliar through the familiar (Bowker and Star, 1999: 54). This emphasises the importance of categories in their cultural and historical context as well as their perpetual state of transition. Ideas on genre formation by Russian Formalists allow for an important negotiation between systems and historical change (Frow, 2006: 68). Philosopher Tzvetan Todorov, for example, argues that 'a new genre is always the transformation of one or several old genres: by inversion, by displacement, by combination' (1976: 161). Following this line of reasoning, sound art will inevitably be characterised by its relationship to existing categories, whether music or visual art, and continue to have strong connections with them. While contemporary art practice will continue to challenge artistic tradition, prototype theory suggests that variety can still be incorporated within these generic categories. Such activity will, however, eventually lead to the formation of new generic categories, as in the case of sound art.

Derrida observes that similarity and difference come into play in the emergence of categories and also comes to a paradoxical conclusion of the 'condition for the possibility and the impossibility of taxonomy' (1980: 65). This refers to an inherent contradiction in the very nature of generic categories, since the placing of a text within a genre automatically alters the nature of that genre. In Derrida's own words: 'participation never amounts to belonging' (1980: 65). This constant shift of meaning must be acknowledged in any attempt at classification. As linguist John Swales points out, such constructions therefore have relatively little value when seen against the inescapable evidence of continuous evolution (1990: 37). 'At the end of the day', he explains, 'genre analysis is valuable because it is clarificatory, not because it is classificatory' (Swales, 1990: 37).

An exploration of developments in taxonomy provides a renewed understanding of the project of definition and classification as one of identification and clarification. This facilitates a conceptual shift in the approach to categories, which has the potential to rationalise fears of essentialism found within the discourse of sound art, and which might also be directed towards this study. In arguing that an exploration of definition can ensure a better understanding and evaluation of sound art, Cox intuitively highlights some of the most basic functions of categories: organising information and providing a means of reception and therefore, ultimately, evaluation. As music theorist Jim Samson observes, 'the principal role of classification is arguably pragmatic – to make knowledge both manageable and persuasive – but its effect can be to shape, and even to condition, our understanding of the world' (2008: n.p.). This aspect of definition demands further consideration in relation to sound art.

Fears of constructivism: Categories of art in action

Cox's reflections on the act of definition during the *Artforum* symposium place definitions based on context at the other end of the spectrum to an essentialist definition of sound art:

It's probably silly to look for some essence of sound art. And [...] we could go the thoroughly antiessentialist route and say that "sound art" is just sound of any sort that shows up in contexts usually devoted to visual art. For my part, it seems to me that some kind of middle ground is important. (Cox, 2004a: n.p.)

This illustrates a hesitancy to reduce sound art's definition to matters of context as much as a reluctance to disregard its distinctive features for reasons of essentialism. It is possible that definitions based solely on context might be accused of falling at the other extreme of sheer constructivism, although it is also evident from this comment (and other chapters of this study) that the visual arts context is significant in the definition of sound art. The visual arts are, however, yet another category of art, and theorisation about artistic categories can once again shed further light on this situation. As with the shift from definition to identity, genre theorists start looking beyond the formal aspects of categories and their construction in favour of their particular communicative and social functions (Swales, 1990: 37). A socio-cultural approach to categories contrasts with the traditional taxonomical approach in its belief that 'a rhetorically sound definition of genre must be centred not on the substance or form of discourse but on the action it is used to accomplish' (Miller, 1984: 151). The remainder of this chapter will investigate how categories such as visual art and sound art not only influence the development of artistic tradition but also the institutions, industries and disciplines of art.

Society and meaning

Context and social codes

Categorical existence is contextual at the most fundamental level, since it relies on a relationship between several works, or the 'intertextual' (Thwaites, Davis and Mules, 1994: 96). It is therefore perhaps unsurprising that genre theorists have also turned their attention towards the literal context of works, or the 'paratextual' (MacLachlan and Reid, 1994; Genette, 1997; Frow, 2006: 104). MacLachlan and Reid, for example, describe how 'the relocation of an object in a new space [...] gives it a different semiotic charge' (1994: 91). This observation is obviously important for the case of sound art, in which the definitive role of context has been raised as an issue. One critic also observes: In a post-Cagean world, if sound art is performed in front of an audience it can too easily be perceived as music or theatre. If sound art happens on radio it becomes radiophonics or, again, music. So sound art ends up in the heavily culturally coded environment of the art gallery. (Andrews, 1996: n.p.)

This comment suggests that the location of a sound work might influence the way in which it is categorised. It has even been argued that the paratext plays more than an accompanying role and is in fact crucial to a work's definition, so that it might even be seen to form part of the work itself (Genette, 1997: 2; Frow, 2006: 106). These ideas are compelling for the case of sound art, in which context seems to be a significant aspect of its definition. There are nevertheless a whole variety of contextual factors that might potentially affect the reading of a work, including the known background of the artist, the disposition of the reader, or the interpretation accompanying it. Frow regularly uses the analogy of a frame to illustrate the function of genre 'to define the text against those things which it is not', but also uses the idea of its thickness to indicate 'the different degrees of generality at which a text is defined' (2006: 107). Such a description can account for the range of generic contexts in which a work might be located, whether at the level of installation, exhibition, gallery, visual arts, experimental music or sound art, for instance. Frow notes that 'we could thus think of the "edge" of the work as being something like a series of concentric waves in which the textual space is enclosed' (2006: 107). In this example, the set of waves includes the medium or method of display as well as the physical and institutional location. Frow also describes the edge of the text is 'a site of dangerous ambivalence which must be negotiated and secured' (2006: 106), which is suggested by the above quotation regarding the location and identification of sound art.

Due to an interest in the idea of convention, genre theorists have extensively considered the social context of artistic categories and the way in which works are received as well as produced. Just as a paratextual reading of genre views the elements surrounding a work as anticipatory cues or meta-communications in how it should be read (Frow, 2006: 104), an intertextual reading sees genre as a set of expectations. Another useful analogy is provided by Dubrow, who regards genre as a 'contract' between author and reader: 'a genre represents [...] a communication from the writer to his readers. He is in effect telling us the name and rules of his code, rules that affect not only how he should write the work but also how we should read it' (Dubrow, 1982: 31). Like Walton, Dubrow suggests that these expectations are shaped through previous encounters with works of that genre, and place the observer in the correct mind-set in which to perceive what is significant about the work (1982: 37). This serves as a reminder that those who produce and consume art operate under a set of preconceived assumptions, ideas and attitudes. Categories or genres, then, are indicative of a kind of 'social code' (Dubrow, 1982: 2). These ideas are not only

relevant for the potential identification of sound art within the context of the visual arts but also for its identification as a category in its own right.

Context and discourse

A shift from the textual to the social refocuses theoretical attention to the deeper effect that categories can have on our understanding of the world; categories not only slice up reality, but also *create* it. Frow, for example, asserts that 'the notion of genres as "frames" [...] implies the divisibility of the world and the *formative* power of those representational frames' (2006: 19). In this way, genres can be likened to the idea of 'discourse' which, in Foucault's own words, refers to 'practices that systematically form the objects of which they speak' (1972: 49). Frow elucidates:

Each element of this sentence matters: discourses are practices in the sense that they carry out an action; they are systematic because they are relatively coherent in the way they work; they are formative of objects in the very act of speaking of them, not in the sense that they create objects out of nothing but in so far as they build weight of meaning around the categories of the world. (Frow, 2006: 17-8)

Genres are therefore culturally-specific frameworks of knowledge that exist as a combination of language, thought, and action.

Adopting the idea of discourse in relation to categories of art highlights the fact that the issue of definition is not solely a theoretical concern. In relation to sound art, theorist Kersten Glandien observes:

A discourse provides a connection between people working in the same field. It gives an audience the possibility to access a work. It develops tools to talk about both the work – and what is so vital in this field – about its cultural context. A discourse provides historical references and finally, allows awareness and interest to grow and audiences to develop. In Britain this discourse does not exist and this severely effects [*siq*] the art itself. (Glandien, 2001: n.p.)

These comments indicate the social, cultural and communicative functions that lie beneath categories such as sound art, as well as a perceived issue with the state of the discourse around the turn of the millennium, which will be discussed in the next chapter.

The discourse of sound art nevertheless illustrates how a divide between theory and practice is often maintained by artists in matters of definition and categorisation. Derek Holzer, noting the significance of intention and context in postmodernist art, suggests that these aspects are more important in the definition of sound art than the sounds themselves (2007: n.p.). He therefore concludes:

Of course, "intention" and "context" are both tricky pickles to sort out [...] so we now must hand over the categorization of music vs sound art from one group of specialists (the musicologists) to another (the theorists). And I'm personally of the opinion that, in terms of production, an artist needs a theorist like a fish needs a bicycle. (Holzer, 2007: n.p.)

Another sound practitioner, Allen Cobb, remarks that 'it is interesting that there should be such confusion about what we do, since those of us doing it seem to just do it' (2005: n.p.). These comments indicate a naive or idealistic view of the arts that is called into question by sociological accounts highlighting the complex social conditions of cultural production (see also Chapter 1). While practitioners may be uninterested in matters of definition, it colours all that they say and do, whether consciously or not. As cultural theorist Stuart Hall explains, 'the meaning is not in the object or person or thing, nor is it in the word. It is we who fix the meaning so firmly that, after a while, it comes to seem natural and inevitable' (1997: 21). While the issue of definition does not always overtly concern those involved in the arts at a practical level, a Foucauldian concept of discourse nevertheless reveals the inherent connection between theory and practice.

A discursive view of genre can also present a fruitful way in which to negotiate individual or personal definitions in relation to collective or prevailing definitions. As generic meaning both constitutes and is constituted by the social, even seemingly autonomous thoughts and actions are influenced by collective constructions of meaning. As Stuart Hall observes, 'we are able to communicate because we share broadly the same conceptual maps and thus make sense of or interpret the world in roughly similar ways' (1997: 18). At the same time, individuals are able to influence the collective view; the ideas, writings and works of artists, scholars or curators have an impact upon the discourse as a whole, perhaps even more so in an emergent and unstable discourse such as sound art. Individual and collective meanings are nevertheless in an ongoing process of exchange and negotiation. Swales's concept of a 'discourse community', for example, suggests that structures of meaning and value are sustained by groups whose members recognise, use, and renew them (Frow, 2006: 146). He also notes that 'a discourse community's nomenclature for genres is an important source of insight' (Swales, 1990: 54), as seen in this study. To consider that a discourse is slowly developing for sound art is, effectively, another way of saying that the category is developing 'an organised domain of meaning' and therefore potentially its own epistemology and ostensible 'truths' (Frow, 2006: 146). It is therefore the work of the theorist to interrogate this discourse, even if only its 'actualisation' as written text (Frow, 2006: 146), in the hope of revealing what some of the perceived norms or 'truths' of its discourse community might be. As Foucault, as well as some theorists of sound art (Kim-Cohen, 2009), would argue, meaning can only exist within discourse (Foucault, 1972). It is therefore evident that the role of context in the definition of sound art, whether literal or figurative, concerns critical

issues of signification and meaning, which also have a range of real-world manifestations worth further consideration.

Institution and industry

Art as a social activity

Viewing art as a social activity can expose the social structures and institutions that form around it, which Foucault would describe as a high-level 'discursive formation' (1972: 38). This acknowledges that, in addition to language, a discourse will be made up of people, spaces, actions, beliefs, norms, values and institutions, which come into association at specific moments (and, often, at the expense of something else) (Foucault, 1972; Frow, 2006: 46). These elements enable the production of culture and translate into the 'conditions of possibility' of discursive practices. This particular concept of discourse therefore exposes the fact that institutional mechanisms are essential to the existence of categories or genres such as sound art, and vice versa.

The importance of institutional contexts in the construction of art is not only reinforced through later theories of art but also observed through the idea of genre as shared norms 'built into more or less durable infrastructures' (Frow, 2006: 102). As film theorist Rick Altman observes, genres 'appear to be initiated, stabilised and protected by a series of institutions' (1999: 85). It has even been suggested that arts organisations 'govern the determination and distribution of classification and value' (Frow, 2006: 137). These ideas obviously place importance on the institutions of art in the definition and emergence of sound art as a category, whose role it is to fund, commission, manage and present it.

An acknowledgement of the role of institutions in the classification of art and its subcategories recognises the processes mediating the production and reception of a work from artist to audience, factors that were traditionally neglected in accounts of art and genre. The romantic view of art and creativity, for example, upholds ideals of individual spontaneity, inspiration, and genius. Sociologists such as Bourdieu nevertheless show that the fields of cultural production consciously work to maintain these essentialist illusions through the denial of extra-aesthetic factors (1993; see also Chapter 1). The idea of genre was also initially rejected for relying on the idea of convention following a similar line of reasoning. As Swales observes, 'scholarly activity is typically designed to show how the chosen author breaks the mould of convention and so establishes significance and originality' (1990: 36). Subsequent accounts of genre nevertheless view conventions and institutional structures as 'central to the evolution of the creative arts' (Swales, 1990: 37). Todorov, for example, argues that 'for there to be a transgression, the norm must be apparent', and through transgression these norms are created and reinforced (1973: 8). The existing artistic traditions and their institutions will therefore inevitably play a part in the emergence of new artistic categories such as sound, which might also eventually develop its own institutions.

Art as a social product

Viewing art as a social product is another useful way in which to consider the social structures and institutions that have formed around it. Frow observes that 'these things are often clearer when we talk about popular genres of capitalist modernity, since we accept that they are industrially produced, whereas the conditions of production and reception of self-consciously "aesthetic" texts are often obscured' (2006: 137). This recognition of the institutional conditions that sustain the 'high' arts reveals that the artworld operates more like the 'popular' arts and their associated industries than perhaps many would like to admit.

The ideal of 'pure', disinterested creativity which permeates the arts – what Bourdieu might refer to as the 'pure aesthetic' (1993: 254) – might in fact explain some of the cynicism surrounding the rise of sound art as a category. Douglas Kahn, for example, remarks that 'it is clear how a few folks see [the term sound art as] an opportunity to exploit a momentary and monetary cache in whatever system of exchange they may trade' (2006b: n.p.). He adds:

My own suspicion comes from the fact that the term was reinvigorated only when certain metropolitan art centres – their markets, institutions and discourses, and only then a certain subset of those – "discovered" this thing called sound art'. (Kahn, 2006b: n.p.)

Kahn's scepticism arises from the fact that the practice existed for a long time without recognition. From a sociological perspective, however, the appearance of sound art in these institutions can be seen as an eventual and significant phase in its emergence within the artworld.

The idea of art within an industry must not be taken to an essentialist extreme. Musicologist Keith Negus, for example, warns of an instrumental view that dominates accounts of popular forms, in which creativity suffers under powerful corporations and commercial structures (1999: 14-30). Similar to the sociologist Theodor Adorno's pessimistic view of the 'culture industry', a view of categories as a means to control the flux of goods might be seen as an ideological account of genre as an instrument of social control, often found in film theory (Berry-Flint, 2003: 36). Negus instead adopts a stance that emulates developments in genre theory relating to convention versus creativity, where the ideas of norms and transgression negotiate the apparent 'conflict between commerce (industry) and creativity (the artists)' (1999: 24). Here, a complex relationship between industry and culture is emphasised. Meaning-making is at once concept and material, and occurs at a range of different levels both before *and* after an artwork is within the so-called 'clutches' of the industry (Negus, 1999: 14-30). Negus explains:

It is misleading to view practices within music companies as primarily economic or governed by an organisational logic or structure. Instead, work and the activities involved in producing popular music should be thought of as meaningful practices which are interpreted and understood in different ways [...] and given various meanings in specific social situations. (Negus, 1999: 20)

This is another reminder that, although ideas of convention, institution or industry seem to be at odds with ideas of art and creativity, these structures are in fact an integral part of the creative process.

Negus's observations of cultural industries hold further interest for the case of sound art, which finds itself situated at the intersection between different institutional systems such as music and visual art, and even high and popular forms. He proposes, for example, that 'there are many differences between and within industries and these can carry according to aesthetic form, content, working practices, means of financing and modes of reception and consumption' (Negus, 1999: 22). Sound artist Stephen Vitiello describes the difficulty in obtaining grants as a composer compared with the many opportunities in the visual arts for commissions and teaching, and exclaims: 'the only place where I find a problem is when I apply for funding. Not to bring everything back to money' (Vitiello, in Nordschow, 2004: n.p). Marina Rosenfeld, in conversation with Vitiello, describes an opposite scenario, finding work teaching electronic music within music departments. She points to the significance of definitions in relation to this issue:

It's quite clear that we are not in a field like painting, where the distribution and marketplace are set up to ensure that the artist is taken care of. We're in this real no man's land. It's a wonderful freedom on one hand, and it's a real handicap from another point of view [...] some of these definitions simply have a marketplace utility, which is important. (Rosenfeld, in Nordschow, 2004: n.p.)

This suggests that the situation of sound art between industries presents difficulties as well as potential opportunities for sound artists. Rosenfeld's reference to painting, a genre that has arguably lost its prime position within the contemporary arts over the last thirty years, inadvertently points to the complex situation of art today, a situation in which sound art is also located. Poet Kenneth Goldsmith also observes that 'audio works are generally worthless on the art market' (2005: n.p.). Perhaps for this reason, Vitiello predicts that the longevity of sound art will only be assured 'if it takes on a kind of commodity form' (Vitiello, in Nordschow, 2004: n.p.). The position of sound art between the 'industries' of visual art and music therefore highlights their differences and exposes the occupational and commercial nature of art that is often concealed.

In disturbing institutional mechanisms, sound art raises the issues of markets and success in the arts. Alan Licht, for example, sees art as 'commercially viable' even if esoteric due to its

system of collectors, whereas music must appeal to the masses to achieve success (2007: 13). In his opinion, this is part of the reason why sound art has become so popular as a term, since it aligns sound work with the plastic arts and therefore 'rescues music from this fate' as a source of entertainment (Licht, 2007: 13-14). Not everyone, however, is comfortable with this discussion of economies in relation to sound art, as illustrated by the comments of artist Jeph Jerman: 'I think that creative work and commerce are opposites. The impulses for each originate in different parts of the brain. Art is the end result of a human creative process. Commerce is the attempt to better one's position in life through material gain' (Jerman, in Aldrich, 2003: n.p.). This opinion clearly upholds the pure aesthetic ideal and indicates that traditional values are still very much ingrained within the contemporary artworld. At the crudest of levels, the implications of categories such as sound art in the economies of art are evident in the tick-boxes of funding applications. Given the many differences between and within institutions and industries, whether art music or popular music or visual art, it is not unsurprising that sound art consists of an ambiguous, confused and conflicting discourse in light of its position between and across them. Since categories of art can represent different institutional and market structures, there are clearly practical and also political implications in situating sound art within the context of visual art. Moreover, it is possible that sound art will eventually develop its own industry.

Knowledge, evaluation and power

Disciplines of art

Viewing categories such as music and visual art as social structures suggests they each maintain certain values. Discussing the concept of genre in relation to film, theorist Sarah Berry-Flint states that 'it is not only a question of how genres work but also what kind of "truths" they both presume and preclude' (2003: 38). This approach to genre proposes that texts take on meaning 'according to the epistemological and rhetorical modes to which they are linked (Berry-Flint, 2003: 38). Since aesthetics originated from an interest in the senses, for example, this branch of philosophy views art as autonomous and free of moral or political purpose; the sociology of art, which exposes and refutes such ideals, is derived from another epistemology that views art as a social world. Disciplines have also emerged alongside artistic traditions so that knowledge is concentrated within specialist academic areas.

The contingency and mutability of knowledge has been highlighted in a growing body of theory focused on the social construction of disciplines, in particular the sciences. This has involved academics taking a critical position to the production of knowledge in a way that is not too dissimilar from conceptualism in art by interrogating their own craft through the craft itself. The concept of 'boundary-work', for example, observes the particular divisions of knowledge and

the justification strategies involved in the construction, maintenance and movement of these boundaries (Whitehead, 2007: 55). In a seminal paper introducing this concept, sociologist Thomas Gieryn suggests that the 'demarcation' of science from other things is ideological. He also argues that it is in the interests of professionals to uphold such boundaries, as there is often much at stake, including a constructed impression of credibility traditionally associated with the sciences (Gieryn, 1983: 791). This highlights the fact that categories of knowledge are social constructs and furthermore represent a political stance. The various fora of sound art clearly demonstrate artworld figures practising such demarcation strategies for sound art as well as music and visual art.

The emergence of sound art between existing categories therefore also exposes the social construction of knowledge in the arts. Its interdisciplinary position has clearly posed problems for academics, and this appears to have had major repercussions for its legitimisation and critique. In light of artistic developments in the last fifty years, academics must increasingly defend traditional disciplines, such as art theory, art history and musicology; new fields of study, such as visual culture and sound studies, have also begun to emerge. It is evident that a body of knowledge is slowly developing around sound art as part of its institutional growth. Albeit implicitly, each contribution to the field redefines the genre and presents certain limitations to its analysis. Sound art is in this way essentially forming its own set of values, or 'truths', to be defended or attacked.

Politics of art

One of the most consistent ideas about genre – whether essential or constructed, and through a variety of notions from 'species' to 'convention' to 'contract' – has been its presence as a thing of power. As Frow observes, 'accounts of genre always draw on some other, authoritative realm for their metaphors' (2006: 52). Bourdieu portrays cultural production as field in which 'aesthetics judgements are made, cultural hierarchies established and within which artists have to struggle for position' (Negus, 1999: 18-19), and therefore also considers the relations of power at work within the artworld. This is perhaps unsurprising in light of his ideas on the ideological workings of society and the fields of science, which later influenced theories on the construction of knowledge described above (Lamont, 2012: 234-5). Notions of power also resonate strongly within the ideas of Foucault in relation to knowledge. Discourses are ultimately seen as social processes of power and legitimisation that are involved in the construction of truths and their maintenance (Foucault, 1991).

To create an effect of authority nevertheless allows for the possibility of transgression. As Frow explains, 'in each case the metaphor provides a way of thinking systematically about a form of ordering that is in many ways resistant to system' (2006: 52). The idea of systems and their

resistance in genre theory can lead to a view of sound art as a transgression of sociallyconstructed boundaries. Dubrow, for example, compares breaking the rules of genre to a cultural act of rebellion against authority, much like 'distinguishing oneself from the dominant culture and asserting one's allegiance to the subculture' (1982: 13). This is a particularly useful analogy for sound art in relation to the dominant cultures of music and visual art, where it is said to have operated as an 'underground' culture for some time. As Glandien, in relation to the absent discourse of sound art, asserts: 'When I first arrived here [in the UK] and looked around in this field, I could not detect anything obvious [...]. So I decided to dig a little deeper. After intensive searches I discovered artists working in sound art and even came across some obscure events' (Glandien, 2001: n.p.). It is also suggested that the 'mannerisms of a sub-group may be picked up by the culture at large' so that the functions of such rebellion may eventually be lost (Dubrow, 1982: 13). This raises some interesting questions in relation to the rising status of sound art and the effects of a growing discourse demanded by Glandien; should sound art become a dominant culture, then what transgressions and sub-cultures will follow?

The notion of cultures and subcultures introduces the idea of fashion as another motivating factor in the construction of generic distinctions. The strategic use of generic labels, which can be surrounded by either positive or negative cultural connotations, illustrates a connection between popularity and power. One example is the introduction of the term sonic art as a way to avoid rejection from the world of music. Licht also suggests that 'calling oneself a sound artist lends a certain legitimacy that experimental music may not have' since 'however erroneous and unfair, [the term 'experimental'] still strikes an unwanted undertone of semi-professionalism as a calling card' (2007: 13). This position echoes art historian Kevin Concannon's assertion, more than fifteen years earlier, that 'for many, the Audio Arts are merely an extension of the musical avant garde and, as euphemisms go, only slightly less derogatory than "experimental" (1990: 161-2). Such statements hint at some of the political implications behind aesthetic labels and their use, as well as the ways in which fashions change. They also reinforce the notion that categories construct social boundaries and define what is 'acceptable'.

The backlash against terms alternative to music, and the conscious employment of the word as a way of upholding the legitimacy of experimental practices with sound, is another political stance. It might also be seen as an example of the artist rebelliously choosing to locate herself at the edges of a genre, as evidenced by Rosenfeld's specified desire to be 'engaged with that history that comes with the word "composer" (Rosenfeld, in Nordschow, 2004: n.p.). She explains that 'I often butt up against it in a somewhat violent way, it seems, in terms of the reactions that some of my work produces', and states that 'you're really *in trouble* as soon as you take on that composer thing' (Rosenfeld, in Nordschow, 2004: n.p., emphasis added). Rosenfeld's remarks

reveal that an aspect of authority is bound up in aesthetic choices. This also extends to her own reservations about sound art, which she regards as a marginalising term.

These examples from the discourse of sound art illustrate the way in which artistic categories are laden with values that come to fore when threatened. As Negus observes, genre distinctions can result in 'social containers which either do not meet or meet under conditions of mutual incomprehension or contempt' (1999: 183). He also suggests that 'aesthetic judgements imply ethical agreements and disagreements, moral evaluations and assessments' (Negus, 1999: 183). That the artworld actively seeks to maintain its values points to a political dimension that lies beneath practice and theory. It is evident from the differing views about 'sound art' in relation to other terms that categories of art 'at once invoke and reinforce' these values or truths and therefore represent a relationship between knowledge and power (Frow, 2006: 4).

Conflict or coalition

The emergence of sound art as an independent discourse presents some interesting possibilities in relation to the connections between textuality and power that can be seen in the interaction and conflicts between genres (Thwaites, Davis and Mules, 1994: 111). For example, the close and yet tense relationship between music and sound art might be equated to a Foucauldian notion of 'competing discourses', which not only points to extreme plays of power but also to the historical and evolutionary nature of any discourse. Since forces of resistance eventually lead to change, there is therefore also a possibility that sound art might eventually overthrow the paradigm of music.

An indication that sound art is gaining leverage in the artworld might be found in its status as a point of reference for professionals involved in other niche sonic practices. At a conference about sound art, for example, composer and academic Jonty Harrison provides a defence of 'acousmatic music', a form of electroacoustic music inspired by *musique concrète*. Harrison suggests that, 'having been rejected by some quarters of "music", acousmatic music is in danger of being subsumed by a "sound art" agenda which is motivated by completely different concerns' (2006: n.p.). This example clearly demonstrates boundary-work in action: a professional demarcating the boundaries of his particular field in the quest for credibility. Harrison's defence openly aims to establish acousmatic music as a musical form with its own philosophy, methods and history as a way of 'revealing and reiterating its significance' (2006: n.p.). That this is attempted through a positioning of acousmatic music against sound art would at least suggest that the discourse of sound art is strong enough to feature as part of this particular battle.

The case of sound art is particularly interesting since there appears to be interaction and conflict between genres within its own discourse. It has been shown that sound art is connected with the two very different discourses of music and visual art, each with their own conventions,

industries, institutions and intellectual traditions, so that such tensions are inevitable. This situation might, however, be reconsidered through the sociological idea of the 'boundary object', which suggests that a concept such as sound art may be adaptable enough to be interpreted and used in different ways across the visual art and music communities, and yet robust enough to maintain its identity across them (Star and Greisemer, 1989: 393). Susan Star and James Greisemer, who developed the concept of the boundary object, explain: 'they have different meanings in different social worlds but their structure is common enough to more than one world to make them recognizable' (1989: 393). The boundary object may take on certain stronger characteristics depending on the site of its use, an idea that highlights the ambiguity and mutability of categorical meaning. This notion is also potentially relevant to the case of sound art, which will be shown to become distinctive due to a certain set of characteristics from the perspective of music, and a different set of characteristics from the perspective of the visual arts. Star and Greisemer suggest that 'the creation and management of boundary objects is key in developing and maintaining coherence across intersecting social worlds' (1989: 393). As a boundary object, sound art might therefore present a means of translation across the two different worlds of music and visual art, allowing coordination without consensus, and eventually enabling a coalition of sorts. This idea has critical potential in relation to the supposed liminal condition of the contemporary arts, which aspires to be between boundaries, categories, genres, discourses, media, disciplines, and so on, and makes an investigation into the definition of sound art even more urgent.

Conclusions

The artworld tends to avoid explicit reference to definition, as the epigraphs to this chapter indicate. However, any description of an artist or artwork as 'innovative', 'avant-garde', 'cutting-edge', or 'ground-breaking' is in fact implicitly referring to the categorical state of the arts. The general reluctance to define sound art, which can be found within its discourse, largely results from the association of a definitional project with essentialist ideals. Such ideals, which were traditionally subscribed to within the history and theory of the arts, would assume that sound art inherently possesses certain defining features for the theorist to uncover. Acknowledging taxonomical developments in the theory of art and genre can nevertheless alleviate these fears. It has been shown that the project of definition need not subscribe to rejected ideals if art is approached as a cultural concept that is created socially by the people who produce, present and consume it. This is a key methodological premise of this study and subsequent chapters, in which the project of definition is viewed as a task of clarification rather than classification.

This investigation of contemporary ideas on art and genre also addresses an almost opposing tendency, at the other extreme to essentialism, to base a definition of sound art on context alone. Viewing art as a social construction highlights the institutional, industrial, and academic manifestations of the artworld that influence the way in which art is defined, valued and evaluated both in practice and theory. It also shows that categorical definition is bound up in issues of politics and power so that the context of a sound work might have social, economic, intellectual and political implications. Furthermore, it points to the historical condition of art, which is in a constant state of transition, and also tension, since it is made up of durable infrastructures that are slow to develop. Sound art could therefore also potentially develop fully-fledged institutional structures, industries, and epistemologies of its own. These might, equally, eventually be replaced by other discourses.

Although many deem the quest for sound art's definition hopeless, tired, or flawed, this exploration demonstrates just how fundamental the issues of definition and categorisation are to the way in which the artworld functions. Approaching sound art as a social construction can potentially enable the theorist to find the middle ground that Cox demands. Cox later finds a middle ground that questions the constructivist as much as the essentialist approach, by arguing that sound art is bound up not only in the social but also its material basis (2011), and later in this study it will be shown that these are ontological issues that form part of the definition of sound art is a cultural concept as well as its material form. Through their assembly of works according to a thematic idea, such as 'sound art', exhibitions automatically engage with the categorical. By focusing on shared characteristics as well as differences, they also promote a non-essentialist definition of sound art. In the next chapters, some seminal examples will be explored to show how the artworld's artists, curators, audiences and critics have defined sound art, both in theory *and* practice, within specific institutional settings and at particular moments in history.

Chapter 4

Making Waves: Sonic Boom and the Art of Sound

In terms of discourse, have a look at the jaw-droppers on the recent Artforum online forum on sound art. It seems you're meant to believe that sound art started in earnest around 2000. There was certainly some of the same hype around the *Sonic Boom* exhibition.

(Douglas Kahn, in an online panel discussion for Tate's d_cultuRe season, 2005)

One problem in a conventional exhibition space is that work that emits sound inevitably interferes with adjacent work. In this respect, many curators of mixed shows of time-based works have displayed all the tendencies of a bad DJ. In acknowledgement of this sorry history the Hayward Gallery has intelligently chosen a composer as curator.

(David Cunningham, in a review of Sonic Boom for Art Monthly, 2000)

Sonic Boom was an opportunity to put a certain personal view of sound and music across on a bigger scale, but also a chance to place artists and musicians I admire in the public earshot.

(David Toop, in an interview with Rupert Loydell, 2000)

Sonic Boom: The Art of Sound was one among several international exhibitions of sound art that took place at the turn of the millennium. It featured a total of thirty works created or adapted by a range of artists especially for the show, which were distributed throughout London's Hayward Gallery from 27 April to 18 June 2000. Exploring what was described as 'the largest exhibition of sound art ever staged in Britain' (Brades, 2000: 13) provides an opportunity to consider specific examples of sound art alongside a generic representation of sound art by a high-profile contemporary art gallery. Such an enquiry is even more pertinent given the impact of such exhibitions on the discourse of sound art, as indicated in the epigraph by Douglas Kahn and also in previous chapters. This seminal survey exhibition is approached as an historical event and has been reconstructed through a range of materials, including architectural drawings (Figure 4.1), exhibition photography (Figure 4.2), the exhibition catalogue, media coverage and other references to the exhibition, its artists or their works. All works featured in Sonic Boom will be discussed and illustrated in this account, and many also feature on the accompanying audio CD, to provide a virtual walkthrough of the exhibition (see pages ix-xii for a listing). The assembly and analysis of this wide range of material aims to provide a holistic view of the exhibition from different perspectives and at different stages, from its inception through to its reception, and with the added benefit of hindsight. By focusing on the curatorial rationale behind this exhibition as well as the ways in which it was received, this enquiry aims to cast further light on the development of the definitional discourse of sound art.



Images: © Ian Ritchie Architects (Lomholt, 2000: n.p.). Used with permission.

Figure 4.1 – Architectural drawings of *Sonic Boom*, Hayward Gallery, London, 2000



a) Project Dark's 'Step' (right) and Mariko Mori's 'Miko no Inori' (middle)



b) John Oswald's 'Janèad O'Jakriel' (foreground) and Heri Dono's 'Marginal People' (background)



c) Philip Jeck's 'Off the record' (left) and Scanner and Katarina Matiasek's 'The Collector' (foreground)

Photos: © Ian Ritchie Architects (Lomholt, 2000: n.p.). Used with permission.

Figure 4.2 – Installation views of Sonic Boom, Hayward Gallery, London, 2000

Curatorial rationale: From machines to oceans

Susan Brades, the director of the Hayward Gallery at the time of the *Sonic Boom* show, asserts in the preface to the exhibition catalogue that 'sound art is a rapidly growing field, and many different exhibitions could have been made on the subject' (2000: 11). A fundamental factor in the portrayal of sound art in this show therefore lay in the Hayward's decision to invite an avant-garde musician, critic and theorist to develop the exhibition concept. By this point, David Toop had released several of his own albums on experimental record labels, had produced several compilation-albums for Virgin Records' *Ambient Series*, was a regular contributor to various cultural magazines such as *The Face* and *The Wire*, and had also published three books, on the subjects of hip hop, contemporary music and soundscapes. According to Brades, it was Toop who 'proposed an exhibition of art in which sound was the principal carrier of meaning' (2000: 11). It will be shown that the portrayal of sound art in *Sonic Boom* was influenced by a variety of contexts, which transformed this seemingly simple curatorial idea into a diverse, distinct and complex show.

Institutional contexts

It is fitting given the discussions in previous chapters that an exhibition of sound art should occur within an institutional series with an explicit concern for the categorical. As Brades observes, *Sonic Boom* was 'the latest in a series of exhibitions which extend the boundaries of the visual arts and explore relationships between media and disciplines' (2000: 11). Previous exhibitions from this series explored topics such as fashion, film, and politics (Brades, 2000: 11), and the topic of sound was also situated here within the framework of contemporary culture. This is evident in the promotional material for *Sonic Boom*:

In an age of mobile phones, in-car sound systems, digital broadcasting and celebrity DJs, sound and audio technology plays an ever increasing role in contemporary life. Sound – the carrier of words, music and noise – is the subject of *Sonic Boom*, an exhibition in which the experience of sound in space is given a new spin by the installations and actions of sound artists, such as Brian Eno, Pan Sonic, Ryoji Ikeda, Angela Bulloch, John Oswald, Lee Ranaldo (of Sonic Youth) and Scanner. Taking post-techno, post-rave, post-ambient sound art out of a restrictive club context, *Sonic Boom* liberates it in a gallery environment. (Hayward, 2000a: n.p.)

These explanations succinctly introduce some of the fundamentals of sound art observed thus far, in which the concept of sound extends past music to the everyday and is explored by artists through sound in space and installation. An emphasis on popular culture leads to some

questionable comparisons between the gallery and the club, although it may have provided mass marketing appeal.

It is perhaps not coincidental that the press release and subsequent media coverage singles out some high-profile music figures whose creative explorations with sound have brought fame and even notoriety in previous decades. One example is acclaimed rock star and music producer Brian Eno, who developed his concept of ambient music in *Sonic Boom* through an installation called 'Quiet Club', in which continually evolving light, image and sound combined to create a relaxing 'Civic Recovery Centre' for exhibition visitors (Hayward, 2000b: 38-39; Figure 4.3; Track 4.1). Lee Ranaldo is another example, best known as a member of the American rock band Sonic Youth. For the exhibition, he presented a 1920s Stella guitar with a monitor placed in its sound hole playing a looped video of a stretch of highway, in a work called 'Hwy Song' (Figure 4.4). A similar work was presented by Christian Marclay, a figure who can provide a connection between the gallery and nightclub through his performances using turntables and vinyl records that bear striking resemblance to the methods of hip-hop music disc-jockeys. In *Sonic Boom*, however, he presented 'Guitar Drag', a video of an amplified electric guitar being dragged along a dirt road by a pickup truck, which apparently aims to evoke mythologies surrounding the image of the guitar and rural southern America (Hayward, 2000b: 70; Figure 4.5; Track 4.2).

Perhaps the most infamous figure included in the exhibition was John Oswald, whose controversial 'plunderphonics' compositional technique relied on the pirating of music, and led to legal battles with internationally famous artists such as Michael Jackson. For Sonic Boom, Oswald presented an image of a male nude slowly transforming into Janet Jackson, accompanied by a modified soundtrack of a press statement by Michael Jackson, in order to further 'displace gender and identity' (Hayward, 2000b: 83; Figure 4.6; also Figure 4.2b above). Another artist in the exhibition, Robin Rimbaud, otherwise known as Scanner, became known for his illegal interception of phone conversations for use in his work. Here, however, he presented an audiovisual work in collaboration with artist Katarina Matiasek using less intrusive means that will be discussed later. The inclusion of such figures, working across media and across industries, not only raised the profile of Sonic Boom but also enabled the gallery to traverse the worlds of art and music. Brades explicitly notes that 'the exhibition includes several artists and musicians who are well known in the art and music worlds, and also introduces new figures to audiences of both' (2000: 11). By developing an exhibition of sound art, the Hayward was therefore able to extend the boundaries of the visual arts to both music and popular culture in line with its aims as an institution.



Installation stills. Based on photos by Odd Marthinussen (EnoWeb, 2002: n.p.) © Lumen London Ltd. Used with permission; Installation under construction, with artist (right). Photos: © Nicola Levinsky. Courtesy of Hayward Gallery, London. Used with permission.

Figure 4.3 – Brian Eno, 'Civic Recovery Centre Proposal (Quiet Club)' (stills, and under construction), Hayward Gallery, London, 2000



Photo: © Whitehot Magazine (Woensel, 2007: n.p.). Used with permission. Figure 4.4 – Lee Ranaldo, 'HWY SONG' nos. 1-3, Vienna Kunsthalle, 2003


Image: © Christian Marclay. Courtesy of Paula Cooper Gallery, New York. Used with permission.

Figure 4.5 – Christian Marclay, 'Guitar Drag' (still), 2000



Image: © John Oswald (FONY, 2004: n.p.). Used with permission. Figure 4.6 – John Oswald, 'Janèad O'Jakriel, after G. Platt Lynes' (still), 2000

Historical contexts

In an essay accompanying the show, Toop begins by stating that 'sound art is not a new invention' (2000b: 107). After quoting a passage from Karin von Maur's *The Sound of Painting* to illustrate a historical relationship between the 'sibling' arts of music and painting, he makes his own definition quite clear: 'So sound art – *sound combined with visual art practices* – is not a novelty' (Toop, 2000b: 107, emphasis added). Toop goes on to provide a personal and poetic survey of explorations with sound within, between and beyond music and the visual arts since the twentieth century, which can be seen as an early history of sound art as well as a theoretical backdrop to the show. Some key themes emerge from this historical overview that can explain the inclusion of certain works within the *Sonic Boom* exhibition and are therefore worth further consideration.

Automata and kinetic objects

Toop's historical overview begins by noting the technological interests of some key figures in music, such as twentieth-century composer Claude Debussy's desire for a music of 'the century of aeroplanes', the robotic nature of Erik Satie's repetitive piano pieces, and the modernist interest in the mechanical by the Italian Futurists that led to Luigi Russolo's invention of noise machines (2000b: 108-110). An interest in sound machines is traced even further back to the development of automata, a classical interest in man and machine in ancient Greece, a treatise by Renaissance polymath Athanasius Kircher describing a collection of mechanical sound devices such as singing statues, and even the performances of mechanised puppets known as *karakuri* in eighteenth-century Japan (Toop, 2000b: 111-112).

Several works in the *Sonic Boom* exhibition resemble what might be considered modern day automata. Stephan von Huene, for example, presented a mechanised plywood stick figure reciting the Kurt Schwitters poem *Ursonate* to approaching visitors (Figure 4.7; Track 4.3). Speaking an organised string of meaningless phonemes, the robot plays with ideas of the human voice, speech and communication. Chico MacMurtrie also created a small kinetic robot 'Yoyo Berimbau', who attempts to play the rhythms he can hear (Figure 4.8; Track 4.4). Drumming with his left hand and foot and bowing a string with his right arm, he is 'a manifestation of the artist's kinaesthetic enquiry into the human condition' (Hayward, 2000b: 66). 'Toyzone' was a collection of electronic toys modified to react to activity around them, which resulted in a seemingly dysfunctional animated toy display (Figure 4.9). Its creators Paulo Feliciano and Rafael Toral aimed to link 'the lo-fi noises now associated with electronic play with the sophisticated processing of generative feedback systems' and therefore see the use of technology to be as important as the movement and sound of the objects themselves (Hayward, 2000b: 43).



Sculpture in phases of movement (right). Photos: © Petra von Huene. Used with permission.



Figure 4.7 – Stephan von Huene, 'Extended Schwitters', 1987

Photo: © Chico MacMurtrie/Amorphic Robot Works. Used with permission.

Figure 4.8 - Chico MacMurtrie, 'Yoyo Berimbau', 1999



Installation view, and detail (right). Photos: © Paulo Feliciano (2000: n.p.). Used with permission.

Figure 4.9 – Paulo Feliciano and Rafael Toral, 'Toyzone', Hayward Gallery, London, 2000

Toop goes on to consider kinetic objects in relation to sound and technology, and attributes developments such as flight simulation and virtual reality to the invention of mechanical musical instruments such as the player piano or pianola (2000b: 112). Later, he describes art in the aftermath of John Cage, in which 'sounds might generate themselves, through sound sculptures or kinetic machines such as those made by Takis, Pol Bury, Harry Bertoia, Jean Tinguely, Len Lye, Tsai Wen-Ying and the Baschet Brothers' (Toop, 2000b: 115). In Sonic Boom, these ideas might be seen in 'List of Japanese Winds', a collaborative work by Thomas Köner and Max Eastley, in which ten electronically-sounded brass gongs explored 'the interaction between sound sculpture and performance' (Hayward, 2000b: 36; Figure 4.10). Another example was Paul Burwell's exercise bike, a work entitled 'If you were born in '33, you would have been '45 in '78', which drove a 'record player' made up of a large metal disc and megaphones (Figure 4.11). An experimental instrument of sorts, this visually striking construction, which was easy to play and designed for participation, might be compared to the sculptures sonores of the Baschet Brothers. Toop explains that the historical mechanisms were 'a technology that allowed music to be perfectly and repeatedly reproduced until the mechanism broke, and also anticipated the age of phonography' (2000b: 112).

Recording and reproduction

In a chronological fashion, Toop's historical overview of sound art then moves onto the subject of phonography. Several artists in *Sonic Boom* commented upon the technologies of sound recording and reproduction in their work. The collective known as Project Dark, for example, presented a series of three gramophones each playing seven-inch singles sculpted out of materials such as glass, hair and even a biscuit (Figure 4.12; also Figure 4.2a above; Track 4.5). Drawing on a 'collective experience' of the record as sound object, the work aimed to evoke feelings of 'curiosity and nostalgia to recognition and surprise' from its audience (Hayward, 2000b: 90), providing both interesting visual and sonic results. Another work, 'Off the Record' by Philip Jeck, featured a collection of old record players operating at timed intervals with their needles stuck on the disc in a chosen groove, presenting a collage of sound described as a 'hymn to obsolete technology' (Hayward, 2000b: 58; Figure 4.13; also Figure 4.2c above; Track 4.6). A final example is Pan Sonic's '2 x 50Hz Thru Leslie Speaker', which exploited the effects of a speaker originally developed for the Hammond Organ (Figure 4.14). In this work, two sounds of slightly different frequencies were played through the modified speaker, with its distinctive revolving horn, to create the effect of a siren in the ears of the listener.

In moving on to the development of 'speaking machines such as the wireless, the phonograph, the telephone and cinema', as well as later media such as radio, television, the internet and mobile phone, Toop begins to consider the creative implications opened up by these



Image: © Paul Ramsay. Courtesy of Hayward Gallery, London (2000b: 37). Used with permission.

Figure 4.10 – Design for Max Eastley and Thomas Köner's 'List of Japanese Winds', 2000



Photo: © Nicola Levinsky. Courtesy of Hayward Gallery, London (2000b: 23). Used with permission.

Figure 4.11 – Paul Burwell, 'If You Were Born in '33, You Would Have Been '45 in '78' (under construction), 2000



Installation views, and details of records (above). Photos: © Project Dark (Reynolds, 2013: n.p.; Project Dark, 2000a: n.p.). Used with permission.

Figure 4.12 – Details from Project Dark's 'Step', 1998-2014



Installation view. Photo: © Philip Jeck (2000a: n.p.). Used with permission. Figure 4.13 – Philip Jeck, 'Off the Record', Hayward Gallery, London, 2000



Photo: © Nicola Levinsky. Courtesy of Hayward Gallery, London (2000b: 87). Used with permission.

Figure 4.14 – Pan Sonic, '2 x 50 Hz Thru Leslie Speaker' (under construction), 2000 new technologies (2000b: 113). He refers to the idea of the 'technocultural loop' from Erik Davis's book *TechGnosis*, in which 'new technologies of perception and communication open up new spaces, and these spaces are always mapped, on one level or another, through the imagination' (Toop, 2000b: 113). In relation to the growth of such media, Toop paints a colourful image:

The music of the past 100 years has been characterised by a feeling of immersion. Musical boundaries have been spread until they are no longer clear. Music has become a field, a landscape, an environment, a scent, an ocean. (Toop, 2000b: 113)

Here is an interesting take on the expansion of music, which will later be seen as central to Toop's own creative approach to sound art. In reference to the 'boundless ocean of signals' in the digital world, he notes that 'musicians and sound artists have made significant contributions to the exploration and mapping of this indescribable, entirely unfamiliar space that now envelops humanity' (Toop, 2000b: 114).

Certain works in Sonic Boom used and played with the technologies of sound and its signal. Ryoji Ikeda, for example, presented a narrow, all-white corridor in which noises and sine waves bounce as the visitor walks through (Figure 4.15). 'A', like most of the artist's installation and performance work, 'manipulates the relationship between acoustic phenomena and human perception' (Hayward, 2000b: 54). The same might be said of the site-specific work by Christina Kubisch, 'Oasis 2000: Music for a Concrete Jungle', in which visitors could wear specially developed magnetic headphones in order to access natural sounds such as exotic animals, waterfalls, and the Brazilian rainforest in the outside sculpture court of the Hayward Gallery (Figure 4.16; Track 4.7). The catalogue describes the work thus: 'walking around the court, visitors are able to reconstruct in full view of London's urban sprawl a personal, romanticised rural sonic idyll [...] the sounds are all natural, but may sound artificial in the context of the metropolis, the viewer shifting in and out of different registers of sonic reality' (Hayward, 2000b: 62). Through the use of electromagnetic induction, Kubisch's work played with sound, signal and context in order to present a unique immersive experience. Another installation in *Sonic Boom* by the Disinformation project used electromagnetic noise as its basis. In 'Artificial Lightning', the shadows of visitors were 'photographed' using electric discharges accompanied by a live soundtrack produced from the radio signal of the alternating electric currents in the camera flash units (Figure 4.17). All of these works illustrate a use of sound and its signal, whether analogue or digital, to explore social contexts, sonic perception and the imagination.



Installation view. Photo: © Ryoji Ikeda (2000: n.p.). Used with permission.





Installation view. Photo: © Christina Kubisch and Galerie Mazzoli, Berlin (Kubisch, 2000a: n.p.). Used with permission.

Figure 4.16 – Christina Kubisch, 'Oasis 2000: Music for a Concrete Jungle', Hayward Gallery, London, 2000



Installation view. Photo: Anjali Rejo (2011: n.p.). Creative Commons license (CC BY-NC-ND 2.0 UK).

Figure 4.17 – Disinformation, 'Origin of Painting' (based on 'Artificial Lightning'), Usurp Art Gallery, London, 2011

Sound environments

The concept of an 'ocean of sound' launches Toop into a discussion about the activities and ideas associated with 'the growth of a loosely defined movement now known as Sound Art or Audio Art' (2000b: 116). Here he points to the conceptual breakthroughs for sound in history, such as John Cage's consideration of environmental sound in 4'33" and the white paintings of his contemporary Robert Rauschenberg, Max Neuhaus's Listen bus tour, and the Fluxus 'events that questioned all definitions of music' so that 'sound art aspired to a closer engagement with the environment and the auditor' (Toop, 2000b: 116-7). Toop also observes that 'sound art can be a fanciful form of science, as well as an art', noting R. Murray Schafer's approach to listening as an ecological audit of the sound environment, as well as the work of artists such as Laurie Anderson, Bill Fontana and Alvin Lucier (2000b: 118). In his opinion, these new approaches open up a whole range of possibilities for artists working with sound: 'Detaching itself from the organising principles and performance conventions of music, Audio Art explored issues of spatial and environmental articulation, the social and psychosomatic implications of sound or the physics of sound using media that included sound sculptures, performance and site specific installations' (Toop, 2000b: 116). Many of these ideas have been shown to dominate the definitional discourse of sound art.

The essay ends in reference to a younger generation of artists and musicians, who operate 'a certain distance from the worlds of high art and mainstream music' (Toop, 2000b: 119). Toop views their explorations into the glitch and bug noise of digital sound, and fixation with vinyl and the stylus, as 'a new development of sound art in the past ten years has emerged out of a club context' (2000b: 119). In his opinion, however, the everyday noise environment is as likely a venue for sound artists as the club. 'The club context has its limitations', writes Toop, describing 'the narcotic trance environment of a journey on the Eurostar, a feast of subliminal sonics' as a richer alternative (2000b: 121). Here can be seen the source of the media spin by the gallery described above, which attempts to popularise the exhibition through its connection with and purported improvement upon the clubbing experience. Toop concludes: 'Sonic Boom scans some of the most vital artists currently working within this expanding field at a critical moment in the evolution of media. None of us know where media arts will go, since their fate is bound up with the uncertain and overheated future of electronic communications. We can only guess' (2000b: 121). This fast-moving and wide-ranging historical overview of sound art demonstrates a particular interest in technology, machines and media that clearly influenced the curatorial selection of works in the Sonic Boom show.

Contemporary contexts

In a separate introduction to the exhibition, Toop explicitly discusses his choice of artists and works: 'What distinguishes the artists chosen for *Sonic Boom* is their diversity, their commitment to working with sound (a medium with very particular and sometimes difficult characteristics) and their interest in using sound to articulate physical space' (Toop, 2000a: 16). He continues: 'It's easier to explain selections by focusing on what has been excluded. From that perspective, I avoided work that uses sound as an afterthought or gratuitous add-on in conceptual schemes' (Toop, 2000a: 16). It is possible to discern subtle variances within Toop's explanations, which first seem to suggest an interpretation of sound art that relies on sound as object, but then point to the possibility of sound as subject. These additional definitional criteria for sound art in *Sonic Boom* can be investigated further through some of the works featured within the exhibition.

Commitment to sound

It seems only logical that an exhibition of sound art featured artists committed to working with sound, and many works in the exhibition contained some form of sound, whether ambient music, sine tones, gongs, sirens, record players or talking robots. There were, conversely, works included in the exhibition that featured little or no sound. Certain musical paraphernalia such as guitars, gramophones and records, for example, seem to have been included in the exhibition as much for their iconic as their sonic presence, commenting on the social context of sound through reference to its industries, technologies and cultures. The delicate movements of Max Eastley's series of mechanised sculptures also created barely audible traces of sound. A tall, suspended metal sheet gently shivered, for example, or a graphite rod placed through the link of a metal chain gently tapped on a window or slowly tapped and marked the wall as it twisted (Figure 4.18). In another work by the artist, called 'Phantom Drawings of a Procession of Ghosts', long suspended wire legs appeared to dance and scratch invisible lines onto paper lying on the floor below (Figure 4.19). According to the catalogue, Eastley drew upon Cagean ideas of chance and silence and aimed to 'engage an audience's attention in subtly changing ways' (Hayward, 2000b: 34). A final example is 'Watching the Marginal People', a work by Indonesian artist Heri Dono, who presented wall-mounted motorised wooden animal masks to evoke the ritualised rhythms found in traditions of gamelan and shadow-puppet theatre, as well as animistic beliefs that living spirits can reside in ritual objects (Young, 2000b: 34; Figure 4.20; also Figure 4.2b above; Track 4.8). These works fit neatly into the exhibition's historical narrative of sound centred on the machine, and also demonstrate that an exploration of sound in art can go beyond the sonic through a consideration of associated issues and ideas.



Installation views. Images: © Helen Petts (2008: n.p.). Used with permission.

Figure 4.18 – Max Eastley, *Kinetic Drawings* (based on the *Architecture* series), Metropole Gallery, Folkestone, 2008



Installation view. Image: © Helen Petts (2008: n.p.). Used with permission.

Figure 4.19 – Max Eastley, 'Phantom Drawings of Procession of Ghosts', Metropole Gallery, Folkestone, 2008



Installation view. Photo: © Heri Dono (2006: n.p.). Used with permission.

Figure 4.20 – Heri Dono, 'Watching the Marginal People', Hayward Gallery, London, 2000

A conceptual approach was perhaps more apparent in the works that generated the least sound, although it is apparent that most of the works in *Sonic Boom* convey ideas about sound, aurality or other subjects. Toop himself explains: 'Sound is not solely an investigation of phenomena. Sound can be a central element in propaganda, commerce and a wide variety of media. Many of the works in *Sonic Boom* attempt to reposition of subvert the meanings and forms that media and technology can impose upon our perception of sound' (Toop, 2000a: 16). Five years later, in an article written for the Tate during a major exhibition of sound at Tate Modern, Toop attributes this tendency in sound art to Marcel Duchamp:

Sound used in art as raw material is more likely to be an idea within a bigger idea. There are historical reasons for this. In 1916 Marcel Duchamp, who was no more interested in the materiality of sound than he was in the retinal nature of painting or the logic of a text, once concealed a noise in a ball of string. (Toop, 2005: n.p.)

Here Toop refers to the work 'With Hidden Noise', in which Duchamp instructed a friend to insert a noise-making object into a ball of fishing wire that was later clamped between brass plates so that the object remained a mystery. This playful work, like his 'ready-mades', exemplified the artist's belief that 'art should go beyond the visual and appeal to the mind as well as the senses' (Temkin, Rosenberg and Taylor, 2000: 48). As one of the most influential artists of the modern era (Naumann, 2005: n.p.), Duchamp is best known for his conceptual approach to the art-making process, and provides a useful point of reference in the history of the visual arts from which to map this conceptual approach to sound (see also Chapter 2). It is therefore clear that commitment to sound in *Sonic Boom* can also be interpreted in the abstract to refer to sound as a subject as much as an object.

Visual sophistication

Given the importance placed on a commitment to sound, it is striking that most of the works in the exhibition also contained a visual aspect. In some works, the combination of sound and vision was in fact crucial to the message. In 'The Collector', for example, butterfly images were projected in a succession of stills, accompanied by the sound or rustling wings and collector's hammer. This juxtaposition creates new interpretations of an otherwise seemingly innocent image; in this case, the sounds of the hammer point to the potential fate of these butterflies inside a museum glass cabinet (Hayward, 2000b: 98-101; Figure 4.21; also Figure 4.2c above; Track 4.9). As stated in the catalogue, Scanner and Matiasek demonstrate both the elusive and shifting nature of the visual in conjunction with the narrative inclinations of the audible through the audio-visual format in this work (Hayward, 2000b: 100). The 'Young British Artist' Angela Bulloch also explored the interaction between sound and image in 'Pixel/Sound Stack', an installation of

109

coloured cubes representing the pixels that make up the digital image, which lit up rhythmically in response to the surrounding sonic environment (Figure 4.22). In another work, Mariko Mori created a spiritual fantasy world through a video of a 'cyber-girl' dressed in white and cradling a crystal ball, accompanied by a hypnotic soundtrack (Figure 4.23; also Figure 4.2a above; Track 4.10).

Some works in the exhibition might, however, best be described as mixed media, since they included sound among a variety of other materials. Paul Schütze's "Third Site', for example, consisted of a glass-floored space that reflected unfocused images and flickering light from a video projection, which was also accompanied by a soundscape, in order to evoke memories of a Swiss thermal bath (Bell, 2000: 72; Figure 4.24; Track 4.11). In 'Mantle', artists Russell Mills and Ian Walton created an enclosure lined with the fleeces of sheep, and containing a colourfully lit column of skull x-rays, in which the strains of the human body could be heard (Hayward, 2000b: 74; Coomer, 2000: n.p.; Figure 4.25; Track 4.12). This installation also played with memory and metaphor in its aim to consider 'man's place in nature, and his role as spectator and worker within it' (Hayward, 2000b: 74). It is perhaps not coincidental that the works least focused on sound seem to have received less media coverage. One critic also observes that the works presented in enclosed spaces, such as 'Mantle' and 'Third Site', are 'less successful and tend to look oddly conventional in the context of this exhibition', and notes issues of acoustic separation in other isolated works such as Eno's 'Quiet Club' (Cunningham, 2000: 35), to be discussed later.

In an interview some months after the exhibition, Toop indicated the importance of the visual in *Sonic Boom*: 'My first priority was sound, but the brief was to make an exhibition that was also visually sophisticated. That's not easy, since works that are both visually and sonically exciting are quite rare' (Toop, in Loydell, 2000: n.p.). Although this condition is not explicitly stated in the exhibition material, it is perhaps implied by a definition of sound art as 'sound combined with visual art practices'. The use of visuals and mixed media may nevertheless have been used in order to situate this early exhibition of sound art more comfortably within the visual arts.

Toop concludes his introduction to the exhibition by referring to the diversity as much as the coherency of sound art: 'What is striking to me, as a musician and writer who has been involved in sound work for more than thirty years, is the proliferation of forms within sound art and the sense of a shared mission between artists of widely differing backgrounds, ages and methods' (2000a: 16). His historical essay ends on a similar point: 'One aspect of sound art that is compelling, at this stage in its history, is the way that dramatic contrasts in working practice and materials can still link to common historical sources' (Toop, 2000b: 121). These observations seem to suggest that it is the subject matter, rather than the materials, techniques, forms or traditions, that distinguishes sound art as a practice. The works in the exhibition nevertheless seem to suggest that sound art can comprise material and conceptual explorations of sound as



Installation views. Photos: © Robin Rimbaud (2000: n.p.). Used with permission.

Figure 4.21 – Scanner and Katarina Matiasek, 'The Collector', Hayward Gallery, London, 2000



Photo: © Angela Bulloch and Simon Lee Gallery. Used with permission.

Figure 4.22 – Angela Bulloch's pixel boxes in 'Copper Grid 4', 2011



Installation view. Photo: © Nicola Levinsky. Courtesy of Hayward Gallery, London. Used with permission.

Figure 4.23 – Mariko Mori, 'Miko No Inori' (still), Hayward Gallery, London, 2000



Installation view. Photo: © Paul Schütze (2000a: n.p.). Used with permission. Figure 4.24 – Paul Schütze, 'Third Site', Hayward Gallery, London, 2000



Installation views. Photos: © Russell Mills (2000: n.p.). Used with permission.

Figure 4.25 – Russell Mills and Ian Walton, 'Mantle', Hayward Gallery, London, 2000

well as other matters, through sound but also a variety of other media. It will be shown how mixed messages may have arisen as a result of Toop's own creative agenda, which will have influenced his choice of artists and works for the show.

Creative contexts

At a preview of *Sonic Boom*, Hayward curator Fiona Bradley explained that, 'if you put two sound pieces together in a space they'll drown each other out [...] but if you put twenty together they'll support each other. Well, that's the theory at least' (Ratnam, 2000: 247). This quote follows one reporter's observations that 'Bradley seems entirely untroubled by the potential chaos that is about to be unleashed in the normally sedate walls of the Hayward, and remains enthusiastic and optimistic about the whole thing' (Ratnam, 2000: 247). These comments indicate that the gallery subscribed to an unconventional approach and 'theory' of curating sound, and it will be shown that this approach in fact reflected a recurring idea in Toop's oeuvre that profoundly influenced the aesthetic of the exhibition.

Sonic interaction ('ocean of sound')

Perhaps the clearest insight into the curatorial rationale for *Sonic* Boom can be found in the opening of Toop's introduction to the exhibition: "The selection process for *Sonic Boom* began in November 1998. Many people have asked the same two questions since that time: how could a large number of sound installations successfully co-exist within the Hayward's spaces; and what criteria were to govern the selection of artists? In one sense, the answers to those two questions are interrelated' (2000a: 15). This explanation reveals that the potential interaction between works in the show formed important and practical criteria for selection at the outset. Toop goes on to explain: 'I chose artists and musicians who I imagined and hoped would be flexible and compatible. In other words, I decided not to select artists who I thought would suffer badly if their work was infiltrated and swamped by external sounds, or who might insist on imposing oppressive sound levels on everybody else' (2000a: 15). These comments indicate that both the attitude of the artists and the relative sound of their works were additional and crucial factors to the selection process.

While a certain amount of understanding might be expected from artists in any group show, it becomes clear that what seem to be pragmatic reasons governing Toop's selection are in fact related to his particular aesthetic aims for the exhibition: "The stylistic mix of the exhibition is important, and one of the crucial elements of that mix is the way in which differing styles and approaches interact in physical space' (2000a: 15). In contrast to most curators of contemporary art, Toop is referring here to the sonic, rather than visual, style of the exhibition. His introduction

113

goes on to highlight the many contexts in which we normally hear music, such as festivals, restaurants, shops or cars, where that music is normally 'subject to interference, either from other music or from ambient noise' (Toop, 2000a: 15). Toop also describes the way in which 'music and media overlap and hybridize unpredictable and unprecedented ways' so that 'musicians and artists from wildly differing disciplines and genres engage in dialogue and improbable collaborations' (2000a: 15). He provides the example of Sony founders Akio Morita and Masaru Ibuka, who developed the Walkman and even the silent refrigerator in 'seeking to avoid the conflicts caused by competing music' in daily and domestic life (Toop, 2000a: 15). 'By contrast', Toop explains, 'all the artists in *Sonic Boom* are alert and responsive to the richly clamorous environment in which we are now immersed' (2000a: 15).

These ideas about contemporary sound culture not only mirror ideas about music, sound and noise commonly associated with sound art but are also closely aligned to the 'ocean of sound' concept, noted in Toop's historical essay accompanying the exhibition, and mapped out more extensively in an earlier book (1995) and accompanying album by the same name (*Ocean of Sound*, Virgin, 1996). These projects, described as a 'poetic survey of contemporary musical life' (Cox and Warner, 2004: 355), consider how the prevalence of audio machines and media has changed the nature of music and listening, and show that contemporary artists and musicians are working with this soundscape rather than ignoring or competing with it. As Toop explains in his book *Ocean of Sound: Aether Talk, Ambient Sound and Imaginary Worlds*: 'As the world has moved towards becoming an information ocean, so music has become immersive. Listeners float in that ocean; musicians have become virtual travellers, creators of sound' concept therefore provides a theoretical explanation of the curatorial approach in *Sonic Boom*, which consciously embraces the clamorous mix of the modern-day sound environment.

Artist-curator

Although most would regard *Sonic Boom* as an exhibition of sound art due to its constituent works, a reconsideration of Toop role as 'artist-curator' can open up the possibility of perceiving the exhibition as a work of sound art in itself. This is intimated in a review of the exhibition by sound artist David Cunningham for *Art Monthly*, who observes that 'the exhibition itself becomes a large installation, greater than the sum of its parts' due to its guiding principle that most works must 'co-exist with and be tolerant of the interference of adjacent works' (2000: 34). Noting Toop's background as composer who actively embraces the 'mixing and collision of a variety of music, noises and environments' from the everyday soundscape, Cunningham concludes that the exhibition presents 'a very strong sense of this complementary plurality which makes it look and feel like other attempts to present soundworks in galleries' (2000: 34).

It would certainly appear that Toop's creative interests and experience translated into his curatorial approach to *Sonic Boom*. Through his interest in the 'stylistic mix' (Toop, 2000a: 15), Toop was essentially interested in the composition of the exhibition, where 'composition' may equally be understood in its musical sense. His concern with the way in which sounds 'interact in physical space' (Toop, 2000a: 15) allows the analogy to be taken a step further, to the composition of sound in space, which will be shown in later chapters to be central to sound art.

The exhibition was in fact featured in an Architects Journal article entitled 'David Toop on making spaces out of sound' (Young, 2000: 8). Here, architectural journalist Eleanor Young notes that the opening lecture of the exhibition conveyed a particular interest in articulation of sound in space and the creation of 'a journey through interlinking soundscapes' (2000: 8). She also suggests that the treatment of certain works in the exhibition demonstrated how sound, though abstract, is able to create spaces and also heighten our sense of physical space (Young, 2000: 8). The strategic inclusion and placement of several works by Max Eastley provides a good example of this. As Toop would later explain, 'I wanted Max to have a lot of pieces in the show because his work is so quiet and undemonstrative. You'd turn a corner and find another piece by Max and my hope was that eventually the point would emerge through accumulation' (Toop, in Loydell, 2000: n.p.). This suggests that Toop deliberately scattered a number of Eastley's mechanised sculptures throughout the exhibition in the hope that their presence in the soundscape would gradually become apparent to the visitor, and that their juxtaposition with louder works would eventually engage the listener. Cunningham also observes that Eastley's series 'creates small islands of concentration and near-silence' in the exhibition, noting that 'much of Eastley's work over the past thirty years has involved natural systems and here he has found an ecological niche in Toop's sonic environment where the work survives through distinctiveness' (2000: 35). Eastley's work is also a favourite of Young's, who asserts that this 'almost imperceptible sound adds a sense of concentration' (Young, 2000: 8). This example highlights a careful consideration of the overall sound composition as well as the overall listening experience in Sonic Boom.

Another indication of Toop's creative position is provided by one of own works within the exhibition, 'Decompression Tunnel', which consisted of samples from over forty additional musicians and artists and was situated at the entrance of the gallery with the aim of preparing the visitor for the sonic environment ahead (Young, 2000: 8; Figure 4.26). Young compares the work to spaces found in airports and train stations, which in architectural circles might be described as a *threshold* (2000: 8). She also remarks that these are important to Toop, who considers the atmosphere of a space as 'often based on the entry experience, the point at which you are enfolded by your surroundings' (Young, 2000: 8). The inclusion of this introductory sound work clearly demonstrates the analogy of the 'exhibition as journey' and illustrates a curatorial concern



DAVID TOOP

Decompression Tunnel, 2000

An introductory sound work.

Participating musicians include: AMM, Bernd Friedmann, Bill Laswell, Bill Nelson, Carl-Michael von Hausswolff, Carsten Nicolai, Christophe Charles, Coil, David Sylvian, David Toop, Derek Bailey, Digidub, DJ Disk, DJ Food, Gavin Bryars, Haruomi Hosono, HOAHIO, Jah Wobble, John Wall, John Zorn, Jon Hassell, Kaffe Matthews, Kevin Drumm/Martin Tétreault, Kid Koala, Main, Marc Behrens, Michael Nyman/Robert Worby, Michael Prime, Mike Cooper, Otomo Yoshihide, Peter Cusack, Rob Swift, Robert Fripp, Ryuichi Sakamoto, Sachiko M, Sheila Chandra, Shunichiro Okada, Sonic Youth, Terre Thaemlitz, Tom Recchion, Yoshihiro Hanno/Cirque, Yoshihiro Kawasaki, Yoshio Machida

Installation under construction, with artist (above). Photo: © Nicola Levinsky. Courtesy of Hayward Gallery, London. Used with permission; Catalogue entry for artwork (below). Image: © Hayward Gallery, Southbank Centre, London (2000b: 126). Used with permission.

Figure 4.26 – David Toop, 'Decompression Tunnel', Hayward Gallery, London, 2000 for the sensory experience of the show as a whole. In his concern with sound, space and perception, Toop's approach to the exhibition reflects key characteristics of sound art.

Exhibition as work

Criticisms of the choice of work in *Sonic Boom* can serve to illustrate some of the prevailing ideas of sound art at the time. Composer Jean Martin, for example, described the work of Christina Kubisch as the only 'true sound space' in the exhibition, an aspect of sound art he considers to be 'almost completely neglected by David Toop' (Martin, 2000: n.p.). Martin also quotes Kubisch directly:

In this exhibition, there are a lot of sound sculptures, many objects and only a few sound spaces. I was lucky to be out here on the terrace of the Hayward Gallery. I prefer to work within the spaces of architecture and sound. Your perception changes when you walk around here and hear something unusual. You look at things in a different way, because you hear something unexpected (Kubisch, in Martin, 2000: n.p.)

Kubisch's work, 'Oasis 2000' (see Figure 4.16 above), certainly typifies ideas dominating the definition of sound art in its use of particular sounds in a particular space to alter audience perception (see also Chapter 6). In this example, the sounds of the jungle amidst a 'concrete jungle' modified the visitors' perceptions of what could be seen and what could be heard. The above comments appear to place value in sound spaces over sculptures and objects, to the detriment of *Sonic Boom*'s representation of sound art through its works. Some years later, art historian Simon Shaw-Miller also categorised *Sonic Boom* as an exhibition of sound sculpture rather than sound art (2006: 3), which could imply that the exhibition did not present works typically considered as sound art.

It is likely that these judgements at the time of the exhibition derive from the longer-standing discourse of *Klangkunst*, in which Kubisch prominently featured. Martin was also a Berlin-based composer who had moved to London to research the British music scene for German radio (Martin, 2008: n.p.). Although he concludes that *Sonic Boom* was 'an achievement in itself', in that it was 'the first major exhibition about sound art in Great Britain' (Martin, 2000: n.p.). Martin's review demonstrates how the German discourse may have indirectly influenced the English-speaking definitional discourse of sound art.

The curatorial approach to the exhibition as a whole, evident through the inclusion of a 'Decompression Tunnel' and treatment of Eastley's works, is nevertheless more typical of these prevailing aesthetic ideas. It would appear that Toop aimed for *Sonic Boom* to become a 'sound space' in itself, using the sound produced by the works within the architectural spaces of the gallery to provide a sensory experience for the visitor. This is also suggested in his explanation

that 'Sonic Boom offers a landscape of the imagination, transforming the perception of sound from peripheral sense or discrete spectated event to a total environment for all the senses' (Toop, 2000b: 121). These aims might be equated to John Cage's concept of *Musicinus*, in which a number of artists are invited to perform something of their choosing in the same place and at the same time; while the event is made up of distinct performances, it was Cage's intention that the visitor experiences it as a whole, as indicated in the posters advertising his event at Chicago's Stock Pavilion in 1967: 'You won't hear a thing: you'll hear everything' (Forsyth, 1985: 325). The curatorial premise of *Sonic Boom* is arguably an extension of Cage's aim to awaken people to the enjoyment of their environment through art and music. The response of one reporter after visiting the exhibition echoes these thoughts: 'The show prompts us to think harder about the sounds we turn up, switch off or drown out. [...] these pieces highlight the extraordinary sounds that surround us from day to day. After experiencing the show, just walking down a busy street will seem like a complicated task' (Sturges, 2000: n.p.). Further responses to the exhibition will be considered shortly.

Artist Sarah Pierce further highlights the blurring boundaries between creating and curating contemporary art by presenting a 14'48" bootleg recording of her journey through the *Sonic Boom* exhibition in a work entitled 'Sonic Pass' (2008; Figure 4.27a). By illicitly capturing the complex sound environment of the exhibition using field recording techniques, Pierce reiterates many of the issues and ideas of sound art communicated through works in the exhibition. Her presentation of an 'exhibition within an exhibition' in *Curator Curator #5* (HISK, Ghent, 2009) was highlighted through the inclusion of a wall panel containing liner notes for the work to mimic the introductory panel at the entrance of the show (ERforS, 2009: n.p.; Figure 4.27b). The very creation of 'Sonic Pass' indicates that *Sonic Boom* was a rich sound space of its own and is also a useful record of the exhibition as a cacophonous whole. Toop was clearly as much creator as curator in his aim to transform the exhibition into an 'ocean of sound' work of sound art in itself, and this study will show that this curatorial approach provoked much criticism and controversy in light of the incipient discourse of sound art at the time.

Reception problems: The rules of sound art

Sonic Boom received substantial media attention due to the profile of the gallery, curator and featured artists in combination with an impressive marketing campaign by the venue. The press view attracted principal broadcasters such as the BBC and CNN, and led to major international coverage of the exhibition on television and radio. In terms of national press, the exhibition was previewed by the *Evening Standard* newspaper, and throughout the exhibition reviews were regularly published in national broadsheets such as the *Daily Telegraph*, *Financial Times*, *Guardian*,



a) Liner notes to the limited edition CD, 2008. Images: © Sarah Pierce (2008: n.p.). Used with permission.



 b) Installation view from Curator Curator #5, Ghent's Higher Institute for Fine Arts, 2009. Photo: © Enough Room for Space (ERforS, 2009: n.p.). Used with permission.

Figure 4.27 – Sarah Pierce, 'Sonic Pass', 2008-9

Independent, Independent on Sunday, The Times, Observer, and *Sunday Times* (Wolfson, 2000; Howarth, 2000; Packer, 2000; Romney, 2000; Sturges, 2000; Noon, 2000; Judah, 2000; Flanders, 2000; Maddocks, 2000; Januszczak, 2000). The second part of this chapter will show that the aesthetic aims of the exhibition caused production challenges and provoked mixed responses from critics, which might be reassessed in view of subsequent discourse and activity.

Early responses

British magazine *The Wire*, which specialises in the contemporary avant-garde music scene, presented a special issue in association with the Sonic Boom show, announcing: 'In celebration of the year 2000s flourishing new medium, we provide a background for the event' (Young, 2000c: 19; Figure 4.28). A dedicated fifteen-page section contained articles profiling the work of different artists participating in the exhibition, including Brian Eno, Heri Dono and Christian Marclay. Toop also writes about his experience in Japan while contributing to another exhibition of sound art that year. In the editorial, Rob Young remarks that 'everyone's curating something at the moment', and commends Toop for his achievement with Sonic Boom (2000a: 5). He also points to the practical issues associated with producing an exhibition of sound: 'One unforeseen problem in building Sonic Boom, for example, was the difficulty with the crosstalk of noise between exhibits - the bleeding sounds from individual installations had be factored into their distribution around the space' (Young, 2000a: 5). Even Young, a writer sympathetic to experimental music and sound art, appears to misconstrue the curatorial aims of the exhibition in his implication that the interaction of sound was an afterthought and a hindrance. He also notes that Toop's 'already maxed-out schedule has been put under even more strain putting the whole thing together', adding 'we hope David will have time to write a little more for us when it's all over' (Young, 2000a: 5). This at least suggests that the editor had not had an opportunity by this point to discuss the exhibition's concept and aims with its curator. These comments nevertheless serve as a good indication of how the sonic aims of the exhibition might cause difficulties not only in its production but also in its critical reception.

Production issues

Director of the Hayward, Susan Brades, explained that *Sonic Boom* presented the gallery with 'spatial, sonic and electronic challenges' (2000: 12), and it is noteworthy that the gallery enlisted a sound designer to assist with the exhibition design and installation process: 'In *Sonic Boom*, sound is of primary importance, and we are grateful to sound designer Dave Hunt, who has collaborated closely with all the artists and architects to ensure that the sounds combine successfully in the spaces of the gallery' (Brades, 2000: 12). This demonstrates not only how

120



Figure 4.28 - The Wire magazine featuring Sonic Boom, May 2000

seriously the sonic aesthetics of the exhibition were considered during the development of the exhibition, but also the practical challenges of dealing with sound in an exhibition context. There were many others involved in turning the exhibition concept into a reality, from the installation architects to the companies providing electrical and lighting solutions, audio-visual expertise, or graphic design (Brades, 2000: 12). Many years later, in an article paying tribute to the gallery's fortieth anniversary, Ian Ritchie specifically recalls his experience on the architectural installation for the exhibition, which he describes as an 'adventure' with the organisers and artists (2008: n.p.). Certain works 'had a resonance with the Hayward's spaces and texture', he explains, 'while some works failed to engage with it and were very difficult to design-manage as exhibition pieces' (Ritchie, 2008: n.p.). The artists were also heavily involved in the development process:

Much of the art in Sonic Boom has been made especially for the exhibition. In response to David Toop's suggestion that the work should be made with the spaces of the Hayward Gallery and the demands of a group exhibition in mind, artists have developed entirely new projects, adapted existing ideas for spatial presentation, or adjusted older works to suit a new context. (Brades, 2000: 12)

This indicates that individual artistic contributions to the show by artists were specifically tailored to meet the needs of the wider exhibition concept. Alongside the opportunity to showcase their work, the artists had to subscribe to the creative aims of the exhibition and adapt their work accordingly. As Toop explains, 'rather than searching for ways to cancel out the murmurings, hummings, pulses, whistles, alarms, signals, irritations, pleasures and shocks of the contemporary soundscape, they [the artists in *Sonic Boom*] focus on their essence, impact and affect, so shaping new meanings for a bewildering range of aural events' (2000a: 15). Toop's requirement of a flexible attitude and necessary commitment to sound discussed earlier, which is accompanied by an aside about sound as 'a medium with *very particular and sometimes difficult* characteristics' (2000a: 16), certainly makes more sense with his aesthetic aims in mind.

Cultural historian Steven Connor asserts that the creation of *Sonic Boom* displayed the 'positively suburban problem of sound pollution' (2005: n.p.): "Though many of the artists represented in the show might well have paid lip service to the idea of the importance and pleasure of the diffusiveness of sound, the potential for undesirable interference was high. [...] During the planning, the artists involved became a new species of suburbanite, protesting against their noisy neighbours in the gallery space' (2005: n.p.). This example was given in a talk for the Tate Modern in the series *Challenging Ocularcentricity* in order to illustrate the ironies involved when sound enters the gallery with all of its 'exhilarating and delinquent leakiness' (Connor, 2005: n.p.). As well as exposing some of the difficulties faced by the organisers of the exhibition, the comment highlights the way in which sound art might challenge some of the traditional ideals of art and its display. As Connor explains, 'sound work makes us aware of the continuing emphasis upon division and partition [...] even in the most radically revisable or polymorphous gallery space, because sound spreads and leaks, like odour' (2003: n.p.). *Sonic Boom* therefore draws attention to the poetics and politics of display, in which the very act of grouping works – whether visual or sonic – challenges romantic ideals of artistic originality and can create new associations and meanings.

Connor's account suggests that some of the artists' protests were in fact taken on board: 'The solution to which David Toop and some of his artists was led was the traditional one: they put up extra walls, and built rooms of sound, to insulate and contain the different sound events' (2003: n.p.). Discussing his experience of the exhibition several months later, Toop notes that 'a lot of artists wanted to build rooms for themselves and I had a premonition of it just becoming an exhibition of Portakabins. I understand that everybody want[s] to isolate their work but certain artist[s] really benefited from being brought into the open' (Toop, in Loydell, 2000: n.p.). It is therefore possible that the various partitions found within the gallery space (as seen in Figure 4.1 and Figure 4.2) intended to contain the visual and conceptual, rather than the sonic, elements of the works; they may otherwise indicate that both the artists and the curator had to compromise on their aesthetic aims to some extent. The latter is suggested by Cunningham: 'That this ambition [of co-existing works] has not been completely realised in Sonic Boom is inevitable because we do not live in an ideal world, because artists and artworks are all too often thought to thrive on a strong sense of individuality and because the installation of an exhibition like this is a major logistical problem' (2000: 34). This account points to the poetics and politics and also the pragmatic aspects of working with artists and curating sound.

An alternative solution for sound in a gallery context is to make use of a range of available spaces. One critic notes that there were many potential options at the Hayward Gallery as part of the South Bank Centre complex, such as lifts, cafés', toilets, foyers and walkways (Wolfson, 2000: n.p.). This device has been used by galleries to bring sound works into their permanent collection. The IKON Gallery in Birmingham, for example, commissioned artist and musician Martin Creed to compose a sound work for its lift, 'Elevator ooh/aah up/down' (2005), in which a four part choir accompanies its movement with rising and descending chromatic scales. In *Sonic Boom*, the two approaches to the gallery became host to 'Stairway', a site-specific sound work by a group of artists collectively known as Greyworld, in which exhibition visitors walking on the steps down from Waterloo Bridge or the ramp up from the Festival Hall activated a sound environment through sensors (Hayward, 2000b: 46; Figure 4.29). The backdrop of the London skyline was also important to Kubisch's 'Oasis 2000', located on the outside sculpture court of the gallery, to provide visual contrast with the sounds of the jungle (see Figure 4.16 above). The concentration of works in the exhibition within the indoor galleries, despite the range of available spaces at the Hayward, does nevertheless point to the aesthetic aims of the curator. That he



Installation views. Photos: © Nicola Levinsky. Courtesy of Hayward Gallery, London. Used with permission.

Figure 4.29 - Greyworld, 'Stairway', Hayward Gallery, London, 2000

explicitly thanks the artists 'for allowing their work to be thrown into the sound maelstrom of *Sonic Boom*' (Toop, 2000a: 16) perhaps suggests that these aims challenged the exhibiting norms.

Reception issues

Given the reputation of *The Wire* in the field of new music, it is unsurprising that its tribute to *Sonic Boom* may have influenced the general reception of the exhibition. In a later issue, the magazine publishes an amusing letter from a visitor of the show, who writes:

Having gone particularly to experience the Brian Eno installation called The Quiet Club, I was very disappointed to have it utterly ruined by the noise coming through the curtain from the adjacent exhibit. Then, on the way home on the train, I read in your editorial about "the bleeding sounds from individual installations". "The bleedin' noise from next door" just about sums it up. (Marshall, 2000: 8)

This kind of response dominates many reviews of the exhibition. In an article for the Sunday *Times*, for example, the exhibition is described as 'the Hayward Gallery's large and generally painful tribute to Sound Art' (Januszczak, 2000: 12). Here, art critic Waldemar Januszczak suggests that the artists are 'all clamouring for the attention of your ears' and equates the visiting experience to 'being in the middle of a morose new-age party where the DJ is a Brian Eno fan' (2000: 12). In the previous issue of The Wire, another journalist observes that 'one thing you can say for sure about sound art is that it leaks all over the damn place, like trying to exhibit coloured gas' (Bell, 2000: 72). The use of negative terms such as 'leak', 'bleed' and 'spill' can in fact be found across reviews of the exhibition, to suggest the accidental or unwanted behaviour of sound. Previous chapters have shown that these characteristics are often embraced and interrogated by contemporary sound artists and theorists who are interested in exploring the cultural and perceptual distinctions between sound and noise, and the curatorial rationale observed for Sonic Boom would also indicate that Toop is among these. Although such criticism could be seen to result from a general lack of understanding about sound art, or a misunderstanding of the exhibition concept, it will be shown that the approach of Sonic Boom has also been questioned by those active within related fields.

In a plenary lecture for *Ars Acoustica*, an international association interested in the public broadcast of radio art, theorist Kersten Glandien remarks that 'what happened at the South Bank left many sound artists and visitors quite frustrated' (2001: n.p.). This reproach of the exhibition is in itself revealing, in that it indicates an existing discourse of sound art at the time of the *Sonic Boom* exhibition. Glandien goes on to explain that, 'by being unaware of the developments and intrinsic rules of sound art on a curatorial level, a rather narrow musically based and complacent approach was taken, which largely ignored the international achievements in the field (2001: n.p.). These remarks again suggest that Toop's representation of sound art in *Sonic Boom* did not correlate with prevailing ideas of sound art at the time.

Glandien's comments raise a number of questions. Why was there such frustration towards the exhibition? What are the intrinsic curatorial rules of sound art? And what are the international achievements in the field to which she alludes? It is likely that these issues are interconnected, and that their investigation will reveal more about the situation of sound art in the art world at that time. It is probably not incidental that Glandien had favourably reviewed Berlin's *Sonambiente: Festival of Hearing and Seeing* (1996) some years earlier. Hailed as the 'internationally biggest presentation of Sound Art' (Glandien, 1996: n.p.), this festival provides an obvious point of comparison to *Sonic Boom*, which was marketed four years later as 'the largest exhibition of sound art ever staged in Britain' (Brades, 2000: 13). In this review, Glandien describes how *Sonambiente* presented core sound installations and objects located in 'six mostly derelict or currently unused buildings, as well as some distinct outside locations' (1996: n.p.). Such a setting meant that works were distributed throughout a substantial area and presented independently of each other (Figure 4.30). Since Glandien seems to approve of this particular curatorial approach, it is possible to speculate that the 'complacent approach' to which she refers in *Sonic Boom* relates to the proximity of the works and the way in which sound was allowed to interact between them.

Sonic Boom is also compared to *Sonambiente* by the late musician and journalist Richard Wolfson in the *Daily Telegraph* (2000: n.p.), who similarly concludes: 'this chaos of competing noises is not what sound art is supposed to be about. Kubisch has talked about wanting to "sensitise" people to sound, and for this a separate, defined space is needed' (Wolfson, 2000: n.p.). Wolfson, therefore, seems to support the view that the exhibition broke the curatorial 'rules' of sound art through its combined treatment of works. His comparison extends to the number of 'internationally respected' sound artists included in the exhibition, leading to his advice that 'if you want a real introduction to international sound art, you are going to have to wait' (Wolfson, 2000: n.p.).

The current investigation has shown that the organisers of *Sonic Boom* were far from unaware of the issues of exhibiting sound, nor complacent in their approach; not only were artists selected and works commissioned specifically for sonic compatibility, but a sound designer was also part of the installation process. The visitors and critics, however, appear to have been unaware of the curatorial aims of the exhibition, in which the interaction of sounds was crucial to the aesthetic of the show. Some months into the exhibition, even Toop complained about the fact that 'some critics wrote about the overspill as if it was an issue I wasn't aware of or hadn't thought through' (Toop, in Loydell, 2000: n.p.).

Whether justified or not, the presence of these criticisms indicates a prevailing discourse of sound art at this point in history, as well as the opinion that this exhibition did not adequately



Hans Peter Kuhn's 'Ballet of Tones' in a derelict ballroom on Sophienstraβe. Photo: © Xebec Corporation (Kawasaki, 1996: n.p.). Used with permission.



Matt Heckert's 'Resonator' at the Parochialkirche (Parochial Church). Photo: © Matt Heckert (1996: n.p.). Used with permission.



Ulrich Eller's 'In the Circle of Drums' in the banqueting hall of the former Staatsrat (State Council). Photo: © Xebec Corporation (Kawasaki, 1996: n.p.). Used with permission.

Figure 4.30 - Sonambiente festival, Berlin, 1996

represent it. Glandien's criticisms of Sonic Boom are in fact given in the context of a paper complaining about the severe lack of discourse in the field of sound (and radio) art. Here she draws attention to the underground nature of this 'scene' in England at that time, which is described as an 'activity of outsiders' (Glandien, 2001: n.p.). Because of her qualms about the way in which Sonic Boom was curated, Glandien regretfully notes that 'a wide-spread celebrity popattitude in the British art domain allowed the self-created hype around that exhibition to prevail and penetrate public consciousness' (2001: n.p.). This disapproval of the high-profile nature of the exhibition at first appears to be odds with her plea for an improved discourse that will enable people to 'tell good from bad'. Glandien nevertheless insinuates that the prestigious nature of the exhibition, coupled with the lack of discourse at that time, resulted in misguided assumptions around its quality and relevance (2001: n.p.). She suggests that this has led to harsh criticism of the exhibition in academic circles as well as frustration (Glandien, 2001: n.p.). In essence, Glandien seems to argue that Sonic Boom was a bad representation of sound art, although, due to the lack of discourse, the audience is unlikely to have been able to tell. There is even an implication that *Sonic Boom* was both a symptom *and* cause of the poor discursive situation of sound art. In Glandien's opinion, 'the consequence of a lack of discourse is that great opportunities such as the sound art exhibition Sonic Boom at the Hayward Gallery last year are missed' (2001: n.p.).

Glandien's comments raise further questions about what *Sonic Boom* might otherwise have been. The criticism at the time at least seems to suggest expectations of a more representative selection of work and artists dealing with issues of sound in space and presented in isolation. These expectations point to traditional approaches of curating, whereby the museum provides a 'universal survey' in which to educate the public (Duncan and Wallach, 1980: 451-452). In any exhibition, curatorial decisions will inevitably have to be made about whom and what is included or excluded, and these choices will be subject to interpretation and potential dispute. Young speculates that, 'no doubt in the aftermath [Toop] will be caught in a crossfire of all the bruised egos who feel they've been left out of a necessarily reductive process' (2000a: 5).

In response to the widespread criticism, Toop is happy to admit his own agendas, as seen in the epigraph to this chapter, having personally collaborated with many of the artists chosen for the exhibition in the past (Loydell, 2000: n.p). It is nevertheless clear that his creative agenda greatly affected the choice of artists and works for the exhibition, and ultimately the portrayal of sound art, even if this agenda – understood through the earlier analogy of the 'exhibition *as* sound art work' rather than an 'exhibition *of* sound art work' – displayed the characteristics most commonly attributed to sound art. In the same interview, Toop acknowledges the idiosyncratic nature of his curatorial approach, explaining that 'the issue of sound spill is very subjective. Ultimately, it represented my idea of a sound exhibition, in which sound spill was a strong

element within the perception of the show as a whole' (Toop, in Loydell, 2000: n.p). His avantgarde approach to the exhibition clearly posed challenges for its audience, many of whom mistakenly perceived the sonic interaction as an oversight, or else considered it a mishandling of sound art as a topic. This response suggests that the artworld might not have been quite ready for such an idiosyncratic approach at this particular point in history, given the immaturity of the discourse of sound art; it may have preferred to see more 'typical' artists and works presented in a more 'typical' manner instead.

Whether well-received or widely criticised, the very occurrence of a high-profile sound art exhibition enabled the discourse to develop, and perhaps even provided the possibility for Glandien's paper on the 'correct' and 'appropriate' ways in which to present sound art to appear in the first place. As Young asserts in relation to *Sonic Boom*, 'the word curator implies more than a choosing and rejecting process. There's also a 'tending' and 'restorative' aspect to the word, and the best retrospectives are precisely those which nurse an ailing or forgotten zone of artistic activity back to health' (2000a: 5). Even Toop himself is aware of the potential impact of the exhibition, remarking that 'more than 36,000 people visited *Sonic Boom* and aside from feeling proud of that, I'm interested to see what effect it has in the future' (Toop, in Loydell, 2000: n.p.).

Later responses

Later exhibitions can serve as a good indication of how the discourse of sound art has progressed. *Sonic Process: A New Geography of Sounds* was another high-profile exhibition of sound held at the Pompidou Centre in Paris in 2002 (following a preview at MACBA, the Barcelona Museum of Contemporary Art, during the *Sonar* festival), and *Ensemble* a smaller exhibition of sound at the University of Pennsylvania's Institute of Contemporary Art in 2007. While it is beyond the scope of this chapter to discuss either of these exhibitions in great detail, their very different curatorial approaches to sound can nevertheless provide a useful perspective on the debates surrounding *Sonic Boom* and the developing definitional discourse of sound art.

Sonic Process

Sonic Process, conceived within the framework of a longstanding institutional policy of 'opening up to new media' (Pompidou, 2002: n.p), was an exhibition on the subject of electronic music comprising eight audio-visual installations by musicians and visual artists, a 'databank' space with music, websites, documentaries, books, and journals on the subject of electronic music, and a programme of performances and concerts (Figure 4.31). Its curator, Christine Van Assche, in an introductory essay for the catalogue, notes that 'the exhibition of sound works runs up against museology. For the museum still remains a site principally conceived for the hanging of two- or





Selected views: Installation by Coldcut/Headspace, 'Gridio', 2002 (above); Exhibition "databank" by Martí Guixé, 'Square/MPTree', 2002 (below). Photos: Miquel Bargalló. © MACBA. Courtesy of MACBA Study Centre and Historical Fonds. Used with permission.

Figure 4.31 - Sonic Process, MACBA, Barcelona, 2002

three-dimensional visual works' (2002b: 11). Her particular solution to this problem was the sound studio, which she describes as 'the best model ever conceived for listening to sound' (Van Assche, 2002b: 11). As an acoustic environment specifically constructed for the recording of sound, the sound-proofing methods of a sound studio completely contain any sounds within its environment and protect from any sounds occurring outside of it. Van Assche therefore worked with acoustics specialists and architects to recreate the sound studio within the gallery space for each of the eight installations (Pompidou, 2002: n.p.).

Sonic Process is an example of how sound can be a curatorial priority in an exhibition and yet treated in a very different manner to *Sonic Boom*. Rather than aspiring to a sonic mix of the works in the gallery space, *Sonic Process* recreated the environment of the sound studio to ensure a discrete sonic experience of each work – a curatorial strategy that the likes of Glandien and Wolfson would probably support.

The concept of the sound studio appears to impose a 'white cube' ideology of the gallery space onto the curation of sound by attempting to minimise potential interference, in this case, to the aural field. Van Assche nevertheless observes that treating sound in a manner traditional to the music industry demanded the abandonment of certain visual art traditions in the exhibition: 'In order to foster the concentration and comfort needed for listening [...] the circulation and placement of works with respect to one another was governed by functional questions alone. Under such circumstances, it was not conceivable to imagine a conceptual trajectory the way curators are accustomed to doing' (2002b: 11). This comment indicates that Toop, despite following a curatorial strategy contrary to accepted treatments of sound, was in fact following a more customary approach to curating within the visual art in his juxtaposition of works within the exhibition. Guardian journalist Jonathan Romney reflects on this point in a review of Sonic Boom: 'Visual exhibitions come to think of it are not so different from Sonic Boom: some works will always be "louder" and drown out the opposition because they are brighter, or bigger, or more heavily publicised. But you also realise how some quiet works make their presence felt by simply asking you to sift them out from the hubbub' (2000: 13). Both approaches to curating sound seem to have encouraged visitors to reflect critically on their listening experiences and perhaps also compare these to their viewing experiences. Instead of recreating an archetypal sound environment, however, Toop's approach was more typical of someone from a visual art background in its consideration of the overall composition and juxtaposition of works and provision of a conceptual trajectory. It might therefore be argued that this approach bridges a gap between the traditions of visual art and music.

Van Assche's solution has also proved to be problematic within the subsequent discourse of sound art. As theorist Brandon LaBelle observes: 'Though the sound studio may overcome certain problems around lessening interference and sound bleed between respective sound works,

131

it falls short in fostering the full dimensionality of sound art as a complex, rich and dynamic practice to which interference itself bespeaks' (2003: n.p.). LaBelle makes this point within the context of an article that considers the tension between sound art and the museum, in which he presents the dichotomy of the 'acoustical' and the 'alphabetical'. In his opinion, sound art falls in the first category, and the museum in the latter. Sound art is 'acoustical', according to LaBelle, because it plays with 'the representational devices of meaning' by engaging with space, body and language; the 'alphabetical' museum, however, operates through an oppositional paradigm because it 'directs our attention to meaning rather than problematizing its very formation' (2003: n.p.). An exhibition of sound art might therefore be seen as an attempt to place the acoustical within an alphabetical paradigm. Noise music theorist Paul Hegarty makes a similar observation about how exhibitions of sound inevitably play with the distinctions between music, sound and noise: 'Once sound art makes up a whole show, the noisiness of sound is reduced, becoming expectation on the part of the listener, while, conversely, certain areas are permitted to be more disruptive, loud, unpleasant' (2007: 176). Although Sonic Process provides a useful opportunity to deliberate over the problem of sound in a museum context, its solution therefore neglects these aesthetic concerns. It could, however, be argued that Sonic Boom engages with the 'acoustical' nature of sound art and illustrates the way in which the gallery can move away from the traditions of the art museum and operate outside the 'alphabetical'. In exploring, playing with, and then problematizing the notion of sound in the arts, Sonic Boom seems to engage with both paradigms and also characterise the concerns of sound art. The alphabetical tendencies of the museum and the acoustical nature of sound art might also be used explain some of the uncertainty around whether the exhibition presented an authoritative and representative account of sound art or a subjective and creative account, and why it was simultaneously highly acclaimed and widely critiqued.

It is notable that Van Assche draws direct comparison with *Sonic Boom* while explaining her approach to *Sonic Process. Sonic Boom*, she reasons, comprised 'visual and sound-based "installation sculptures" that the historian could 'fit into a continuity', whereas *Sonic Process* is conceived as a sound installation 'presented in its performative and inevitably changing form' (Van Assche, 2002b: 12). Here an emphasis is placed on the electronic nature of the works in the exhibition and the fact that they are 'subject to permanent enrichment' through the involvement of the artist or visitors during their display (Van Assche, 2002b: 12). While this distinction between the two exhibitions is perhaps questionable given the interactive nature of many of the works in *Sonic Boom* and the performative element of the exhibition as a whole, it nevertheless raises the issue of their differing areas of focus. According to its press release, *Sonic Process* 'attempted to examine the relationship between the visual arts and electronic music-making today' (Pompidou, 2002: n.p.), and this was implemented through the commissioning of works for its 'sound studio'
spaces and teaming up of musicians with visual artists in order to 'transpose into a physical space what is usually expressed through performance' (Van Assche, 2002b: 11). Although there is significant overlap between electronic music and sound art, this particular exploration of the interaction between visual art and music does not align with sound art exactly. Criticism of Van Assche's curatorial approach does not necessarily consider that *Sonic Process* was not intended as an exhibition of sound art *per se*, even if it has subsequently been referred to as such (Džuverović, 2002: 134; LaBelle, 2006a: 296; Licht, 2007: 11).

The evolving ideas of curator and theorist Lina Džuverović can provide another perspective on this matter. In a review for Artforum at the time of the Sonic Process exhibition, for example, Džuverović writes: 'Given the meagre attention accorded to sound art by museums, the fact that a large exhibition of the genre has been travelling to key European venues this year is a significant development' (2002: 134). At the same time, she notes that 'Van Assche's method for bridging these disparate practices consists mostly of pairing musicians and visual artists in the hope that their collaborative project will automatically give birth to common language' (Džuverović, 2002: 134). In Džuverović's opinion, this results in a curatorial approach 'grounded in the world of visual arts' and an exhibition that 'barely dips its toes into the wider cultural issues touched on by much sound-related art' (2002: 134). Five years later, however, and Džuverović identifies different types of sound exhibition as part of 'The Love Affair between the Museum and the Arts of Sound' (2007: n.p.). Sonic Process is now categorised as a 'musician/artist collaboration exhibition' rather than a 'sound art exhibition'. In her opinion, this collaborative model 'demonstrates a lack of confidence in bringing in sound based work on the part of the institution'. In this context, she suggests that Van Assche's strategy resulted in 'a fairly conventional exhibition dominated by video installations' that allowed the creation of 'museum friendly' works rather than an exploration of the new geographies of electronic music, and even speculates that this may have been 'a safety mechanism in case the actual focus of the show proved to be too unpalatable for visitor tastes' (Džuverović, 2007: n.p.). The sound art model is, however, a different kind of model, which 'engages with the arts of sound as a genre' and can 'guarantee a relatively high level of commitment from the institution' (Džuverović, 2007: n.p.). Džuverović warns that this model can, however, potentially marginalise the works seeing as sound art is 'perhaps an artform that exists within its own niche' (2007: n.p.). She therefore speculates that 'for those not actively interested in "sound art" as a genre, there would be little reason to visit such a show' (Džuverović, 2007: n.p.). Džuverović's account indicates that ideas about the categorisation of sound art have developed over time as the number of sound exhibitions has increased and the discourse itself has progressed, and that a specific generic identity has formed around the term 'sound art', which is situated within a wider discourse of sound in the arts.

These ideas not only lend weight to the argument that *Sonic Process* should not be judged as an exhibition of 'sound art' but rather a more general exhibition on the 'art of sound', but also point to the way in which *Sonic Boom* potentially blurs the distinction between the two. Its subtitle, *The Art of Sound*, perhaps best describes the wide spectrum of artistic practice included in the exhibition, while the overall curatorial approach to sound is more aligned to sound art. Van Assche's open exploration of curating sound has nevertheless been invaluable in furthering the discourse about sound within a visual arts context.

Some quirky alternatives to the sound studio have since emerged. Artist Joel Cahen, for example, has been touring swimming pools around the country since 2008 in order to deliver performances of sound art works underwater. His *Wet Sounds* series follows the premise that sound travels faster in water and can therefore directly enter the inner ear (Cahen, 2011: n.p.). Other exhibitions, such as *Ensemble*, appear to respond almost directly to the Van Assche-LaBelle debate.

Ensemble

Ensemble was guest curated by a participant of *Sonic Boom*, the artist and musician Christian Marclay. The rationale behind the exhibition is clearly stated in its introduction: 'Whether it comes from sonic or video art, in the curatorial field, sound is often relegated to isolated exhibition spaces where it cannot interact, or presumably disturb, other pieces. Marclay proposes to work against that impulse by intentionally intermingling pieces to see what may result when they are put together for an entirely unprecedented curatorial purpose' (ICA, 2007a: n.p.).

The institute's claim of an 'entirely unprecedented' curatorial purpose is clearly debatable given its striking resemblance to *Sonic Boom* more than seven years earlier. The comparison between the exhibitions also extends to the selection criteria for works in the exhibition: 'Likening his approach to that of a composer, Marclay has chosen a variety of sculptures and installations based on their sound quality and compatibility' (ICA, 2007a: n.p.). Although much smaller in scale than its precursor, Marclay's 'ensemble' also consisted of works created by artists from a diverse range of backgrounds and taking a variety of forms, although they were mainly sound objects or sound sculptures (Figure 4.32).

As a result, the choice of works in *Ensemble* appears consistent with the aims of the exhibition to compose sound. The unusual exhibition premise was also clearly communicated by both the title of the exhibition and descriptions provided by the gallery: "The installation will create an ambient sound environment, intermittently producing a wide range of sounds, from the very quiet notes of a music box to the loud ringing of a bronze bell. They have been selected so that they can share the same resonant space and interact like the various instruments of a musical ensemble' (ICA, 2007a: n.p.). Such an account provides aesthetic justification for the selection of









Installation views. Photos: Aaron Igler/Greenhouse Media © Institute of Contemporary Art Philadelphia (ICA, 2007b: n.p.). Used with permission.

Figure 4.32 – *Ensemble*, Institute of Contemporary Art, Pennsylvania University, 2007 works and also treatment of sound within the exhibition. *Ensemble* therefore appears to have learnt from the mistakes of *Sonic Boom* in managing the expectations of visitors and their understanding of the exhibition experience and thereby minimising potential criticism.

In spite of the affinity between the two exhibitions, *Ensemble* did not openly subscribe to the 'sound art' term. To draw on Džuverović's exhibition models, the exhibition might therefore be placed into a 'sound and vision' category relating to the senses rather than a 'sound art exhibition' category specifically relating to the genre (2007: n.p.). From this perspective, the exhibition is also more likely to be evaluated in relation to its aim to 'provide a listening experience' (ICA, 2007a: n.p.) rather than its attempt to represent the field of sound art. That *Sonic Boom* attempted to achieve both of these aims may have led to the some of the criticism and confusion surrounding the exhibition and perhaps even that surrounding sound art itself. The exhibition might have benefitted from concentrating on *either* its aesthetic aims to provide a listening experience *or* providing a representative introductory survey of sound art. It is however also possible that *Sonic Boom had* to accommodate both options at that point in history, and that later exhibitions such as *Ensemble* were able to concentrate on aesthetic concerns alone because the concept of sound art was by that point more widely known and accepted within the visual arts and its galleries.

Outside of speculation, the examples of *Ensemble* and *Sonic Process* serve to indicate the progressive nature of *Sonic Boom* at a time when exhibitions of sound *were* largely unprecedented. Their approaches, and the discussions surrounding them, in fact suggest that the criticism and controversy caused by the curatorial approach in *Sonic Boom* at the time of the exhibition can now be called into question as the discourse of sound art matures. It might even be argued that in breaking the rules for curating sound, *Sonic Boom* was in fact creating new rules for curating sound art, and thereby enabling visual art institutions such as the Hayward 'to make the leap into sound' (Brades, 2000: 12).

Conclusions

This chapter has shown that 'the largest exhibition of sound art ever staged in Britain' was an exhibition of sound art operating within a variety of contexts. An investigation of institutional, historical, contemporary and creative agendas has exposed some of the evaluative criteria underlying the *Sonic Boom* exhibition, including its aims to extend the boundaries of the visual arts to music and popular culture, comment on the historical development of technology, machines and media, and acknowledge both conceptual and physical explorations with sound through a diversity of forms with visual appeal.

These issues and ideas were uniquely interpreted by the exhibition's curator. For example, the 'ocean of sound' concept, which features significantly within his oeuvre, simultaneously alludes to

the importance of the everyday environment for listening, the expansion of musical boundaries, and saturation of sound through media signals. In the following chapter, it will be seen how these concerns are mostly typical to the discourse of sound art from the perspective of the visual arts. This abstract concept nevertheless translated into an aesthetic aim to transform the entire *Sonic Boom* exhibition into a sonic experience through its composite works, so that it became a work of sound art in itself.

This enquiry has also demonstrated that this avant-garde curatorial approach was badly received; not only did the gallery struggle to find a compromise between the vision of the curator and the needs of individual artists, but its audience also either misunderstood the aesthetic aims or simply viewed the curatorial treatment of sound, which encouraged sonic interaction, as incorrect. The discourse surrounding later exhibitions of sound nevertheless indicates that the approach to *Sonic Boom* and the issues it raises are in fact true to the spirit of sound art, in its exploration of the tensions between sound and noise, which also challenge ideologies of display. Although criticism of the exhibition might therefore be blamed on the youth and immaturity of the discourse at the time, the exhibition did convey some mixed messages about sound art by employing multiple layers of curatorial criteria at a time when a less adventurous and more traditional, representative survey may have been more effective. This tension between the didactic and creative purposes of the exhibition also caused controversy, ambiguity and confusion about sound art. These are qualities that remain characteristic of the discourse over a decade later.

While *Sonic Boom* did not signal the beginning of sound art, its impact on the discourse of sound art cannot be underestimated. Even the polemic surrounding the exhibition contributed to the raising of its profile as well as securing the definition of what Toop then described as 'a loosely defined movement now known as Sound Art' (2000b: 116). An analysis of this historic exhibition has broached various issues relevant to the contemporary discourse of sound art from the perspective of the visual arts and curating. This example also shows that something different happens when sound art works are put together to when they are considered individually; exhibition praxis can therefore provide vital insights into the definition and ontology of sound art. In the next chapter, another high-profile exhibition of sound from the same year as *Sonic Boom* will be considered. This exhibition takes a very different approach and also provokes a very different reaction.

Chapter 5

Triple the Volume: Sound Art as a Category of Media

The medium is the message.

(Marshall McLuhan, in Understanding Media, 1964)

In music and visual arts the medium declares itself as medium.

(Clement Greenberg, in 'Beginnings of Modernism', 1983)

In art, the medium is not often the message.

(Max Neuhaus, in liner notes to Volume: Bed of Sound, 2000)

Volume: Bed of Sound was an international millennial exhibition of sound held at one of the oldest and largest contemporary art institutions in the US, New York's MoMA PS1. This high-profile show took a radically different approach to the exhibitions discussed in the previous chapter, and will be explored in the first part of this chapter in relation to its impact upon the definitional debate of sound art. The second and main part of this chapter will shift attention to an exhibition that was developed in response to *Volume. Treble*, which took place at New York's SculptureCenter four years later, will be shown to resituate the issue of sound art's existence from the discourse of music to that of the visual arts. This account will draw on a range of materials, such as text panels, floor-plans, photography, soundtracks, press releases and critical responses, in order to understand the discursive milieu of these exhibitions in history. It will also position the debate within a wider theoretical discourse relating to the historical significance of 'the medium' in the categorisation and definition of the arts in the hope to shed further light on sound art and its situation within the artworld today.

Volume: Exhibiting sound art, or music?

Given the general interest in sound art evident from other international exhibitions in the year 2000, it is perhaps unsurprising that MoMA PS1 chose to hold an exhibition of sound at an institution that 'actively pursues emerging artists, new genres, and adventurous new work by recognized artists' and sees itself as 'a catalyst and an advocate for new ideas, discourses, and trends in contemporary art' (PS1, 2008: n.p.). In the same year as the *Volume* exhibition, the Museum of Modern Art (MoMA) merged with the PS1 Contemporary Art Center, which already had its own radio station *WPS1.org* and a music and performance programme alongside its gallery programme (PS1, 2008: n.p.).

In this particular group show, the sound works of almost sixty artists were presented through either headphones or loudspeakers, to which visitors could listen from a large bed-like structure (Figure 5.1). A full list of works in the exhibition can found in Figure 5.2, and a selection of the works discussed also feature on the accompanying audio CD. The art centre explains that in this presentation of sound in an 'unusual setting', visitors were 'exposed to minimal visual stimuli', and each contributor also had 'the same technical parameters of sound projection and volume' (PS1, 2000b: n.p.). Although this approach demonstrates an interest in sound and listening, and avoids the issue of competing sounds as seen in the previous chapter, an exploration of the curatorial aims, artistic introductions and critical reception of *Volume* will show that this exhibition raises a different set of issues and ideas concerning the relationship between sound art and music.

Curatorial reflections

The *Volume* exhibition was guest curated by composer and musician Elliott Sharp, a prominent figure in New York's avant-garde and experimental music scene since the late 1970s (McGonigal, 2003: n.p.). Sharp provides John Cage, whose openness to noise eventually led to a substitution of the term 'music' for 'organisation of sound', as a theoretical backdrop to the exhibition. However, he also notes the diversity of aims and approaches of the 'organisers of sound' featured:

The experimenters mine and undermine the core elements of our perceptual engine, hacking and rewiring. Creators of soundscapes reshape the materials indigenous to our everyday environments so that we may hear them as if for the first time and find different modes of meaning in them. Composers working with a new syntax and vocabulary of musical materials derived from the workings of sound itself and forged into tools as yet undefined create music that is alien and exciting. Sculptors and installation artists utilize inextricable sonic elements as an integral part of the whole. The cultural commentators provoke and challenge habits and preconceptions. Finally, the entertainers channel their audio intelligence into popular media, stretching ears wide. (Sharp, 2000a: n.p.)

This description points to a wide spectrum of contemporary activity with sound from across a variety of contexts, whether experimental music, visual art or the entertainment industries. It is also suggestive of Sharp's interest in the phenomenology of perception.

These interests clearly translate into the exhibition concept. Sharp explains that the beds furnishing the galleries, for example, were intended to 'encourage the visitor to recline, relax, open themselves to sounds and the possibility of psychoacoustic chemical change at the deepest level' (Sharp, 2000a: n.p.; Figure 5.3). He also suggests that the lack of visual stimulation should facilitate 'total immersion in this acoustic environment' so that 'the sounds will embody



Selected views: Gallery with headphones (above); Gallery with loudspeakers (below). Photos: © Elliott Sharp (2000b: n.p.). Used with permission.

Figure 5.1 - Volume, MoMA PS1, New York, 2000

Artist	Work	Year
Muhal Richard Abrams	The Perpetual Suite	2000
Vito Acconci	[Remix of assorted works]	1976-79
Maryanne Amacher	Living Sound, Patent Pending	2000
Laurie Anderson	Thank You	2000
David Behrman	2000 Triangles; QS; RL	2000
John Cale	Work in Progress	2000
Ed Campion	Ellipsis	2000
Joel Chadabe	After Some Songs	1987-95
Chop Shop	Kaput	2000
Chris and Cosey	EAR ONE; 2t (Head to Head)	2000
Cibo Matto	Jungle, Country, Beauty, Swords & Paintbrush	2000
Beth Coleman	Say My Name	2000
Nicolas Collins	Still Lives	1999
Tony Conrad	The Clandestine Nautical Carnality of Short I	2000
¡Cubanismo!	Mardi Gras Mambo	2000
Alvin Curran	Maritime Rites	1987
Chris Cutler	3 Bare Rooms	1998
Tod Dockstader	Apocalypse; Drone	1961-62
John Duncan	Tap Eternal	2000
Yamataka Eye	Cup Holder	2000
Fischer Spooner	The 15th; Emerge; Tone Poem	2000
Ellen Fullman	Sunday Sessions [sunharmonic series]	2000
Carl M. von Hausswolff	Audionomical Charter	2000
Matt Heckert	Birdhouse	2000
John Hudak	Don't Worry About Anything, I'll Talk to You Tomorrow	2000
I-Sound	Classic Flaw	2000
Phil Kline	Houseatonic at Henry Street	2000
Keenan Lawler	A Suspension in Dreamtime	1998
Arto Lindsay	Desenho Animado; Chelsea Peers	2000
Alivin Lucier	Empty Vessels	1997
Paul De Marinis	Vocal Variety	1997
Kaffe Matthews	Located	2000
Genken Montgomery	Wake Up	1999
Ikue Mori	Ghost Story for the Mutant Drums	2000
Butch Morris	Nowhere Everafter	1982
Walter Murch	Apocalypse Now	1982
Phill Niblock	Five More String Quartets; Early Winter	1993
Carsten Nicolai	Prototypes	1999-2000
Bob Ostertag	Like a Melody no Bitterness	2000
Zeena Parkins	\$ Shot	2000
Pan Sonic	Untitled	2000
Genesis P-Orridge	Howlers for Larry Thrasher	2000
Lou Reed	Metal Machine Music	1975
Vernon Reid	Visionary Geometries; A Strange Blessing	2000
The Residents	Santa Dog Millennium	1999-2000
Frank Rothkamm	77 Sunsetstrip	2000
Ben Rubin	Tangible	2000
Adrianna Sá	Homage; Is4	2999
Ryuichi Sakamoto	Mahakauna	2999
Michael J. Schumacher	Untitled Composition from 1999	1999
Howard Shore	Naked Lunch from 1992	2000
Sonic Youth	Tamra	2000 1991
Sonic Youth Steinski		1991
	The Lurp [from <i>Dispatches</i> by Michael Herr]	
Carl Stone	NYALA	1996
Loudon Wainwright	Bed Senie Bertraits and Blasse	2000
Lauren Weinger David Weinstein	Sonic Portraits and Places	2000
	Untitled [7 live tracks by Impossible Music]	2000

Based on Volume press release (PS1, 2000c: 3-6). Courtesy of MoMA PS1, New York.

Figure 5.2 – List of works featured in Volume, MoMA PS1, 2000



Installation view. Photo: Eileen Costa © MoMA PS1 (PS1, 2000d: n.p.). Used with permission.

Figure 5.3 – Visitors at Volume, MoMA PS1, New York, 2000

themselves across all inputs' (2000a: n.p). The different playback methods offered in the exhibition are explained along similar lines: 'the West gallery has loudspeakers for the "outer ear", the socialized listener, the receptor of the whole person; the North is equipped with headphones for the audio solipsist, the "inner ear" (Sharp, 2000a: n.p.). The curator explains that headphones enable 'an intimate transaction between the sound and the person', which reacts within the body 'from ear to brain, to glands, to spine, to muscles' so that 'the sound becomes the person in the act of reacting to the sound, a closed loop, reflective, reflexive' (2000a: n.p.). Conversely, when sound is played over speakers, the reactions of each listener 'subliminally affect the perceptions of those around them' so that 'the group feeds back on itself, resonating and reinforcing' (Sharp, 2000a: n.p.). These descriptions clearly point towards a curatorial interest in the physical, physiological, psychological and also social nature of the listening experience.

These concerns are also reflected in the choice of title for the exhibition. Sharp explains, for example, that volume is a quantification of space and intensity 'defined by the physical construction of the human ear' (2000a: n.p.). Loudness is created by 'the pressure of molecules rushing away from each other and bouncing against the walls of the outer room and of the inner ear', and saturation is caused by the 'small and rapid changes in air pressure between some ten times per second and some 20,000 times per second' (Sharp, 2000a: n.p.). This scientific approach to sound extends to the format for sound storage and playback used in the exhibition. The works are described as 'a portion of data, with its physical storage medium, that can be handled conveniently as a unit: floppy, harddisk, CD' (Sharp, 2000a: n.p.). Sharp makes some interesting observations in relation to medium of choice in the exhibition:

Volume is an assemblage of audio initiators manifesting their work through the purely digital medium of the compact disk. Within this disk, meaning is reduced to 16 bits of raw data and quantized levels of information: the complex curves of sonic life are encrypted as thousands of on-off blocks every second. The artist encodes allusions, emotions, memories, thoughts, and actions into these disks. (Sharp, 2000a: n.p.)

These descriptions highlight a complex interaction between the cultural, scientific and technical aspects of sound and hint at some of the interesting phenomenological tensions that can result from the technological mediation of art.

Sharp asserts that 'in the simple fact of conversion from digital bits to physical sound lies alchemy' (2000a: n.p.). While acknowledging the subjective element of listening, influenced by cultural factors, the curator clearly stakes his own particular interest in the more objective, physical act of hearing sound through the vibration of molecules. His aim to reduce a wide variety of works to this basic form of presentation in *Volume* might therefore be compared to a Schaefferian aim of 'reduced listening'. This results in an interest in the 'wide spectrum of

physical, aesthetic, and emotional responses' that sound can evoke (2000a: n.p.), but also a disdain of cultural categories. In a later talk, Sharp stresses the porosity of the categories in the works he includes, noting that 'genrefication is the tool of marketing and an evil of our time that we must pay great heed to and combat!' (2000b: n.p.). Sharp's interest in the phenomenological clearly results in a leaning toward the 'natural' and away from the 'cultural', and this also seems to lead to an idealistic view of artistic production, which can also be seen within the general discourse of sound art (see Chapters 3 and 6). This is further evident in his suggestion that 'sound art is the most abstract of arts – pure vibrations unmediated by the retina' (Sharp, 2000: n.p.). Despite this suspicion of categories, Sharp chooses to use the 'sound art' term to describe this phenomenological approach to sound.

This open approach to generic categories nevertheless resulted in the selection of a wide range of works for the exhibition. According to the art centre, the exhibition aimed to place 'essential historic works' alongside 'audio works by contemporary artists addressing the current trend of "sound art" (PS1, 2000a: n.p.). The earliest work included was an album by American musique concrète composer Tod Dockstader, called Apocalypse (1961; Track 5.1), and another track actually features the sound effects composed by American sound designer Walter Murch for the film Apocalypse Now (1982). From another pair of headphones visitors could listen to Metal Machine Music (1975; Track 5.2), the controversial album of guitar feedback by Lou Reed, former frontman of Andy Warhol's rock band The Velvet Underground. This work was derided by the rock industry at the time of its release but is now considered historically important for sound and noise (Morley, 2010: n.p.). The subsequent generation of experimental rock from New York was represented by Sonic Youth's track 'Tamra' (1991; Track 5.3), and another recording of feedback was presented in the work of American composer and installation artist Alvin Lucier, although this time created by visitors walking past microphones placed inside glass flasks in his installation *Empty Vessels* (1997). Other sound tracks from installation or performance artists include a remix of Vito Acconci's sound works from 1976 to 1979 and a reworked recording from Maryanne Amacher's 1980s site-specific project 'Living Sound, Patent Pending' (Track 5.4). At another listening station, the slowly changing pitches and timbres by the New York minimal composer's album Music by Phill Niblock (1993) could be heard.

More than half the works in *Volume* show were heard for the first time. Founders of the English avant-garde art band Throbbing Gristle, Cosey Fanni Tutti and Chris Carter, for example, presented albums from their *Electronic Ambient Remixes* series, and the Finnish experimental music duo Pan Sonic also presented a new 'Untitled' (2000) work. The wide range of musical genres is evident in the inclusion of the album *Mardi Gras Mambo* (2000) by *son* band ¡Cubanismo! (Track 5.5), the work 'Perpetual Suite' (2000) by free jazz musician Muhal Richard Abrams, and the track 'Thank You' (2000) by performance artist and musician Laurie Anderson.

In line with the exhibition concept, American folk singer-songwriter Loudon Wainwright also premiered a track called 'Bed' (2000) from his album *Last Man on Earth*, and London-based artist Kaffe Matthews, later known for her own sonically vibrating beds with subwoofer-embedded mattresses, was commissioned to create the work 'Located' (2000), which was also presented in the foyer of the Hayward during the *Sonic Boom* exhibition. German artist Carsten Nicolai presented his album *Prototypes* (2000) featuring sound collages constructed from amplified electrical sounds (Track 5.6), and the Swedish artist Carl Michael von Hausswolff, also known for his recordings of electricity and frequencies, presented 'Audionomical Charter' (2000). Both of these artists had also featured in another sound art exhibition that year in Tokyo.

While all of these artists demonstrate a creative use of sound, they also represent a wide spectrum of traditions, influences, styles and genres, whether film, performance, installation, new music, minimal music, jazz, rock, electronic music, sonic art or sound art. It is clear that the curator's interests lay in creating a relaxed and focused environment in which listeners could experience this plethora of sounds, whether 'a distant murmur, a flurry of chirping cicadas, a pounding bass drum, a mass of sliding squeals, a hushed sine tone, an echoing scream, a consonance of lightly bowed strings' (Sharp, 2000a: n.p.). He describes how 'brainwaves will be amplified or suppressed; pulse rate or body temperature may increase or decrease; limbs may move involuntarily (dare we say "dance"?); pheromones generated and transmitted' (Sharp, 2000a: n.p.). This phenomenological approach is indifferent to the original aims or format of the works, and is in fact perceived to fall outside of generic distinction, as suggested by Sharp's instructions to 'turn off your filters, the learned reflex, the already-known, and let the sound do its work. You may be surprised and overwhelmed' (2000a: n.p.). Like the exhibition discussed in the previous chapter, it is the curatorial aims and approach rather than the choice of works in the Volume exhibition that best reflect the aesthetics of sound art. It will also be shown that an aversion for such generic distinctions is in fact woven into the fabric of the exhibition itself.

Artistic introductions

The programme at MoMA PS1 at the time of the *Volume* exhibition included a range of complementary exhibitions and events. A series of sound installations, for example, featured work by Ugo Rondinone in which voices emanate from a tunnel of wood and mirrors at the centre's main entrance, an installation of broken records covering PS1's first floor hallway by Christian Marclay, an organic sound work by Jonathan Bepler played on a four-channel speaker system, and a video work featuring a semi-naked Pipilotti Rist repeatedly singing the title to a John Lennon song (PS1, 2000b: n.p.; Figure 5.4). The art centre's annual music series *Warm Up*, featuring live performances and DJs in the outdoor galleries, is said to have provided a contemporary take to 'allow the audience to draw parallels' with the indoor exhibition, thereby



Installation view. Ugo Rondinone, 'So Much Water So Close To Home', 1997. Photo: © Ugo Rondinone (2017: n.p.). Used with permission.



Installation view. Christian Marclay, 2822 Records, MoMA PS1, 2009. Photo: Mark Lentz © MoMA PS1 (2010: n.p.). Used with permission.



Video stills. Pipilotti Rist, 'I'm Not the Girl who Misses Much', 1986. Images: © Pipilotti Rist. Courtesy the artist, Hauser & Wirth and Luhring Augustine. Used with permission.

Figure 5.4 – Example sound installations complementing *Volume* at MoMA PS1, New York, 2000

exposing 'the roots of sound discovery' (PS1, 2000a: n.p.). In addition, the centre featured a major exhibition of *Drawings* by one of the first artists to consider sound as an autonomous medium in the contemporary arts, Max Neuhaus (2005a: n.p.). Neuhaus wrote the introduction to the *Volume* exhibition catalogue and, in doing so, situated the exhibition within a debate about the existence of sound art in relation to new music.

The rhetoric of Neuhaus's text, presented on a wall panel and in the liner notes to the album 'catalogue' accompanying the exhibition, might be equated to a manifesto of sorts (Figure 5.5). He begins: 'From the early 1980s on there have been an increasing number of exhibitions at visual arts institutions that have focused on sound. By 1995 they had become almost an art fad' (Neuhaus, 2000: n.p). Neuhaus could well be referring to exhibitions such as Sonic Boom and Volume in his observation of the tendency of these shows to include either 'absolutely everything under the sun' (in presenting 'anything which has or makes sound and even, in some cases, things which don't') or else simply include diverse collections of new music (2000: n.p.). The latter type of exhibition leads him to question 'why we think we need a new name for these things which we already have very good names for?', and the former to a sense of confusion as to why visual art curators 'somehow have no trouble at all swallowing "sound art" - even if the category were to reveal a previously unremarked commonality - when an equivalent art form such as 'steel art' would be ridiculed (Neuhaus, 2000: n.p.). He adds: 'it's as if perfectly capable curators in the visual arts suddenly lose their equilibrium at the mention of the word sound' (Neuhaus, 2000: n.p.). Referring to the function of classification and naming in culture for the 'refinement of distinctions', Neuhaus argues that sound art is an example of the 'destruction of distinctions for promotion of activities with their least common denominator in this case sound' (2000: n.p.). In his opinion, there is not, as yet, an art using the medium of sound that goes beyond the limits of music to merit a new name such as 'sound art' (Neuhaus, 2000: n.p.). Although Neuhaus concludes on an optimistic note - With our now unbounded means to shape sound, there are, of course, an infinite number of possibilities to cultivate the vast potential of this medium in ways which do go beyond the limits of music and, in fact, to develop new art forms'- he adds, 'when this becomes a reality, though, we will have to invent new words for them. "Sound Art" has been consumed' (2000: n.p.).

Neuhaus's opinions, placed into the spotlight by the *Volume* show, clearly made a lasting impression on the discourse surrounding sound art, casting serious doubts upon its existence. Many of his observations, questions and arguments are explored in this study, whether the trend of sound art exhibitions, the relationship between sound art and new music, the function of classification and suspicion of commercial agendas, the adoption of sound art in the visual arts, the plethora of confusing curatorial responses, or the issue of medium-specificity. Although Neuhaus did not himself subscribe to the sound art label, he did choose to situate his work



Volume bed of sound

ori adriana sa oz alvin lucier os arto lindsay o4 ben rubin
os bob ostertag o6 butch morris o7 carl stone o8 chop shop o9 chris carter
o chris cutler 11 c.m. von hausswolff 12 cosey fanni tutti 13 david behrman
14 beth coleman (a.k.a. dj singe), howard goldkrand 15 ed campion
16 ellen fullman 17 frank rothkamm 18 genesis p-orridge
19 genken montgomery 20 howard shore, ornette colemann, LPO 21 i-sound
22 ikue mori 23 impossible music 24 joel chadabe 25 john duncan 26 john hudak
27 kaffe matthews 28 keenan lawler 29 lauren weinger 30 maryanne amacher
31 matt heckert 32 michael j. schumacher 33 muhal richard abrams
34 nicolas collins 35 paul de marinis 36 sonic youth
37 steinski 38 telectu 39 the residents 40 tod dockstader
41 vernon reid 42 vito acconci 43 zeena parkins

Sound Art?

From the early 1980s on there have been an increasing number of exhibitions at visual arts institutions that have focused on sound. By 1995 they had become almost an art fad. These exhibitions often include a subset (sometimes even all) of the following: music, kinetic sculpture, instruments activated by the wind or played by the public, conceptual art, sound effects, recorded readings of prose or poetry, visual artworks which also make sound, paintings of musical instruments, musical automatons, film, video, technological demonstrations, acoustic reenactments, interactive computer programs which produce sound, etc. In short, 'Sound Art' seems to be a category which can include anything which has or makes sound and even, in some cases, things which don't.

Sometimes these 'Sound Art' exhibitions do not make the mistake of including absolutely everything under the sun, but then most often what is selected is simply music or a diverse collection of musics with a new name. This is cowardly.

When faced with musical conservatism at the beginning of the last century, the composer Edgard Varese responded by proposing to broaden the definition of music to include all organized sound. John Cage went further and included silence. Now even in the aftermath of the timid 'forever Mozart decades' in music, our response surely cannot be to put our heads in the sand and call what is essentially new music something else – 'Sound Art'.

I think we need to question whether or not 'Sound Art' constitutes a new art form. The first question, perhaps, is why we think we need a new name for these things which we already have very good names for. Is it because their collection reveals a previously unremarked commonality? Let's examine the term. It is made up of two words. The first is sound. If we look at the examples above, although most make or have sound of some sort, it is often not the most important part of what they are – almost every activity in the world has an aural component. The second word is art. The implication here is that they are not arts in the sense of crafts, but fine art. Clearly regardless of the individual worth of these various things, a number of them simply have little to do with art.

It's as if perfectly capable curators in the visual arts suddenly lose their equilibrium at the mention of the word sound. These same people who would all ridicule a new art form called, say, 'Steel Art' which was composed of steel sculpture combined with steel guitar music along with anything else with steel in it, somehow have no trouble at all swallowing 'Sound Art'.

In art, the medium is not often the message.

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.

With our now unbounded means to shape sound, there are, of course, an infinite number of possibilities to cultivate the vast potential of this medium in ways which do go beyond the limits of music and, in fact, to develop new art forms. When this becomes a reality, though, we will have to invent new words for them. 'Sound Art' has been consumed.

Max Neuhaus

Album cover (above). Image: Elliott Sharp © MoMA PS1. Used with permission; Liner notes (reconstruction, below) © Estate of Max Neuhaus (2000: n.p.). Used with permission.

Figure 5.5 – Volume exhibition catalogue, MoMA PS1, 2000

within the visual arts rather than music due to its emphasis on space (1994: 42), a concept that is fundamental to the contemporary definition of sound art. The artist's dislike of the sound art term nevertheless ultimately appears to stem from his belief that it does not represent a radically new art form in practice. The inclusion of this introduction to the show also arguably added to the confusion around whether or not *Volume* was an exhibition of sound art.

Critical reception

Author of Sound Art, Alan Licht, observes that although some works in the Volume exhibition were by 'bona fide sound artists' (2007: 12), many were composed by musicians from the worlds of pop, rock and jazz (2009: 3). He therefore questions the choice of artists such as rock star Lou Reed, who in his opinion 'deserves some recognition as an experimental musician but should not be considered a sound artist' (Licht, 2007: 12). Licht also describes the exhibition as 'unfortunately presented' due to its use of headphones (2007: 12), which is perhaps unsurprising given his adoption of the typical time-space distinction between music and sound art. In Licht's view, installation frees artists working with sound from the time constraints of vinyl, and he also notes the initial resistance by artists such as Amacher to record their works due to a loss of spatiality (Licht, 2009: 6). For these reasons, Licht regards Volume as 'a survey of experimental music rather than sound art', and also one amongst a 'rash' of high profile exhibitions (alongside Sonic Boom and Sonic Process, which were discussed in the previous chapter) that brought the sound art term to greater familiarity at the turn of the century while causing a lot of confusion as to what it actually referred to' (2007: 12). He explains that while 'none of these exhibitions purported to be an exhibition of sound art per se', they have led to the 'tendency to apply the term "sound art" to any experimental music of the second half of the twentieth century' (Licht, 2007: 12). These observations again highlight the significance of high-profile exhibitions such as Volume to the discourse of sound art, as well as the confusion caused by them.

Artist and curator Alex Keller describes the *Volume* exhibition as a unique opportunity to showcase works created for the recording medium that do not normally have their own venue, whether radio, CD or live performance. He writes: 'I won't say that the Bed is a perfect venue, but part of the value of the exhibition is that it exists as an experiment, an attempt to find a solution to the problem of venue for recorded works' (Keller, 2001: n.p.). Although Keller's concern is with works 'created specifically for the recording medium', a criterion that does not necessarily best describe sound art due to its spatial aspects, his argument raises the general issue of institutional support for experimental sound works. He also states that the unusual context for listening to recorded works was enough to foster an intensity of listening in the visitor: 'I found myself jumping from piece to piece, coming back to one or another before settling in for a twenty minute session [...] The Bed of Sound is almost a test, an opportunity to work to

experience the work, to hone the listener's skills' (Keller, 2001: n.p.). This suggests that, although the works in the exhibition were not necessarily sound art, the presentational approach in *Volume* at least encouraged a key aim of the aesthetic.

Philosopher and critic Christoph Cox speculates that exhibitions such as *Volume* implicitly adopt Pierre Schaeffer's paradigm of the 'acousmatic', through their 'banks of headphones or darkened rooms' (2005: 238). Sharp's approach to sound in the exhibition has already been equated with the idea of 'reduced listening', and the privileging of the sonic experience in Volume might well be seen as an attempt to subvert the hegemony of the visual. However, critic John Haber writes: 'I spent some time observing the other listeners, who were fascinating to watch. Some were shoeless, eyes closed; some perched with anticipation on the edge of the Bed; lovers cuddled listening to Vito Acconci and Maryanne Amacher together. Everyone was focused on what was happening in their headphones' (Haber, 2001: n.p.). This description suggests that the lack of visuals in the gallery space encouraged visitors to focus not only on the sound presented through the headphones but also on the visitors around them, so that listening itself became 'a part of the performance' (Haber, 2001: n.p.). Writer and critic Steven Connor also remarks that the exhibition title of *Volume* must have been a pun, given the number of headphone sets extruding from the bed (2005: 53). This investigation has shown that the title of the exhibition, Volume: Bed of Sound, alludes to the intentions of its curator to create a special listening experience through sound resonating among bodies and minds. Although critical accounts suggest that these aims were to some extent achieved, like Sonic Boom, the aims of the exhibition's artist-curator may not have been apparent to the visitor due to the multiple and complex layers of interpretation surrounding the choice, the format, the introductions, and experience of the works.

While *Volume* did not claim to be an exhibition of sound art alone, it did claim to include 'works by contemporary artists addressing the current trend', and also carried an introduction which placed the issue of sound art's definition at the heart of the exhibition. It would appear that Neuhaus was right to criticise exhibitions like *Volume* for their use of the term: although the curatorial intentions were characteristic of sound art, through his choice of works it is clear that Sharp was in fact interested in working across genres rather than focusing on sound art *per se*. It is therefore ironic that the inclusion of this short excerpt by Neuhaus cast a spotlight on sound art in this exhibition, raising awareness of its rising popularity as a term as well as problematising its existence in relation to new music.

Perhaps due to the eminence of the artist and bold nature of his remarks, as well as the profile and mixed messages of the *Volume* exhibition, Neuhaus's thoughts on the matter have continued to feature prominently within the discourse of sound art, and were given even wider exposure in a special issue of *Art Review* dedicated to 'the art of sound' five years later. In spite of minor revisions to the text, it is interesting that sound art is still described in this piece as a fad occurring

'over the last five years' (Neuhaus, 2005b: 55). This indicates the slow but steady growth of its discourse as well as the artist's unchanging opinions about it. These opinions not only provoked a range of reactions from the artworld to the concept of sound art, as seen in this study, but also prompted another art centre to enter into the debate from a different perspective.

Treble: Exhibiting sound art, or art?

Treble was an exhibition organised by independent curator Regine Basha as part of a wider festival called *New Sound, New York* in the summer of 2004. This group show comprised thirty-four artworks by twenty-two artists, including five site-specific works created specifically for the exhibition in response to the surrounding architecture, and occupied the entirety of SculptureCenter's indoor and outdoor spaces (Figure 5.6). It was supplemented by a conference on sound and art, a live performance series, *TrebleLive*, and the radio series *TrebleRadio* (SculptureCenter, 2004a: 1-3).

The influence of the *Volume* exhibition, which had taken place within the same area of New York four years earlier, is described in the exhibition's introduction:

Max Neuhaus, among the first to explore the relationship between sound and space in his early installations – and whose drawings are included in *Treble* – provides an important foundation for the exhibition with his call for the dissolution of the term "Sound Art". (SculptureCenter, 2004b: n.p.)

The exhibition, which played on the idea of 'treble' as a high-pitched tone, aimed to address 'the presence and influence of sound in the production of contemporary art' through a focus on 'how sound informs the way artists think about sculpture, drawing, and architecture' (SculptureCenter, 2004b: n.p.; 2004a: 1). In doing so, *Treble* also questioned the existence of sound art as a category, but in relation to the history and traditions of the visual arts rather than music.

The remainder of this chapter will explore this exhibition in relation to these three visual traditions, as well as the wider history and theory of the visual arts and sound art, in order to tackle a whole new set of issues and ideas concerning the situation of sound art within the contemporary arts. All works featured in *Treble* will be discussed and illustrated – or, in the case of its radio work, presented on the accompanying audio CD, alongside a selection of other works in the exhibition – to enable a reconstruction of this temporary event and a deeper understanding of its contribution to the definitional discourse of sound art (see pages ix-xii for a listing).

Treble SculptureCenter floorplan





Image: © SculptureCenter, New York (2004c: n.p.). Used with permission.

Figure 5.6 – Floorplan of Treble exhibition, SculptureCenter, New York, 2004

Exhibition overview

Drawing

Drawing was one of three traditions presented within the scope of the *Treble* exhibition and represented by an eclectic range of work. In the colour pencil studies by Max Neuhaus, for example, two site-specific sound installations, including the celebrated "Times Square' (1977), are sketched out and described (Figure 5.7). Although only a reference to his site-specific works, these drawings provide an insight into the artist's ideas and intentions regarding the behaviour and experience of sound in these spaces. As Cox, in a review of the exhibition, observes, 'the coloured topographical lines and shaded boxes with which he depicts the timbres, movements, and layers of sound that inhabit these environments charged the sonic imaginations and drew the viewer into their spaces' (2004b: 262). A similar explanatory drawing could be found within the site-specific sound installation 'viaDUCT' (2004), in which artist Grady Gerbracht mapped out the sonic environment into one of the centre's stairwells to provide an 'immersive sonic portrait of the building' (SculptureCenter, 2004a: 2). These drawings of spatial sound installations therefore implicitly reference the tradition of architecture considered within the exhibition.

A looser interpretation of artists working with 'sound through drawing' (SculptureCenter, 2004: 2) could be seen in the exhibition through collage, print, and moving image. Jim Hodges's 'Untitled (Landscape V)' (2000-1), for example, drew attention to the visually-oriented systems of Western music by composing a landscape through printed sheet music (Figure 5.9). In Jorge Macchi's 'Incidental Music' (1997), large wall-mounted sheets of musical score were, upon closer inspection, in fact made up of a collage of newspaper print clippings about murders and fatal accidents (Figure 5.10). Macchi takes this play on words even further with an accompanying soundtrack consisting of 'a dour score of incidental piano notes' that could be heard through headphones (Ewing, 2004: n.p.). These works might be associated with the graphic scores by the likes of Cornelius Cardew, Tom Phillips, Sylvano Bussotti and Roberto Zamarin, who were experimenting with the visual notation systems of Western music in the 1950s and 1960s (Shaw-Miller, 2002: 18-24). Graphic scores expose and play with the shared 'code' that is customarily used between musicians and also relies on a translation between media from the visual to the audible. The presence of such works in *Treble* points to scoring as a form of graphic mark marking that is as close to drawing as sound art is to music.

The combination of print with sound in one series of works, created by the deaf artist Joseph Grigely in collaboration with his wife, artist Amy Vogel, served to highlight the idiosyncrasies of language at the point of translation from the visual to the audible. The framed pigment prints by



'Three to One', 1992. Image: © Estate of Max Neuhaus (1995: n.p.). Used with permission.



'Study for Times Square', 1977/2002. Image: © Estate of Max Neuhaus (1995: n.p.). Used with permission.





Installation views (above), and detail (below). Photo: © SculptureCenter, New York (2004d: n.p.). Used with permission.

Figure 5.8 – Grady Gerbracht, 'viaDUCT', SculptureCenter, New York, 2004



Photo: © Jim Hodges. Courtesy of Jim Hodges and Stephen Friedman Gallery, London. Used with permission.

Figure 5.9 – Jim Hodges, 'Untitled (Landscape V)', 2000-1



above and Parker's earplugs on plinth in front). Photo: © SculptureCenter,

New York (2004d: n.p.). Used with permission; Installation detail.(left) Photo: © Marjolein Blaauwbroek (2011: n.p.). Used with permission.

Figure 5.10 – Jorge Macchi, 'Incidental Music', SculptureCenter, New York, 2004

Grigely, for example, spelt out the name of artist 'Ed Ruscha' (2001), while a clump of speakers hanging in front played recorded voices trying to pronounce this 'notoriously mispronounced' name' (Ewing, 2004: n.p.; Figure 5.11). Roberta Smith, art critic for the *New York Times*, describes how 'the pronunciations vary wildly, and it is something of a relief when a man shouts, as if from the background, one of the more widely accepted versions: "Ed roo-SHAY!" (2004: 29).

Another example of interplay between print and sound included Mungo Thomson's 'Collected Recordings of Bob Dylan 1963-1995' (1999), which were played in a space covered with adverts of the performance posted around town (Figure 5.12). Thomson's collection, however, was not of the sounds of Dylan's live music but that of the applause between his songs. The work therefore set up the visitor's experience to mirror the rising and falling sense of expectation heard from the crowds at Dylan's concerts following the somewhat misleading promotion of the work (Valdez, 2001: n.p.).

In another series of works, artist David Schafer presented a promotional poster, available to purchase during the exhibition, which together with vinyl signage above the reception desk and a column in the foyer, advertised a mini-expo at SculptureCenter (Figure 5.13). These graphics were accompanied by a lecture by philosopher Jacques Derrida on 'Structure Sign and Play in the Discourse of the Human Sciences', recited by a female voice, and broadcast over a loudspeaker outside the building between a few seconds of corporate-sounding 'canned' music (Tracks 6.7-6.9). Through this combination of sound and image, the artist aimed to play with the ambiguity, complexity, dissemination, and eventual institutionalisation of meaning and discourse (Schafer, 2009: n.p.).

A combination of moving image and sound could be seen in the work 'Salto del Agua' (2003). Here, a projection of the façade of a Mexican metro station by conceptual artist Anton Vidokle was accompanied by a soundtrack of electronic frequencies by sound engineer Cristian Manzutto (Figure 5.14). This aimed to express the iconic presence and resonance of urban architecture (Trans, 2002: n.p.). Another work with moving image was Euan Macdonald's 'Poor Blumfeld' (2003), a title referring to an unfinished story about an elderly man called Blumfeld, who was irritated by bouncing balls following him, by the influential writer Franz Kafka. Television monitors placed side-by-side present videos of a bouncing blue ball that slowly fall out of synch with each other (Figure 5.15). With no explicit use of or reference to sound, the only explanations for the inclusion of this work within *Treble* are that the artist was known to reference to music in his work and the rhythmical movement resulting from the temporal as well as visual nature of video.

These examples demonstrate that sound has informed the way in which artists think about drawing in many different ways and through a wide range of subjects referencing, representing or accompanying sound.



Installation view. Photo: © SculptureCenter, New York (2004d: n.p.). Used with permission.

Figure 5.11 – Joseph Grigely and Amy Vogel's 'You' (speakers) with Grigely's 'Jenaba' and 'Ed Ruscha', SculptureCenter, New York, 2004



Figure 5.12 – Mungo Thomson, 'The Collected Recordings of Bob Dylan 1963-1995', SculptureCenter, New York, 2004



Installation views, from left to right: expo wall graphic, PA speaker, and column. Photos: © SculptureCenter, New York (2004d: n.p.). Used with permission.

Figure 5.13 – David Schafer, 'General Theory' expo and lecture, SculptureCenter, New York, 2004



Installation view. Photo: © SculptureCenter, New York (2004d: n.p.). Used with permission.

Figure 5.14 – Anton Vidokle and Cristian Manzutto, 'Salto del Agua', SculptureCenter, New York, 2004



Installation view. Photo: © SculptureCenter, New York (2004d: n.p.). Used with permission.

Figure 5.15 – Euan Macdonald, 'Poor Blumfeld', SculptureCenter, New York, 2004

Sculpture

It is perhaps unsurprising given the venue of the exhibition that there were many works within *Treble* that might be described as sculpture. A reproduction of a drum kit by artist Jude Tallichet, for example, hung upside-down from the ceiling as though a 'designer' chandelier (2010: n.p.; Figure 5.16). In this position and context, however, its function to make noise remained unfulfilled and it instead became a visual object animated by light rather than sound. Tallichet compares the transformation of this object into a 'spectacle of desire' with the appropriation of rock star instruments decorating the interior of themed restaurants, and the pink plastic material might even suggest the object's function as a giant girl's toy (2010: n.p.). The inclusion of this work points to a relationship between sculpture and musical instrument design, although unlike the works resembling the sound sculptures of the Baschet brothers that are often considered in a sound art context, this example becomes visually and sonically striking because of its inability to sound.

Erik Hanson presented more abstract sculptures representing key moments of his life in relation to the music he was listening to at the time. 'Disco songs I liked when I was a punk rock DJ' (2003), for example, were visualised as a blossoming branch of blue orchids in clay, an image symbolising the artist's growing passion for disco music that led to a questioning and acknowledgment of his sexual identity and eventual 'coming out' (Bovee, 2005: n.p.; Figure 5.17). In another work, a coil with blue peaks represented the title track from Kraftwerk's album 'Trans-Europe Express' (2001; see also Figure 5.17). Steve Roden's 'Letter Forms' (2003), consisting of sculpted sound-waves of each spoken letter of the alphabet, provided a more literal example of sculpted sound (Figure 5.18).

A 'Noiseless Blackboard Eraser' (1974) by Fluxus artist Joseph Beuys took on a variety of potential meanings in the context of *Treble*. Beuys would often hold lectures as part of his extended concept of art as 'social sculpture', which was based on a belief that art could transform society, and during these lectures he would often write his ideas onto a blackboard. These blackboards eventually came to be considered as objects of art in their own right, and on his first visit to the US in the same year as the object featured in *Treble*, Beuys allegedly erased the diagrams on one of his blackboards when a collector tried to acquire it (Desmond, 2010: n.p.). Beuys also explored sound and silence through musical instruments, and so there was potentially an element of humour in the inclusion of an inert, 'noiseless' ready-made sitting quietly behind glass (Ewing, 2004: n.p.), especially one that evoked the unpleasant noise of a blackboard being scraped in the imagination (Figure 5.19).

Artist Dario Robleto also presented some ready-made objects in the exhibition, in this case the antique boxes of a violin and cello string (Figure 5.20). One box was labelled 'Fatalism Sutures To A Memory (A Melody)' (2003) and apparently made from bone dust and melted bullets; the



Installation view. Photo: © SculptureCenter, New York (2004d: n.p.). Used with permission.

Figure 5.16 – Jude Tallichet, 'It's All Good', SculptureCenter, New York, 2004



Figure 5.17 – Erik Hanson's 'Disco Songs I Liked When I was a Punk Rock DJ', and 'Kraftwerk - Trans Europe Express', SculptureCenter, New York, 2004



New York. Courtesy of SculptureCenter, New York. Used with permission.

Figure 5.18 – Steve Roden, 'Letter Forms', SculptureCenter, New York, 2004



Photo: © Joseph Beuys Estate/DACS (NGA, 2009: n.p.).

Figure 5.19 – Joseph Beuys, 'Noiseless Blackboard Eraser', 1974



Photo: © SculptureCenter, New York (2004d: n.p.). Used with permission.

Figure 5.20 – Dario Robleto, 'Fatalism Sutures To A Memory (A Melody)' and 'The Minor Chords Are Ours (The Lost Chord)', 2003 other had an equally romantic title, 'The Minor Chords are Ours (The Lost Chord)' (2003), and was said to be made from bone dust as well as tears, lava and fragments of meteorite. The names and materials ascribed to these objects connected the seemingly ordinary musical items to significant times and places, evoking sounds that may or may not have existed (Ewing, 2004: n.p.). Cox notes that, 'though mute and inert, the objects exerted powerful, contradictory forces. Dead stuff was given the prospect of new life through sound, but at the same time, the brittle forms threatened to crumble under the strain of history, memory, and their own grisly material origins' (2004b: 262).

Another example in the exhibition of seemingly commonplace objects referencing almost mystical concepts of sound and silence could be found in Cornelia Parker's ear plugs, entitled "The Negative of Whispers' (2007; Figure 5.21). These earplugs were sculpted from the dust collected from St Paul's Cathedral's 'Whispering Gallery', an acoustic space within this prominent religious institution that hosts royal weddings and events known for carrying even a whisper. The work's title implies that the artist has transformed the ephemeral into something material; the dust is a trace of the people who have visited, and the whispers of prayer or other exchanges they may have made there. The dust also becomes a form of memorabilia often bought by tourists who flock to the destination (Nichols, 2011: n.p.). The wide variety of sculptural works in the exhibition that reference rather than produce sound clearly operate within the sphere of conceptual art, an idea to be considered further from a theoretical perspective later.

A very different spin on the idea of implied and latent sound was provided by a sculpture created by Stephen Vitiello especially for the exhibition, which played with the subsonic. In 'Fear of High Places and Natural Things' (2004), speaker cones suspended from the ceiling in a wave formation visibly pulsated with inaudible sound waves, and the title evoked associations of their throbbing and trembling with a fearful, beating heart (Ewing, 2004: n.p.; Figure 5.22). This work is later cited as a prime example of sound art by Cox, in an essay on the subject of synaesthesia, since it demonstrates how silence of the visual can powerfully disclose sound: 'at once mouths and ears, these mobilized membranes draw attention to the kinetic energy of sound, the vibrations that constitute its production and reception' (2005: 241).

Terry Nauheim's 'Curiously Groovy' (2004) also played with the technologies of sound. This work presented visitors with a record collection they could listen to on a turntable, although these particular records were hand-made rubber casts of vinyl records (Figure 5.23). The ghostly and distant sound from these records pointed not only toward the evanescent nature of sound but also the technologies of its recording (Ewing, 2004: n.p.; Cox, 2004b: 262). Another interactive but lower-tech work in the exhibition was Jim Hodges's assortment of white blown-glass bells, which hung from the ceiling for visitors to ring and experiment with the sonority of their different shapes and sizes (Ewing, 2004: n.p.; Figure 5.24). This work is a rare example of a



Photo: © SculptureCenter, New York (2004d: n.p.). Used with permission. Figure 5.21 – Cornelia Parker, 'The Negative of Whispers', 1997



Installation view. Photo: © SculptureCenter, New York (2004d: n.p.). Used with permission.

Figure 5.22 – Stephen Vitiello, 'Fear of High Places and Natural Things', SculptureCenter, New York, 2004



Installation view, and detail of record (left). Photos: © SculptureCenter, New York (2004d: n.p.). Used with permission.

Figure 5.23 – Terry Nauheim, 'Curiously Groovy', SculptureCenter, New York, 2004



Installation view, and detail (left). Photos: © SculptureCenter, New York (2004d: n.p.). Used with permission.

Figure 5.24 – Jim Hodges, 'Untitled (Bells)', SculptureCenter, New York, 2004
sound-making object in the exhibition. A more abstract and expanded idea of sculpture could be found in another group of works in the exhibition which were 'creating sonic experience as sculpture' (SculptureCenter, 2004b: n.p.). These will be considered in relation to the exhibition's interest in architecture due to their site-specific and spatial tendencies.

Architecture

Several works in the *Treble* exhibition already discussed for their use of drawing or sculpture also illustrate an important relationship between sound and architecture. Gerbracht's site-specific drawing, for example, was featured within an installation in which the sounds outside the building were brought inside, and Nauheim's sculpted archive of rubber records was situated within his recreation of a basement hideaway (Basha, 2004: n.p.).

A more literal exploration of sound in space was found in Steve Roden's 'Fulgurites' (2003), in which sounds raced up and down along a basement passageway lined with wine bottle fragments encasing tiny speakers (Figure 5.25). Cox describes an 'array of glassy tones and prickly sonic fragments' flitting to and fro along the eighty-foot span of the installation, in which the 'sounds moved in and out of earshot, were remembered and anticipated, and, at either end, merged with noises from neighbouring rooms' (2004b: 262). The use of glass bottles in Roden's work as well as his playful treatment of sound in space might also be considered as sculptural.

A literal example of architecture was a multi-faceted and multi-coloured dome created by Brad Tucker, named after the music shop 'Fuller's Vintage Guitar' (2001; Figure 5.26). Other than the title, the relationship between sound and this structure is not especially evident to the viewer, although one critic speculates that 'stepping into this structure might be the artist's way of taking viewers "inside the music"...or at least inside the amplifier' (Ewing, 2004: n.p.). Paulo Vivaqua's 'Sentinels' (2004) was perhaps a more 'classic' example of sound art whereby speakers, on poles positioned around the gravel courtyard of SculptureCenter, emitted 'windy howls and wavering sine tones' (Cox, 2004b: 262; Figure 5.27; Track 5.10). One critic describes how these loud organ-like tones 'permeate the walled rectangular space with a hair-raising wash of energy that causes the entire area to vibrate like a solid form' (Ewing, 2004: n.p.). This work illustrates the more abstract understanding of sound as sculpture by demonstrating the physical presence of sound in space.

Andrea Ray's 'Inhalatorium' (2004) was an immersive installation that used a combination of materials to create a relaxing and meditative space within the vaulted corridors of SculptureCenter's basement (Figure 5.28; Track 5.11). Referencing the Eastern European practice of speleotherapy, in which salt mines are used to cure respiratory problems, benches lined a corridor covered with salt and bathed in a warm orange glow. From each end of the corridor emanated the sound of a male and female voice sustaining a single note for as long as possible, a

169



Installation view. Photo: © SculptureCenter, New York (2004d: n.p.). Used with permission.

Figure 5.25 – Steve Roden, 'Fulgurites', SculptureCenter, New York, 2004



Installation view (with works by Grigely, Vogel and Hanson to the left). Photo: © SculptureCenter, New York (2004d: n.p.). Used with permission.

Figure 5.26 – Brad Tucker, 'Fuller's Vintage Guitar', SculptureCenter, New York, 2004



Installation view, and detail (right). Photos: © SculptureCenter, New York (2004d: n.p.). Used with permission.

Figure 5.27 - Paulo Vivacqua, 'Sentinels', SculptureCenter, New York, 2004



Installation view. Photo: © SculptureCenter, New York (2004d: n.p.). Used with permission.

Figure 5.28 - Andrea Ray, 'Inhalatorium', SculptureCenter, New York, 2004

play on the idea of respiration (Ray, 2006: n.p.). This work indicates the way in which sound can be used to create, explore and comment upon experiences, as well as the multimedia nature of contemporary artistic practice.

None of the above

Some works that were featured within the *Treble* exhibition cannot easily be described as drawing, sculpture or architecture. Emmanuel Madan's 'Freedom Highway' (2004), for example, was composed from audio intercepted from nationwide radio stations in America on the first anniversary of the September 11 attacks. This radio piece 'about mass media and American public discourse' (Madan, 2004a: n.p.) was aired on the New York station WKCR-FM in the first week of the Treble exhibition (Track 5.12). Although the work might be considered a sonic collage, it reflects a use of sound outside of the framework of the three visual traditions. Another work that illustrated the potential complexity of contemporary art was Francis Alys and Rafael Ortega's '1 Minute of Silence' (2003). The piece documented a street performance in Panama City in which members of the public participated in the artists' minute of silence (Mosquera and Samos, 2003: n.p.). Photographs, event flyers and information about the artistic project were presented on a table in the gallery with a laptop playing a video recording of the performance (Figure 5.29). A combination of the concept, execution, evidence and explanation of the event, this work clearly demonstrates the way in which contemporary genres such as performance have problematised the visual arts traditions. As the art centre also states: 'the works in this exhibition draw on the history of experimental sound and installation art, popular music culture, and situational and performance strategies' (SculptureCenter, 2004b: n.p.).

In relation to the works in the exhibition and its title, Cox observes that 'video appeared here too, but who's counting?' (2004b: 262). This cursory observation is in fact extremely significant in relation to an underlying premise of the exhibition, which simultaneously appears to acknowledge and highlight the limitations of visual art traditions. Although the categories of drawing, sculpture and architecture were used a framework within which to consider the influence of sound on the established traditions of the visual arts, it has been shown that a certain amount of flexibility is required to fit many of these works into this traditional schema. Even those that might be perceived as examples of drawing, sculpture or architecture could alternatively be classified as painting, collage, video, performance, installation or conceptual art. Although the three mediabased categories provide an historical framework for an exposition of sound art, the diversity of media within and across the works in the exhibition is in fact indicative of the problematisation of historic categories in the arts as much as the emerging category of sound art. As asserted in the introductory text to the exhibition, 'operating *beyond* the categories that define "sound art",



Installation view. Photo: © SculptureCenter, New York (2004d: n.p.). Used with permission.

Figure 5.29 – Francis Alÿs & Rafael Ortega, '1 Minute of Silence', SculptureCenter, New York, 2004 "sculpture", "drawing", or "architecture", the artists in *Treble* reflect a generation seeking to move freely between disciplines' (SculptureCenter, 2004b: n.p., emphasis added).

In focusing on the visual traditions of sculpture, drawing and architecture, the *Treble* exhibition was in fact 'challenging the categories of "sound art" *and* "visual art", while 'explor[ing] the spectrum between the two practices' (SculptureCenter, 2004a: 1, emphasis added). Like *Volume*, the *Treble* exhibition appears to reject sound art as a category, although this time it is not because categories already exist to accommodate such work, but rather because it joins a set of existing categories which are also destabilised within the current climate of contemporary art. The exhibition highlights that the existence of sound art is embroiled within the problematisation of media categories within the history and theory of visual art, which is an issue worth further consideration.

Art history and theory

Modernism and media restriction

Art and music historian Simon Shaw-Miller notes that the distinction between artistic traditions such as music and visual art, and the forms within them, is the result of various ideological projects throughout history based upon the notion of 'the medium' (2002: 1-35). This point is potentially significant in relation to sound art, which appears to span these artistic traditions and forms, and yet whose very name has medium-specific connotations, as artist Marina Rosenfeld explains: 'Sound art has a sort of '70s ring to it to me. It sounds somewhat utopian. It also sounds medium based, which is traditional in the sense of the way art areas have been categorized or separated' (Rosenfeld, in Nordschow, 2004: 2). Given that the formalist nature of sound art is repeatedly raised as a potential issue within its discourse (see also Chapter 6), the way in which the concept of the medium was used to reinforce essentialist ideals within the historical discourse of the arts is worth further investigation.

The ideas of American art critic Clement Greenberg (1909-1994), who provided the authoritative account on aesthetics during the first half of the twentieth century, had a major impact on what became known as modernist art (Shaw-Miller, 2002: 173; Kim-Cohen, 2009: 33-34). His modernism was characterised by the 'common effort in each of the arts to expand the expressive resources of the medium' (Greenberg, [1940]1986e: 30-32) – an ideal, as Shaw-Miller points out, that also served to accentuate their differences (2002: 87). Although Greenberg's efforts were focused on the specificity of painting and sculpture, his ideas were relevant to the other areas of artistic activity, and his notion of medium-specificity is not only the most persuasive but also the most problematic for sound in the arts (Kim-Cohen, 2009: 34).

Greenberg openly adopted the ideas of art critic Gotthold Lessing, who in the late eighteenth century advocated the need to consider the fundamental distinctions between the arts for the purpose of criticism and judgement (Shaw-Miller, 2002: 9). In 'Laocoon: An Essay on the Limits of Painting and Poetry' (1766), Lessing differentiates painting and poetry on the basis of the semiotic sign system they use (natural versus arbitrary), the senses to which they are addressed (the eye and ear), and their organisation in either space or time. This debate is carried forward into the twentieth century by Irving Babbitt in 'The New *Laocoon*: An Essay on the Confusion of the Arts' (1910). In this essay, Babbitt argues for the need to 'patrol the borders' between forms to enable a 'pure' and 'civilised' art, rhetoric that clearly points the ideological roots of this formal issue (Shaw-Miller, 2002: 29-30).

Thirty years later, Greenberg presents his first account of modern art in the essay 'Towards a Newer Laocoön' ([1940]1986e). As its title suggests, the essay takes inspiration from Lessing's argument, examining the development of the arts through an extension of his rationale for the differentiation of media and consequently laying out the terms through which modern art should be engaged. Greenberg proposes that aesthetic value is obtained through each art's investigation of its own means of expression, and argues that in order to achieve 'purity', each artistic form must therefore focus on the uniqueness of its own character and its own conditions of representation ([1967]1986d: 32). This idea of modernism advocated an increased attention to the formal properties of art, such as colour, line and space, and Greenberg used this argument as a basis to defend and promote 'abstract expressionist painting' by artists such as Jackson Pollock. In his opinion, this kind of avant-garde work was able to distinguish itself from its aesthetic neighbours by accentuating its material and mode and, most importantly, was therefore a logical continuation of art history (Shaw-Miller, 2002: 30-31). These ideas form the foundations for Greenberg's later writing on art, and more specifically abstract expressionism, which would eventually become the dominant American style of painting in the 1950s (Melville, 1998: n.p.).

Lessing's project was part of a general interest in the systematisation of the arts and provision of a theoretical structure of aesthetics, with the ultimate aim of defining the 'essence' of each art form in order to make artistic communication autonomous and transparent (Shaw-Miller, 2002: 7). Greenberg, in the same way, would continue to champion the notion of medium-specificity as a way of encouraging the separation of each art and establishment of their 'essence'. He believed that such 'purity' would avoid 'confusion' and restore the identity of each art. As he later suggests, 'each art would, to be sure, narrow its area of competence, but at the same time it would make possession of this area all the more secure' (Greenberg, [1960]1986b: 86).

The very nature of Greenberg's modernist aesthetic required a consideration of the 'other' forms of art. Despite his initial focus on abstract painting, for example, Greenberg would later shift his attention to modernist sculpture, observing that 'three-dimensionality is the province of

175

sculpture' ([1939]1986a: 88). In his opinion, 'to achieve autonomy, painting has had above all to divest itself of everything it might share with sculpture' (Greenberg, [1960]1986b: 88). Music also features predominantly in Greenberg's account. In line with the dictum that 'all art constantly aspires to the condition of music', a statement written by Greenberg's contemporary Walter Pater ([1877]2005: 111), who also drew from the ideas of Lessing, Greenberg saw music as an 'art of pure form' due to its "'absolute" nature, its remoteness from imitation, its almost complete absorption in the very physical quality of its medium' ([1940]1986e: 31). Music was therefore viewed as an exemplar of autonomy for the visual arts, a dependence that Greenberg excused, despite his claims for exclusivity, since it was a formal relationship; every age has a dominant or 'prototype' art form, he argued, which all others try to imitate (Shaw-Miller, 2002: 30). In his opinion, the other arts would only obtain self-sufficiency and purity 'by accepting the example of music and by defining themselves solely in terms of the sense or faculty which perceived its effect' (Greenberg, [1940]1986e: 31).

This account shows that the concept of media in the arts points to a complex nexus of ideas involving semiotics, the senses and spatial-temporal dimensions in addition to more formal qualities such as the materials and techniques from which a work is composed. Although essentialist assumptions and formalist ideologies have since been questioned, these media-based demarcations have influenced the configuration of the arts as they exist today. The case of sound art, whose definitional discourse has been shown to revolve around the same nexus of ideas, highlights the fact that these historical assumptions are still extremely relevant to the development of contemporary art. Even Clement Greenberg, who championed formalism in the visual arts, realised that the media-based distinction between art forms potentially limited artistic possibilities ([1939]1986a: 5-22), and a modernist focus on the conditions of representation, in which art becomes its own subject, eventually leads to a paradigm shift in the arts that he would struggle to accept (Shaw-Miller, 2002: 173). These developments precipitate a reconceptualisation of the traditional artistic categories, whereby painting and sculpture, for example, become regarded as part of a 'restricted' field of art. This is also worth further consideration in relation to the situation of sound art.

Postmodernism and media expansion

The rise of so-called 'postmodernist' activity problematised the media restrictions in the arts grounded in the essentialist ideals of modernism. Sonic art theorist Seth Kim-Cohen describes minimalism, conceptualism and performance as 'the post-Greenbergian art of the sixties' (2009: xv) due to the fact that artists around this time reacted to Greenberg's vision of medium-specificity, which had, through abstract expressionism, become 'stabilised in theory and realised in practice' (Kim-Cohen 2009: 8). Just as Shaw-Miller demonstrates that modernist artistic activity

challenged the paradigm of purity through the cross-fertilisation of music and art from Richard Wagner (1813-1883) through to John Cage (2002: x), Kim-Cohen points to comparable activity beginning in the 1920s with artists and movements such as Russolo, Duchamp, and Dada (2009: 4). He explains that, following Greenberg, their ideas 'returned with renewed vigour (or to a more receptive climate)' and eventually 'staked a genuine and significant claim to the definition and identity of each medium around 1960' (Kim-Cohen, 2009: 4).

Such changes were inevitably accompanied by a reassessment of the foundations of art history and aesthetics. Greenberg's definition of modernist art is first seen to reach its own limit in sculpture rather than painting. Greenberg admired the abstract reduction of sculpture which, in his opinion, had the potential 'to attain an even wider range of expression than painting' ([1958]1986c: 58-9). He criticised heavily the development of minimalist sculpture, however, as he was suspicious of its focus on 'idea' rather than form, since it then failed to secure aesthetic interest (Greenberg, [1967]1986d: 254). Such criticism continued in the writings of Greenberg's successor, Michael Fried (b. 1939), who was fervently opposed to minimalist sculpture due to its 'theatricality'. He adopted this term to describe a lack of differentiation between the work of art itself and the experience of its viewing, largely in reference to sculptural works that either acknowledged or were activated by the presence of the viewer (Fried, 1968: 139). Fried saw theatricality as 'the single greatest threat to the art he and Greenberg championed', since it drew on an expanded situation of art (Kim-Cohen, 2009: 42). It is of little surprise then that Fried, like Greenberg, was equally suspicious of those who insisted on critiquing modern art within a historical or cultural context rather than formally examining the work of art on its own terms. In his essay 'Art and Objecthood', he asserts that 'What lies between the arts is theatre' (Fried, 1968: 142), and announces theatricality to be 'at war' with not only modernist painting and sculpture but also with 'art as such' (Fried, 1968: 139). Here is evidently a late attempt to promote an ideology rooted in Lessing, Babbitt, and Greenberg by branding intermedia art 'uncivilised' and 'impure' in contrast to medium-specific forms.

Influential art critic and theorist Rosalind Krauss (b.1941) also used Greenberg's ideas of the medium as the basis for her theory and criticism of art, although she perceived the situation of minimalist sculpture quite differently to Fried. In a seminal essay entitled *Sculpture in the Expanded Field* (1979), Krauss observes that 'over the last ten years rather surprising things have come to be called sculpture' (1979: 30). Interrogating the nature of the academy and its attempts to legitimise and authenticate minimalist sculpture by constructing a historical lineage, she describes how 'in the hands of this criticism categories like sculpture and painting have been kneaded and stretched and twisted in an extraordinary demonstration of elasticity' (Krauss, 1979: 30). Krauss determines that such extensions of meaning risk obscuring the very terms the academy is trying to save, and therefore attempts to find a logical structure that accounts for the 'ruptures' of definition found

in contemporary practice. Focusing on the historically defined category of sculpture, she writes: 'It is obvious that the logic of the space of postmodernist practice is no longer organized around the definition of a given medium on the grounds of material, or, for that matter, the perception of material. It is organized instead through the universe of terms that are felt to be in opposition within a cultural situation' (Krauss, 1979: 43).

In this characterisation of contemporary sculpture, Krauss therefore draws attention to discourse rather than matter (Kim-Cohen, 2009: 82&152), demonstrating that the definition of sculpture is in fact a product of how we talk and think about it. 'This shouldn't have come as a surprise', remarks Kim-Cohen, since 'all categories are products of discourse' (2009: 82: 152). These observations are particularly relevant to the present study and its approach to the definition of sound art, and refer to a transformation that is consciously described by Krauss as 'postmodernism' (1979: 41). Krauss nevertheless permits a compromise in the critical reception of art by retaining 'material and media as fundamental starting points from which to investigate culture, language, knowledge, society' (Kim-Cohen, 2009: 82). This theoretical acknowledgement of the expanded situation of art means that sculpture begins to define the parameters of the visual arts to a greater extent than painting. Krauss also identifies two very different bodies of thought - structural linguistics and phenomenology - related to the development of modern sculpture. These differing approaches can be seen within the definitional and theoretical discourse of sound art (Kim-Cohen, 2009: 34-5; 76), which will be considered further in the following chapter. In fact, sound art illustrates the intermedia and conceptual character of artistic activity that unsettled modernist theorists and eventually signalled the postmodern condition.

Sound art within the expansion of art

The location of *Treble* in a centre for sculpture takes on particular significance in light of this critical discourse surrounding media categories in the visual arts. The exhibition situated sound art within a theoretical climate that is conscious not only of the medium-based nature of artistic categories but also of the way in which this has been challenged and also problematised in postmodernity. A conscious engagement with such issues of definition is indicated in SculptureCenter's mission 'to engage with artists in evolving the definition of contemporary sculpture' and present programmes 'intended to further the historical documentation and critical dialogue around contemporary art and sculpture in particular' (2004: 4). It is therefore particularly interesting that *Treble* was not the first exhibition of sound art at the art centre, which in fact hosted the 1984 *Sound/Art* show, considered to be the earliest documented use of the sound art term (Licht, 2009: 11; see also Chapter 1). Like the millennial exhibitions discussed in this study, this show prompted a reflection on meaning-making in relation to sound, and often in combination with the visual, in line with its curator's belief that 'hearing is another form of

seeing' (Hellermann, in Boros, 2012: 67). *Treble* might therefore be seen as an attempt by SculptureCenter to account for artistic developments after Greenbergian modernism within its contemporary programme, which aims to 'explore the conceptual, aesthetic and material concerns of contemporary sculpture' (2004: 4); in other words, 'sculpture' in an expanded sense.

It is explicitly noted in the Treble exhibition that 'the last decade has seen a resurgence of artists working with sound as sculptural material, both metaphorically and conceptually' (SculptureCenter, 2004b: n.p., emphasis added). Many of the works featured within Treble resemble Krauss's description of some of the 'surprising things' that have come to be called sculpture: 'narrow corridors with TV monitors at the ends; large photographs documenting country hikes; mirrors placed at strange angles in ordinary rooms; temporary lines cut into the floor of the desert' (1979: 30). Bernd Schulz, a curator involved in some of the earlier as well as more recent exhibitions of sound art (see Chapter 1), similarly describes sound art as an art form 'in which sound has become material within the expanded concept of sculpture' and 'for the most part works that are space-shaping and space-claiming in nature' (2002a: 14, emphasis added). It might be argued that this metaphorical use of sound as sculptural material actually adheres to a more traditional idea of 'the medium', whereby sound is considered a material from which works of art are made. Some of the 'architectural' works in Treble such as Vivaqua's 'Sentinels' and Gerbracht's 'ViaDUCT' are good examples of this, showing an expanded sense of sound as a non-literal and non-visual object. A conceptual use of sound within sculpture nevertheless draws on a slightly different understanding of the medium as information, or an idea. This would account for many of the works included in *Treble* that refer to sound as a subject, such as Neuhaus's drawings, Beuy's eraser, Tallichet's drum kit and Hanson's abstract sculptures. As Cox remarks, 'over half the pieces in Treble made no noise at all' (2004b: 262). Many works in the exhibition also reference other subject matters, whether Parker's earplugs, Vitiello's speaker cones or Ray's 'Inhalatorium', although these topics still tend to circle around issues related to the sonic.

This 'conceptual turn' led Krauss to identify the postmodern in art, which jeopardised the very notion of 'visual art' and therefore led sonic theorists such as Kim-Cohen to replace the term 'visual art' with 'gallery arts' (2009: xviii; see also Chapter 2). In Kim-Cohen's opinion, this shift can indicate 'the universe of terms and institutions that sanction artistic practices distinct from literature, dance, architecture, and, most crucially for our purposes, music' (Kim-Cohen, 2009: xxi). Such a move points to the expansion of the visual arts, and the way in which practices such as sound art have found definition within this particular institution, rather than music. This change in nomenclature certainly feels more accommodating of such practices, although the historical foundations of the arts, which are defined in relation to certain ideas and ideologies of media, cannot be disregarded.

The premise of *Treble* to 'explore the spectrum between the two practices' of 'sound art' and 'visual art' points towards the expansion of the arts, and also to the medium-specific ideology enforced and then challenged during the course of the twentieth century. This is reflected in the press release for the exhibition: Just as contemporary sculptors are challenging the rules of sculpture as an artistic category, artists who work with sound are developing languages that defy medium-specificity' (SculptureCenter, 2004a: 2). It is perhaps a sign of the times that the Treble exhibition did not take a more 'literal' approach to sound in sculpture, overlooking soundemitting objects by artists such as Jean Tinguely, Harry Partch or the Baschet Brothers, which are often referred to as 'sound sculpture', in favour of more postmodern contemporary approaches. All of the examples of sound in the exhibition – whether metaphorical, conceptual, or literal – highlight the expanded nature of today's art, which might be variously described as sculptural, conceptual, installation or sound art among other things. It is somewhat ironic given its apparent neologism of sound art some seventeen years earlier that SculptureCenter should later present this exhibition of sound art within the context of a postmodern reticence of media categories. In many ways, Treble signifies that the theoretical justification of sound and other media within a visual art context is still very much a work in progress, as well as the potential for genres such as sound art to contribute to these developments.

Sound art theory

The *Treble* exhibition simultaneously demonstrates and questions the idea of a 'sound art' in illustrating that contemporary artists do not necessarily operate within medium-specific traditions such as drawing, sculpture and architecture, or even visual art. In his review of the exhibition, Cox remarks that 'though sound remained the thread that tied the exhibition together, *Treble* resisted the neo-modernist tendency to focus on sound as such and, instead, considered it one element among many in a postmedium aesthetic' (2004b: 262). It has been shown that the exhibition presented a diversity of forms, modes of sensory engagement, and artists from a variety of backgrounds drawing on a range of ideas and influences while featuring sound as the unifying theme. Further parallels might therefore be drawn with the *Sonic Boom* exhibition discussed in the previous chapter.

Perhaps also in reference to *Sonic Boom*, Cox acknowledges the 'notorious challenge' faced by exhibitions of sound art in light of the fact that sound is difficult to contain and tends to 'bleed through barriers'. He nevertheless describes *Treble* as a 'nicely mounted and orchestrated' exhibition that deftly negotiated the issue in allowing this sound bleed to happen (Cox, 2004b: 262). Cox in fact suggests that this approach is symbolic of how sound leaks across the borders between media, 'conceptually underscoring a key premise of the show' (2004b: 262). Here is an

implication that *Treble* (and, by association, *Sonic Boom*) took a postmodern curatorial approach to sound art by including multimedia works and encouraging sonic interaction.

Cox's review alludes to the presence of a more traditional aesthetic in sound art, which he discusses in an article written a year before the *Treble* exhibition. In this article, entitled 'Return to Form' (2003), Cox highlights a resurgence of modernist strategies in the contemporary arts such as 'abstraction, reduction, self-referentiality, and attention to the perceptual act itself' (2003: 67). He names this tendency 'neomodernism', and asserts that this revival is 'nowhere more evident than in sound art' (Cox, 2003: 67). Cox also maps out a terrain of postmodernist sound art that features quotation and pastiche and the collapse of distinctions such as time and space or high art and pop culture, noting figures such as John Oswald and Christian Marclay as exemplars of this approach (2003: 67). He continues:

Neo-modernist sound art could not be more different. Where postmodernism is about mixture and overload, neo-modernism is about purity and reduction. Where postmodernism is about content and the concrete (the vertiginous string of recognizable samples), neo-modernism is about form and abstraction. (Cox, 2003: 67)

Cox identifies Ryoji Ikeda and his exploration of sine tones as an example of neomodernism, and also identifies a 'new generation' of neomodernists such as Steve Roden and Francisco Lopez, who begin with found sound 'like their postmodernist forebears', although they 'take care to abstract their raw material beyond recognition, stretching and layering it into dense drones and loops' (2003: 67). Almost all of these named figures feature in exhibitions discussed in this study.

Within this account of a neomodernist aesthetic in sound art, Cox briefly notes the impact of technology on the discourse of media in the arts. Here he cites *The Moderns* exhibition at the Castello di Rivoli in Turin (2003), which included a sound art component curated by SculptureCenter director Anthony Huberman, as an example of work by a generation of visual artists 'who reanimate modernist practices for a digital age' (2003: 67). The ideas of theorist Lev Manovich, who refers to 'the new modernism of data visualizations, vector nets, pixel-thin grids and arrows' in 'new media' art (2002: 1), are also cited. Sound art therefore serves as a reminder that terms such 'new media' and 'contemporary', which have arisen in recent years 'to absorb and re-configure the debate' around postmodernism (Carter and Geczy, 2006: 12), are an extension of modernist ideologies. The issue of technology and new media will be revisited in the concluding chapter of this study (see Chapter 7).

Cox chooses to compare neomodernist sound art with modernist visual art rather than music because of its focus on the 'basic forms of aesthetic matter and the fundamental conditions of perception', as illustrated by installations that reveal sound's 'directional and immersive' qualities (2003: 67). He references Greenberg's modernist idea that each art is unique and irreducible, to suggest that neomodernist sound artists 'offer up the experience of sound-in-itself' and in doing so take a similar position in relation to the culture industry:

In eschewing mass-media content, the genre proposes a more radical exploration of the formal conditions of the medium itself. Against the anaesthetic assault of daily life, it reclaims a basic function of art: the affirmation and extension of pure sensation. (Cox, 2003: 67)

This description points to the phenomenological interests of sound artists to be explored further in the following chapter, and implicates an essentialist leaning in a neomodernist approach to sound art that harks back to largely rejected ideals of modernism.

For this very reason, Kim-Cohen later heavily criticises the 'sound-in-itself' tendency in the sonic arts, arguing that this phenomenological approach to sound, which he identifies in the work of major sound artists such as Lopez and Christina Kubisch, ignores the discourse that exists around the senses (Kim-Cohen, 2009: 8-22; 123-128; 109-119; 159-163). He instead advocates a more postmodern approach, described as 'non-cochlear', which acknowledges conceptual developments in the visual arts and approaches sound in this expanded situation. Kim-Cohen points out that a critical engagement with categories such as sound and music is by default non-cochlear, since it accounts for the textual and 'symbolic grid' of sound (2009: 87, 121-148). He argues that a shift from a sound-in-itself to a non-cochlear approach would vastly improve the discourse of the sonic arts (2009: 257-262). This implies that the discourse of sound art must move away from a modernist and towards a postmodern aesthetic in order to progress.

A neomodernist theory of sound art positions sound art within the wider history and theory of the visual arts, and also serves as a reminder that stylistic periods in the arts such as modernism and postmodernism are not necessarily univocal. Similar arguments have been made relating to the history of sound in the arts, which show that medium-specificity, despite its dominance, was not *the* only aesthetic of modernism. The likes of Kim-Cohen and Shaw-Miller demonstrate that many artists of the time, such as Duchamp and Cage and the associated movements of Dada and Fluxus, were operating within a very different aesthetic that influenced practices such as performance, minimalism, conceptualism and installation and eventually came to be known as postmodernist (Shaw-Miller, 2002; Kim-Cohen, 2009). Cox also notes the 'apparent exhaustion of the postmodernist project in art and theory' observed in the early 1990s by critic Hal Foster, who 'went on to sketch a complex historical picture in which modernism and postmodernism are engaged in a kind of temporal dance, where one or the other comes to the fore at different moments' (2003: 67). It is therefore possible that sound art, alongside the revival of 'avant-gardist conceptions of aesthetic innovation and revolutionary commitment' in critical theory (Cox, 2003: 67), presents a challenge to postmodernist thought.

For Cox, Treble was 'a rich and compelling exhibition that, in spite of its own premise, ultimately articulated a fine argument for the viability of sound art as a term and a practice', since it 'demonstrated that medium-specific and postmedium approaches to sound are not antagonists but allies' (2004b: 262). In seeming response to the calls for a dissolution of sound art, which are evident in the *Volume* and *Treble* exhibitions, he explicitly reiterates in his conclusion: 'contrary to claims of its exhaustion, sound art is a fitting label for a flourishing practice' (Cox, 2004b: 262). In a later article on the discourse of synaesthesia in sound art, which commends sound art's attempt to rebalance the dominance of the visual, Cox again mentions Volume and Treble as examples of an ambiguity that, in his opinion, animates sound art as an art form (2005: 238). These examples, considered in relation to the wider historical context of 'the medium', point to sound art's negotiation not only of the visual and auditory senses and traditions of visual art and music, but also of medium-specificity and the postmedium condition of the arts. From this perspective, an assertion that the best sound works 'amplify differences among media and sensory modalities' (Cox, 2005: 241) supports a phenomenological re-evaluation of the senses as well as a cultural re-evaluation of the medium-based distinction between the arts. These ideas will be explored further in the following chapters.

It is clear that much of the ambiguity and tension surrounding the establishment of sound art as a new artistic category – whether alongside drawing, sculpture, architecture, or the wider traditions of visual art and music – directly reflects the long and complex history and discourse of the arts, which is in itself a significant feature of the genre.

Conclusions

The concept of 'the medium' in the arts is difficult to pin down. It is used to describe the physical materials used by an artist to create a work, but also the human sense or mode designed to perceive these materials, such as sight or hearing. Its reference to general modes of communication like speech or writing led to its eventual adoption in the description of methods of mass communication such as radio, television and the internet. Sound art exposes these different ideas and their significance to the way in which the arts have developed and are understood.

It is in the work of media theorists, rather than musicologists or art historians, that the first significant theoretical engagement with sound can be found (Kim-Cohen, 2009: 91). One of the early protagonists, Marshall McLuhan, not only considered the auditory experience closer to the 'essence' of being than the visual experience (Kim-Cohen, 2009: 92-3), but also famously maintained that the characteristics of a medium were inseparable from its content. His ideas are seen as an epigraph to this chapter alongside those of modernist critic Clement Greenberg, who

championed art that interrogates its medium to the point at which form becomes content. The last epigraph illustrates that contemporary artist and sound art pioneer, Max Neuhaus, simultaneously referenced and rejected such ideas.

This account reveals that the source (and perhaps even some of the cause) of such derision was a major millennium exhibition, Volume: Bed of Sound, which raised a key debate about the existence of sound art that was later pursued and re-contextualised in the exhibition Treble. It has been shown that the overall curatorial aim of *Volume* largely reflected the concerns of sound art in providing a unique listening environment for visitors to experience a range of sound. However, its use of headphones and selection of historic and contemporary sound work from a range of contexts, including music, installation and film, were not representative of the genre. The controversial introduction to the exhibition, written by Neuhaus, added to the confusion about the exhibition's aims, and reinforced an uncertainty about the existence of sound art in relation to experimental music that has remained within the discourse. This issue was confronted by Treble and reconsidered in relation to the visual arts. By focusing on the influence of sound in the arts through drawing, sculpture and architecture, the exhibition illustrated the presence of sound as part of a general expansion of contemporary artistic practice, and questioned the existence of sound art alongside categories such as visual art. While Volume placed sound within a visual art context and raised questions about the category of sound art in relation to music, Treble therefore placed sound within the discourse of the visual arts to raise questions not only about sound art but also about the nature of contemporary art itself.

An investigation of these exhibitions draws attention to the postmodern situation of the arts in relation to its modernist, media-based, foundations and the interesting way in which sound art appears to negotiate this. Through the ideas of highly influential art critics such as Greenberg, Fried and Krauss, in conjunction with some key theorists of sound in the arts, it has been shown that sound art is associated with ideals from both modern and postmodern stylistic periods. This tension is seen by some critics as a strength of the genre, since the idea of the medium is fundamental to modernist as well as postmodernist aesthetics. It can also explain the degree of debate and ambiguity surrounding its existence. In fact, both of the exhibitions discussed in this chapter seem to communicate a paradoxical message in reinforcing the idea of sound art at the same time as renouncing it.

In a strange circularity of discourse, a reconstruction of the *Volume-Treble* debate can be found in the special sound art issue of *Art Review* from 2005. Here, the reprint of Neuhaus's essay in *Volume* is placed as a prologue to an article by SculptureCenter director Anthony Huberman on "The Sound of Space', which discusses a new generation of artists using sound in the late 1960s (Huberman; 2005: 54-59; Neuhaus, 2005b: 55; Figure 5.30). This is suggestive of a continuation

184



Page opening featuring title page of article by Huberman and prologue by Neuhaus. Photo: the author © ArtReview. Used with permission.

Figure 5.30 – ArtReview magazine article 'The Sound of Space', May 2005

of sound art's troubled existence within the artworld, in which there is a simultaneous adoption and rejection of the idea. Understanding the situation of sound art in relation to the historical development of the visual arts and its expansion and hybridisation of forms – whether as 'intermedia', 'multimedia' or 'new media' – therefore reveals much about the tensions and ambiguities characteristic of the artworld today. These tensions will be seen to loom large in the following chapter, which seeks to identify the characteristics of sound art itself.

Chapter 6

Sensual Territories: The Distinguishing Features of Sound Art

I think we need to question whether or not "Sound Art" constitutes a new art form. The first question, perhaps, is why we think we need a new name for these things which we already have very good names for. Is it because their collection reveals a previously unremarked commonality? (Max Neuhaus, in liner notes for *Volume: Bed of Sound*, 2000)

Sound Art [...] is not new in the sense of being a new stage in a long tradition, like serialism, for instance, but is new in the sense of being altogether a new art, based on sound but not specifically pitch, which is only one kind of sound.

(Arthur Berger, in Reflections of an American Composer, 2002)

Approaching sound art as a discrete category – after taking into account the roots and possibility of its definition that is challenged and yet affirmed by exhibitions - denotes the existence of certain distinguishing features. As suggested in earlier chapters, these features should not be seen as intrinsic to sound art, and will not necessarily apply to all works. They should nevertheless explain why a work tends to be identified as sound art as opposed to another artistic form. This chapter will focus on the definition of sound art itself and tease out some key assumptions within the discourse that revolve around a dominant idea of sound in space. After a brief consideration of sound, the first part of this chapter will focus on the idea of space to demonstrate that the definition of sound art is caught up in an institutional battle of territories. The second part of the chapter will return to, and expand upon, the idea of sound to show that the definition of sound art is caught up in an almost opposing phenomenological battle of the senses. It is perhaps unsurprising, given that the definitions of even the most enduring artistic traditions are regularly questioned and challenged, that the identity of sound art still appears to be very much under negotiation. By exploring a range of definitional ideas within its discourse, which are fraught with binaries and contradiction, this account hopes to reveal some of the fundamental concerns of sound art as a nascent form.

Territorial tensions: From space to place

Sound (as object)

It seems only logical that sound should be considered among the key characteristics of sound art. While this characteristic may be useful in defining sound art from the perspective of the visual arts, it is clearly not as convincing from the perspective of music, which is traditionally established as the art of sound. John Cage highlighted that the tradition of music is only one particular art of sound, although the influence of his work with silence also problematises a definition of sound art through sound. Firstly, it highlights the visual as an important aspect of the musical experience. From this vantage point, the definitional idea of sound might be turned on its head in order to account for 'extra-musical' or visual ideas often associated with sound art. Secondly, it focuses attention on sound as a concept. Douglas Kahn, who notes the possibility for sound to exist 'in myth, idea or implication' (1999: 3), therefore describes audio art as an 'absent practice' in which 'silence can have as much presence as anything' (1990: 309). A philosophical idea of presence through absence can also be found in the ideas of sound artist Christof Migone, whose History of Unsound Art - which references Cage's famous anecdote about hearing the sounds of his blood and nervous system within an anechoic chamber, and Kahn's addition of a third sound, that of his inner dialogue - describes sounds imagined and non-heard as a 'thinking art' of self-hearing (2003: 91). These examples show that sound art is not necessarily sonic, and that the definitional characteristic of sound could even be extended to silence in order to accommodate the philosophical and conceptual exploration of sound. Cage did neverthelesss conclude from his explorations that there is only sound, as there is no such thing as silence in the absolute sense. It will be seen through the course of this discussion that these kinds of permutations and contradictions regularly arise within the definitional discourse of sound art.

Various figures have tried to negotiate these issues in order to demarcate an area for sound art. Sound artist Christopher DeLaurenti asserts, for example, that 'pieces that imply sound [...] are sculpture, not sound art. But physical pieces that modify or mute sound [...] are certainly sound art' (2006: n.p.). He later describes the modified and positioned musical instruments of Christian Marclay as 'awkward', perhaps because they aggravate his particular criteria of what constitutes sound art. A similar distinction is made by New York curator Anthony Huberman:

In reference to the mentions some have made about visual artists working with music, this, I think, is the source of a lot of confusion in the art world, with mistaking work that makes use of musical iconography (vinyl records, notes, sheet music, images of musicians, instruments, etc.) for sound art. (Huberman, 2004: n.p.)

These comments point not only to the uncertainty surrounding the definition of sound art but also to the development of common understandings. Exhibitions of sound art discussed in previous chapters nevertheless feature a range of silent works, from obsolete technologies providing visual echoes of music to installations producing sonic frequencies so extreme as to render sound inaudible.

Defining sound art through sound is not only problematic in relation to music, but also runs into difficulty within the visual arts. Christoph Cox, for example, observes that 'there is

interesting and important work being done with sound in multimedia contexts' and concludes that 'it is perhaps silly to call such work "sound art" simply because it employs sound' (2004a: n.p.). The fact that 'sound has, relatively recently, become just another artist's tool' (Cox, 2004a: n.p.) has also raised questions as to how sound art can be distinguished from other visual forms using sound, such as installation, video and performance. It is likely this situation has led to suggestions that the *degree* of sound in a work is significant in its identification as sound art, as is apparent from the comments of noise theorist Paul Hegarty: 'the use of sound in art is relatively recent, certainly in the form of sound art where the object consists primarily of sound [...] although sound has featured regularly as part of "multimedia" work' (2005: n.p.). For others, the presence of sound, no matter how significant, is not enough to identify something as sound art. DeLaurenti, for example, suggests that 'sound artists can simply attach sound to a sculpture (or a piece of paper, a glass of water) and call it sound art, though to succeed, the sonic attachment must also be effective and essential to the work' (2006: n.p.). These comments look to the quality rather than quantity of sound. In DeLaurenti's opinion, artists struggle to integrate sound and visual art, which he illustrates through 'Four Bugbears': 'the soundtrack loop; sound relegated to incidental accompaniment; sound presented in a poor acoustic situation; and sound that just doesn't hang together as a coherent piece' (DeLaurenti, 2006: n.p.). These observations allude to phenomenological concerns regarding the relationship between sound and vision to be considered later. They nevertheless also indicate that the definitional idea of sound is problematic for the purposes of positioning sound art independently within the visual arts. While the introduction of substantive ideas such as quantity and quality might appear to resolve some of the issues, the subjective nature of these ideas is highly problematic for the purposes of definition, and leads to further questions around what makes a sound work successful or ineffective and the point at which sound becomes crucial to a work's existence.

It is therefore interesting to observe that a 'purist' view of sound art has also emerged, which upholds that 'true' works of sound art must *only* be of sound. Artist Steve Roden, in defence of his own practice that includes sound installation and sculpture, affirms this perspective:

There are some incredible artists, contemporary and historical, who use sound alone in a space and simply slay me. But I do have a problem with the camps that seem to develop through the idea that sound art must be a room with sound alone. I sat at a table with a group of card-carrying sound artists a few years ago where everyone was bitching about Documenta because there were works with sound but no "real" sound art. I don't think that having a visual element necessarily dilutes the audio (nor do I think that every sound work necessarily needs visuals). It depends upon the piece of course. (Roden, 2004: n.p.)

These comments illustrate the politics of definition in action. Cox also questions why sound art should be focused on sound, when 'no one would worry about the fact that a drawing or a painting is solely visual' (2004a: n.p.). Although this ocularcentric view of visual art traditions is just as questionable in relation to postmodernist activity, these comments again point to phenomenological concerns dominating the discourse of sound art, which will be considered in the second part of this chapter. An interesting response to the protestations by Roden and Cox is provided by art historian Brandon W. Joseph:

My feeling is that things will become even more varied and mixed in the manner that Steve Roden mentioned early on, and that a classic, "sound only" sound art of the type Christoph [Cox] mentions will be one pole – perhaps a very important pole – against which continuing practices will be judged. It may become a touchstone for the larger field of sound art in somewhat the same manner as Minimalism has for contemporary art. (Joseph, 2004: n.p.)

These comments resonate with ideas about categorisation discussed in previous chapters, in which a 'sound only' work might be regarded as the 'prototypical' or 'classic' example of sound art within a wider variety of examples. This debate also indicates that the background of the person defining sound art is significant to the process; someone defining sound art from the perspective of music will perceive different and sometimes opposing issues to someone defining sound art through sound has its limitations, it is clearly shaping the ways in which works are perceived and evaluated. A different interpretation of this definitional idea will be considered later in this chapter. More immediately, attention will turn to another popular idea that presents a similar set of issues.

Space

The idea of space can possibly address some of the limitations in using sound to distinguish sound art from music. Artist Stephen Vitiello, for example, who is perhaps best known for his *World Trade Center Recordings* (1999), which he produced during an artist residency by attaching microphones to the windows of his studio on the ninety-first floor, explains:

I always come back to this definition, which works for me: Music can be defined by sound in time, while sound art may be defined by sound in space. I realize that this doesn't work for everyone or all genres or subgenres; but personally, it has connected to my own definition of what I do and how I think about "sound art". (Vitiello, 2004: n.p.)

This account places the idea of space in opposition to that of time, which in the previous chapter is shown to be part of an historical distinction between art and music that has endured the test of time. The idea of space therefore not only differentiates sound art from music but also situates it more readily within the domain of the visual arts. Bernhard Leitner, widely considered one of the first sound artists, and known for his installations of sound in space, also notes the importance of the spatial in his work:

What I have always emphasised is that the central issue of my work is space and not so much sound [...]. I took from the world of sound, from temporal art, the material, that is, sound and from the more static and sculptural art its traditional concepts of space. And it was clear to me that if I mix the two together the result is a completely new vocabulary that was not present before. (Leitner, 2002: 82)

These comments suggest that the concept of time from music might meet the concept of space from the visual arts through sound. In her publication *The Sound of Painting*, curator Karin von Maur argues that the interplay between music and visual art caused a temporalisation of painting and spatialisation of music that resulted in some pivotal moments of modernity for both fields (1999: 121). Might sound art, then, which continues the spatio-temporal convergence of these artistic traditions, represent a pivotal moment for postmodernity?

Due to the inevitable temporal experience of sound art, Cox describes the time/space definitional idea as an 'idiosyncratic and dubious distinction' (2007: 128). In earlier response to Vitiello's description, he remarks:

In many respects, Stephen's distinction is helpful [...]. But I don't fully endorse the distinction. I think that the discourse around sound art has focused too exclusively on space [...] sound is irreducibly temporal. And I think that the music/sound, time/space parallelisms can work to occlude the profound temporal experience of sound installations. (Cox, 2004a: n.p.)

This observation highlights the temporal experience of sound art that is excluded in its discourse based on the time/space binary. Huberman raises his own reservations: 'I wouldn't want to let the experience of sound-through-time somehow not "belong" to sound art, and only to music or composition'. He cites the sound walks of Janet Cardiff and other artists who 'take the very concept of sound extending itself across time as their subject' (2004: n.p.). It could similarly be argued that the issue of space and the experience of sound-through-space can also be significant to music (such as in the sound diffusion techniques that have developed out of the electroacoustic music tradition). Cox therefore speculates that 'perhaps the turn to sound has something to do with some new relationship with time and space?' (2004a: n.p.).

Cox proposes an alternative definitional idea for sound art that foregrounds the experience of time rather than space. Referring to the ideas of philosopher Henri Bergson, who sets forth a 'primordial' relationship to time before it was measured by the clock, Cox identifies a 'relationship between the "nonpulsed time" of sound art and the "pulsed time" of musical composition (to draw on Deleuze's extension of Bergson)' (2004a: n.p.). He therefore presents a different binary distinction between music and sound art, one of pulsed/non-pulsed time, and refers to this 'non-pulsed' temporal characteristic in sound art as 'duration'. It is interesting that Vitiello, who subscribes to the spatial idea of sound art that Cox is questioning, describes a similar open-ended experience of time in relation to his own practice:

The concept of time in Sound Art is more open ended. I tend to think of the installation work that I do as Sound Art, while the concerts and CDs as music. These are not absolutes and many of the same interests cross over, but I feel that the point of an installation is to create an environment. A visitor might experience it for a few seconds, minutes or hours and hopefully come away with a memorable experience. The music I make for CDs tends to have more of a conscious structure: a beginning, middle and an end. (Vitiello, in Aldrich, 2003: n.p.)

This example serves to highlight the paradoxical (and, perhaps, oversimplified) nature of binaries in which, for example, the prevailing definition of space for sound art is by default also about time. The discussion of one automatically implicates the other, and the elements of space and time will both evidently feature in experiences of music, visual art and sound art. It is therefore not surprising that the idea of non-pulsed time that Cox identifies in relation to sound art can also be found within branches of art music, such as La Monte Young's experimentation with sustained notes and tones that inspired minimalist techniques such as drone.

In an article by Lílian Campesato, featured in the special sound art issue of *Organised Sound* (2009), both space and time are noted as 'fundamental aspects for the study of sound art' and the development of its unique discourse (2009: 27). Campesato observes that these characteristics have resulted in a tendency for sound art to refer to contextual matters, as well as the potential of this aesthetic to 'promote an interchange among distinctive discourses and contribute to enlarge the frontiers of music as well as other art forms' (2009: 36). The significance of the binary opposition of space and time in the definitional discourse of sound art should not be overlooked, however. It will be shown that this leads to particular tendencies towards the contextual in sound art that are integral to its distinction.

Place

The fact that space is used in the discourse to distinguish sound art from music and situate it within the visual arts encourages a reconsideration of this prevailing definitional idea. The time/space binary, which results from a historical distinction between music and visual art explored in the previous chapter, seems to translate into very practical differences between these two institutional contexts. Discussing his interpretation of space in sound art, Vitiello explains: 'for me that really connected to creating open-ended work [...] and that has really lasted as music versus installation – installation being sound art, again for my personal reference' (Vitiello, in

192

Nordschow, 2004: n.p.). He also states that thinking about the interaction of sound with space led him to explore 'sound as a physical medium rather than a temporal one' (Vitiello, 2004: n.p.). These comments suggest that the idea of space in sound art is closely connected with the presentational formats of the visual arts.

The format of installation clearly presents different opportunities to a concert situation for artists to investigate sound, since it can address the integral relationship between sound and the space in which it is situated. Cox, for example, observes that 'relatively few works of sound art have to do with sound alone. After all, it's a curious property of sound that it is powerfully shaped by the space it inhabits. Hence, sound has always been multi-media insofar as it is intimately bound up with architecture' (2004a: n.p.). The term 'sound installation' was coined by artist Max Neuhaus in relation to his works that were situated in site-specific contexts outside of the gallery, however. It has been said that, in Neuhaus's opinion, 'Cage didn't go far enough, by having the idea behind 4'33" remain inside the concert hall' (Huberman, 2004: n.p.). In the work 'Listen' (1966), for example, Neuhaus stamped this title onto the hands of a coachload of passengers, and then took them around the sights, or more correctly sounds, of New York. While it is more likely that this work would now be referred to as a 'sound walk' or event or performance, rather than installation, it illustrates a conceptual current of art concerned with the issue of sound and space. Artist Christina Kubisch also describes the 'early days', when works arose outside of the gallery not only to subvert the system but also because they could not be accommodated by it, and identifies the issue of site-specificity as central to sound art (2006: n.p.).

In an article on 'The Sound of Space', Huberman observes that 'in the late 1960s, a new generation of artists shifted our attention from the what to the where – from the art object to the physical space the object occupies' (2005: 54). He explains that, as artists became more aware of space, their work became more conceptual in content, and sound as a material provided a multitude of possibilities. Elsewhere, Huberman describes this as 'a time when art began to be not only outside but about the white-cube space, about a self-awareness of site, and the beginnings of artists thinking about the site-specific' (Huberman, 2004: n.p.).

This concept of 'site' reveals an awareness of space in an institutional sense. It is evident from the way in which discussions of site-specific sound art are comfortably situated within art journals (Bandt, 2006: 353) that artists challenging the institution of the visual arts are still operating within it. These artistic developments in history not only enabled sound art to appear *outside* the gallery but may have also provided the conditions for it to appear *within*. Sound artist Nate Aldrich – who asserts that 'as music had previously opened up to all sounds, the art world now opens up to all disciplines' – even speculates that the site-specific trend provided an opportunity for music and video to fill a void left in the gallery (2003: n.p.). It is perhaps ironic that the dematerialised object and site-specificity resulting from conceptualism seems to come into its own

193

in the form of gallery installation. Despite Neuhaus's uncertainty about sound art, evident in the epigraph to this chapter, his concept of the 'sound installation' and ideas about space in relation to sound are fundamental to its definition. The definitional feature of 'space' in sound art might therefore also be viewed as a conceptual awareness of institutional contexts, or 'site'.

The definitional agency of institutional contexts is an issue that has been raised within the discourse of sound art. It leads Cox, for example, to ask 'are there relevant differences between music and sound art? Does the gallery or museum setting itself transform the one into the other?' (2004a: n.p.). While many are sceptical of a definition that relies completely on context – as Kubisch exclaims, 'you can't just put speakers in a gallery and call it sound art' (2006: n.p) – many of the discussions surrounding the space/time distinction of sound art from music seem to refer to the differing presentational formats of visual art and music. When pushed for a definition, composer and installation artist Alvin Lucier in fact explicitly suggests: I suppose that sound installations are closer to the definition of Sound Art and my performance works, written mostly for performers of conventional instruments, are closer to what is commonly thought of as music' (Lucier, in Aldrich, 2003: n.p.). Composer and installation artist Annea Lockwood also notes that she finds the sound art term useful to apply to pieces she intends to be presented in galleries and museums, places where sound is considered a medium rather than just for performance (Lockwood, in Aldrich, 2003: n.p). These dualisms of installation and performance, or gallery and concert hall, might therefore be seen as further permutations of the space and time binary used to distinguish sound art from music.

Different institutional contexts produce their own practical and theoretical possibilities and constraints. The traditions of visual art and music have their own histories, modes of presentation and behavioural codes, which are apparent even in the way in which their public is described, as visitor or audience. In an installation setting, for example, it is expected that a visitor will dip in and out of a work as well as move around. This is also possible, although less conventional, in a performance setting, where a work customarily begins and ends in front of a seated audience. Other features, such as recorded sound, immersion and interaction, also result from the practical circumstances in which sound art tends to be presented and therefore experienced. In short, many of the definitional features of sound art result from an association with the physical but also institutional space of the visual artworld.

Reconceiving the key definitional feature in sound art of space as place is another useful way in which to represent this move away from a literal interpretation of physical space and towards a metaphorical interpretation relating to institutional contexts. It illustrates a certain complexity implicit within the discourse of sound art, whereby definitional features represent an association with the institutional framework of the visual arts in contrast to music. The binary of space versus time can be seen as the archetype of this position, although a range of ideas noted in the discourse – gallery versus concert hall, concert versus exhibition, performance versus installation, or passive versus active – are equally applicable here. The definitional idea of space might therefore be seen as another iteration of the music versus sound art debate seen in previous chapters of this study. The concept of place illustrates a general tendency to situate sound art away from or within existing artistic traditions by way of contrast or analogy, which will be seen again below in a different context. It also symbolises a shift from the poetic to the political, in which sound art is defined in relation to existing social institutions fundamental to the way in which it is produced and consumed. The two most dominant definitional ideas in the discourse of sound art – sound and space – therefore belong to a definitional strategy that resorts to the tactic of disciplinary differentiation, in an act one might call 'territorialism'.

Territorialism in theory

The idea of space features heavily in theoretical accounts of sound art. In his account of *Sound Art*, for example, Alan Licht yields to the time/space dichotomy and its many guises, such as installation, exhibition and visual art as opposed to concert, performance and music (2007: 13-14). At one point, he specifies:

For the purposes of this study, we can define sound art in three categories:

1. An installed sound environment that is defined by the space (and/or acoustic space) rather than the time and can be exhibited as a visual artwork would be.

2. A visual artwork that also has a sound producing function, such as sound sculpture.

3. Sound by visual artists that serves as an extension of the artist's particular aesthetic, generally expressed in other media. (Licht, 2007: 16-17, emphasis added)

This description clearly affiliates sound art to the world of the visual arts and all of its institutional habits, or what Bourdieu might refer to as *habitus* (1993: 71). There are certain idiosyncrasies in Licht's interpretation of the time and space idea. He only seems to endorse a literal understanding of sculpture in relation to sound art, for example, and not more abstract interpretations of the sound object (as inspired by Pierre Schaeffer's *musique concrete*, see Chapter 2). Licht also notes that not all installation work with sound is automatically sound art since 'it doesn't always escape music's identity as a time-based art' (2007: 16). He also explicitly observes a 'focus on sound itself and its environment' resulting from recording technologies and their dislocation of sound, so that 'the attunement to a space becomes a lost art looking to be discovered' (Licht, 2007: 47). For Licht, then, sound art must either be visual or 'exhibit-able', or focused on issues of space rather than time. These clarifications also reveal an attempt to associate sound art with visual art traditions. Licht's definition of sound art is therefore as much about place as it is about space.

Space is also presented as the dominant and overarching thread to Brandon LaBelle's account of sound art in *Background Noise*:

It is my view that sound's relational condition can be traced through modes of spatiality, for sound and space in particular have a dynamic relationship. This no doubt stands at the core of the very practice of sound art – the activation of the existing relation between sound and space. It is my intent to contribute to this understanding by supplying the very equation of sound and space with degrees of complexity, detail and argument. (LaBelle, 2006a: ix)

While LaBelle does not explicitly broach the issue of definition in his book, he is able to provide a nuanced account of sound art through a looser interpretation of the relationship between sound and space focused on the *relational* qualities of sound. This enlargement of the concept of space, which places 'the condition of sound' at the centre of sound art practice, leads to a reflection upon the sociality of sound and the act of listening. LaBelle therefore evokes a different set of issues and ideas to those commonly seen in relation to the time/space interpretation, and in fact subscribes to another definitional idea within the discourse of sound art to be explored shortly.

In an interview following the publication of his study, LaBelle presents a more explicit definition that seems to submit to the more 'classic' territorial definition of sound art:

To say that sound art is the use of sound within spatial environments that are more aligned with or involved in a visual arts culture, and that music, in contrast, is concerned with forms of composition and their relationship to structures, temporal presentations, and media formats, such as CDs, is to maybe edge up against an initial distinction. (LaBelle, in Sheridan, 2006: n.p.)

LaBelle relates this idea in a cautionary manner, suggesting a reluctance to portray sound art as straightforwardly exclusive from music. He goes on to explain that the relationship between sound art and music is 'not so much a separation, but a conversation that is both a meeting as well as tension' (LaBelle, in Sheridan, 2006: n.p.). He also emphasises 'the messiness or irregularity of the culture' which means that 'such definitions inevitably run up against their own contradictions, discrepancies and tensions' (LaBelle, in Sheridan, 2006: n.p.). Although these ideas are not explicit in LaBelle's study, his afterword is extremely insightful, and points to the idea of territorialism within the discourse of sound art suggested here.

It might also be argued that the idea of space as place is implicit within LaBelle's study through its very trajectory, which begins in music and moves through to the visual arts, installation, environmental works and the internet. As well as positioning installation at the centre of his study, LaBelle explicitly remarks that sound art 'finds definition' with sound installation by 'demarcating itself from the legacy of the experimental music and entering into a more thorough conversation with the visual arts' (2006a: xiv). LaBelle's claim that sound art becomes a 'unique and identifiable practice' through installation certainly suggests the important role of this institution for the definition of sound art (2006a: 151).

In a review of LaBelle and Licht's publications, Cox complains that 'both books too readily accept Neuhaus's own maxim that while music is a temporal art, sound art is a spatial one' (2007: 128). These publications nevertheless reinforce how fundamental and also how complex the issues of sound and space are to the identity of sound art. In addition, they indicate a range of other tensions related to the territories of music and the visual arts that are worth further exploration.

Sensorial tensions: From sound to reality

Sound (as subject)

By approaching the definitional characteristic of sound as concept instead of material, a whole range of additional issues and ideas significant to the definitional discourse of sound art can potentially be addressed. LaBelle, for example, in an article preceding his book, explicitly suggests that 'to answer the question "what is sound art" I would like to propose that sound art is art about sound; it is art that both uses sound as its medium and addresses sound as its subject of concern' (2003: 67). Although Labelle later seems to subscribe to a definitional idea of space and place, these earlier thoughts are also encapsulated in his 'relational' interpretation of the idea (2006a: ix). They are also evident in exhibitions of sound art discussed previously, such as Sonic Boom, which featured works using sound when it was 'an idea within a bigger idea' or central to a conceptual scheme (see Chapter 4). This reconfiguration of the definitional feature of sound appears to provide a means of differentiating sound art not only from music but also from other forms in the visual arts that use sound, thus avoiding the territorial debates witnessed earlier. It does not, however, come without its concerns. One curator, for example, complains that if sound art must include sound as both the subject and object of a work, then this definition 'excludes audio works that utilise sound as a methodology rather than as an absolute' (Allen, 2006: n.p.). That sound art might not necessarily include sound has already been noted in earlier configurations of its definitional discourse, when sound is the object, and it also follows that a work defined as sound art might not necessarily be about sound. To suggest that sound art takes sound as its subject also broaches the issue of formalism, which is shown in the previous chapter to be significant in the history of the arts, and worth further consideration here.

Art historian Kevin Concannon observes that 'the very idea of an Audio Art implies a genre defined foremost by formalist concerns' (1990: 161). A fundamental ideal of modernism was that works of art must be valued primarily for their formal properties and that the most valuable works were those which placed primary emphasis on their formal properties (Krukowski, 2008:

197

n.p.). The subsequent rejection of these essentialist ideals is nevertheless among the reasons why artist Max Neuhaus questions the emergence of sound art, remarking that 'in art, the medium is *not often* the message' (2000: n.p., emphasis added). Here, Neuhaus plays on the famous phrase by media theorist Marshall McLuhan, and it is evident that in the wake of new media and postmodernity, sound art, like much of contemporary visual art, also uses a range of media and addresses a diversity of subjects. At the same time, the historic formalist divisions of the arts based around the senses continue to influence the way in which the artworld operates and values works of art. It may therefore be the case that McLuhan's phrase is more relevant to the case of sound art than perhaps Neuhaus would like to admit. It might even be argued that the emergence of sound art as a category exposes the formalist basis of contemporary art (see also Chapter 5).

Artist Randall Packer suggests that 'music composition is more formalist in nature while sound art often involves real subject matter as with other art forms in the visual arts [...] sound art addresses issues that lie outside of the medium itself while music composition is so often selfreferential formally speaking' (Garry, 2002: n.p.). This comment suggests that, because sound art *does* often reference subjects other than sound, it is less formalist than music. Composer John Kennedy also observes that 'there are probably many more visual artists than composers who conceive their work on [political, environmental, and economic] terms' (2004: n.p.). Envious of the critical discourse of the visual arts, he adds, 'in the music world we mostly read critiques of technique [...] in the music world, or so my friend suggests, technique reigns as content' (Kennedy, 2004: n.p.). These reflections again point to the formalist nature of music, and highlight interesting differences between the worlds of music and the visual arts in their approach to form, content and criticism.

Due to its references to the medium on the one hand, and its diversity of subject matters, materials and techniques on the other, sound art appears to be able to straddle these different discourses of music and visual art. Sound artist Marina Rosenfeld goes as far as to suggest that the critical approach to a sound work might also dictate whether or not it is perceived as sound art: 'Perhaps sound art can be distinct from music only as long as the content of the sound is taken into account (not a very Cagean approach, I admit)' (2004: n.p.). Citing the example of Janet Cardiff, she notes that these works 'could easily be considered using musical criteria; but it would be silly to ignore the artist's obvious other interests' (Rosenfeld, 2004: n.p.). This indicates that different critical approaches might be applied to a work of sound art, from the tradition of music or visual art, to produce very different readings. Questions remain, however, around whether either approach is appropriate for sound art. It could be that sound art, in straddling these different discourses, has the potential to develop its own critical approach.

In his *History of Sound in the Arts*, Douglas Kahn notes that most accounts of sound conceal the fact that 'sounds are made, heard, imagined, and thought by humans' (1999: 4). His aim to

reinstate 'the social in sound – the political, poetical, and ecological' (Kahn, 1999: 4), therefore follows a critical approach that is arguably more familiar to the visual arts than art music historically. Although Kahn does not focus on delineating an art of sound in this piece of writing, an earlier piece that proposes an audio art comments upon the issue formalism:

Before proceeding, let me dispel an immediate objection. What follows is not another modernist call for a media art based upon a perceived set of the medium's discrete properties. Well, I take that back. It is, that is to the extent that the essential characteristic of phonography is to replicate the entire world of sound, including those sounds arising from other art forms. Thus any essentialism is dispersed and becomes contained in the din. It's most at home elsewhere, in transit and transformation. (Kahn, 1990: 302)

Kahn therefore defends the medium-specificity of audio art on the grounds that it is the particular characteristics connected to the medium that define the art more than just the medium itself. He also compares the situation of phonography with that of photography, another medium-specific form that has eventually become recognised within the visual artworld (Kahn, 1990: 301).

LaBelle is also aware of the formalist implications for sound art: 'if we follow that sound art is about sound, we can easily find ourselves in the domain of formalism, which concerns itself with the very materiality of its production, as both subject and object' (2003: 67). He warns that to limit sound art to a formalist vocabulary 'would be to overlook its ability to address what is outside its own internal properties' (LaBelle, 2003: 67). It will nevertheless be shown how sound art, in focusing on the subject of its own materiality, is able to explore a multitude of conceptual issues from the social to the philosophical.

Aurality

The questioning of distinctions between music, sound and noise by early explorers of sound in the arts not only enable sound to become artistic material in its own right but also draw attention to the way in which sound is automatically bound up with issues of perception. Through his 'silent' musical concert, for example, John Cage explored the way in which the human brain discerns which sounds are worthy of attention and appreciation and those normally filtered out and ignored. Pierre Schaeffer observed and attempted to eradicate the wider cultural associations normally brought to the listening experience in his compositional technique. Composer and environmentalist R. Murray Schafer was another important figure interested in how certain sounds might be unhealthy and 'pollute' the environment. These are just some examples of the ways in which sound as subject can point to the 'political, poetical, and ecological', as Kahn suggests, and also lay the foundations for practices such as sound art.

The centrality of listening in sound art can be observed in a range of early surveys. Artist Mark Garry, for example, after conducting interviews to determine shared motivations between sound artists, concludes that the notion of critical listening foregrounded by Cage's 4'33" is 'a crucial element in contemporary sound art' (2002: n.p.). Aldrich, after conducting a similar exercise, also concludes that 'listening to (and for) all sounds as potential material for artistic construction heightens the sense that beauty is observable in the day-to-day world; aesthetic material is always around you, all you have to do is notice' (2003: n.p.). There are many sound artists who explicitly place listening at the centre of their aesthetic. Roden, for example, who is perhaps best-known for a body of work that amplifies very quiet and often unheard sounds, explains that, 'for me, it is reduced down to the idea that sound art or sound works are about the activity of listening - or better, listening as an activity' (2004: n.p.). In a later article, entitled 'Active Listening', he observes that 'sound art has the potential to expand a person's perception of a space (or perhaps even the world) through the experience of listening - and focused listening heightens the experience - but isn't this also what all great music does' (Roden, 2005: n.p.). This explanation demonstrates how sound as a subject can connect to the interpretation of sound in space discussed above, although Roden uses this idea to discuss his dislike of such 'territorial' debates. He writes: 'It is a thin and somewhat fragmented line that separates sound and music - and lately I have begun to question why people are so bent upon separating the two, as opposed to embracing the territory and languages they might share' (Roden, 2005: n.p.). In many ways, however, the debates surrounding the difference between sound art and music might be seen as a continuation of issues raised by Cage, Schaeffer and Schafer.

The idea of active listening also bears some resemblance to Pauline Oliveros's theory of 'sonic awareness', described as 'the ability to consciously focus attention upon environmental and musical sound [...] characterised by a continual alertness to sound and an inclination to be always listening' (Gunden, 1980: 409). Her compositional method – which involves actively making sound, imagining sound, listening to present sound, and remembering past sound – revolves around an aesthetic of 'Deep Listening'. This is also promoted by an institute founded by the artist, which runs a programme of annual listening retreats in Europe and America. That Oliveros's notion of sonic awareness has been compared to art critic and writer John Berger's concept of visual consciousness in *Ways of Seeing* (1972; Gunden, 1980: 409) indicates that the subject of aurality opens out onto wider issues of consciousness and sensory perception.

In one of the earliest recorded exhibitions specifically on the subject of sound art, curator William Hellermann explains that 'hearing is another form of seeing' (Hellermann, in Boros, 2012: 67). This early comparison indicates the potential significance of visuality in the discourse of sound art. In another brief survey attempting to find a 'common thread', for example, critic

200

Carrie Scott concludes that 'sound artists make the act of listening and seeing (or perceiving) a subject in their work' (Scott, 2006: n.p.). This leads her to ask:

While it's safe to say that sound art often has listening as its subject – it draws attention to the act of listening and to aurality – how is that experience made manifest? Do the visual and the audible have to be considered equal in the artist's mind, as is the case in Christian Marclay's work, in order for art to be considered "sound art"? Or, can the audio be subordinate to the visual, a scenario employed frequently in Harrell Fletcher's videos? (Scott, 2006: n.p.)

These questions point to ancient philosophical issues relating to the structures of human experience and consciousness addressed in the theory of sound in the arts.

The work of Schaeffer was founded on the idea of an 'acousmatic' mode of listening, inspired by Pythagoras, which aimed to rid sound of any visual associations. Theorists such as Michel Chion have also turned their attention the relationship between the auditory and visual senses in cinema (1994). This has in turn influenced the emergence of 'sound studies', which specifically address the significance and neglect of sound within the audio-visual and also wider sensory experience (Bull, 2006; 2013). As early as 1979, musicologist Joseph Smith also observes that visuality is inherent in language and thought, following a tendency since Aristotle to equate knowledge with sight, and argues for a reconsideration of the field through phenomenology.

This philosophical exploration of human experience through the phenomenon of sound, from the immediate and sensual quality of the material to its associated structures and states of consciousness, is also popular within the discourse of sound art, and might even be considered as central to its aesthetic. In one review, for example, Cox commends the way in which the German artists address both aurality and visuality. He describes how 'the integration of sound with visual art is often construed by this group as a holistic enterprise that balances the sensorium, producing an aesthetic experience "for eyes and ears" alike', adding that 'the resulting work can be elegant and powerful' (Cox, 2006: 89). In an earlier piece, Cox asserts that 'the emergence of sound art is important, it seems to me, precisely because it promises to give sound and aurality their due' (2004a: n.p.), and that 'any sound art worthy of the name affirms something of this effort to restore to sound its ontological and aesthetic value' (2005: 238). Roden also points to the work of artists Lucier and Kubisch because of the 'integral relationship between what you are seeing and what you are hearing' (2004: n.p.). He explains: 'Ultimately, I respond to works that have visuals that eventually fall away so that the audio is the thing one actually experiences and has the most intimate relationship with' (Roden, 2004: n.p.). These comments point to a popular phenomenological ideal underlying the discourse of sound art, which is concerned with the subjugation of aurality to vision within the hierarchy of the senses.

It becomes evident that sound art is concerned not only with listening but also with wider issues of perception. Its potential appeal to the entire sensorium is indicated by Scott's description of the artists she investigates: 'We become more attentive when experiencing their work – the sounds we heard, the smells encountered, the sights all seem to matter more' (2006: n.p.). This is also apparent in the examples considered in preceding chapters, where phenomenological interests were central to the exhibition aims and approaches of curators Toop and Sharp (see Chapters 4 and 5). Philosophical issues surrounding sound and vision nevertheless lead to a tendency within the discourse of sound art to favour the former over the latter. As the complaints of one critic indicate: 'sound art is nowadays almost completely subjugated to the sound-emitting visual object; it's not there until it is seen' (Andrews, 1996: n.p.). The phenomenological interests of sound art therefore appear to influence the evaluation of works and approach to the aesthetic.

Arguments suggesting that the most successful works of sound art are those which are able to draw attention to aurality over visuality are not dissimilar to the territorial arguments considered near the beginning of this chapter that refer to the quantity and quality of sound. In this instance, the judgements relate to sound as a concept rather than a material. That the feature of aurality finds definition in the discourse of sound art through its relationship with visuality presents a different battle, of the senses, which runs in opposition to the territorial account described earlier in its attempt to situate sound art *away* from the visual. The discourse of sound art therefore illustrates another definitional strategy resorting to the tactic of disciplinary differentiation, an act one might call 'sensorialism'.

Reality

The phenomenological concerns of sound art result in further sets of binaries seeking to reconsider perceptual experience in relation to visuality. These emphasise the sensorial nature of the definitional discourse of sound art, so that the idea of aurality might be extended to reality. There are, for example, a range of territorial and sensorial binaries within the discourse of sound art concerning issues of language. This is illustrated by a comment made by Lucier: 'I came upon "sound art" naturally, as I developed an intense interest in the natural characteristics of sound waves. I lost my appetite for appropriating, extending or transforming previous or contemporaneous musical languages for my own purposes' (Lucier, in Aldrich, 2003: n.p.). Here, Lucier seems to make a comparison between a focus on raw sound and sound within musical language. Lockwood also seems to refer to the rules and conventions of the Western musical system in her observation that 'I think maybe what's termed "sound art" doesn't intend connection to the linguistic' (Lockwood, in Aldrich, 2003: n.p.).

Artist Jody Elff explicitly asserts that the avoidance of linguistic traits such as repetition, structure and familiarity is what distinguishes sound art from music:

[Elff] differentiated his sound art work from music in a quite simple way. He said that music was based on repeated structures and patterns that very quickly became familiar to the listener, and that the listener ceased to engage with the individual sounds in the same way as soon as this familiarity became apparent. (Garry, 2002: n.p.)

This explanation in fact reveals a phenomenological interest in the difference between sound art and music and suggests that the presence of a familiar language can affect the way in which sounds are received by the listener.

The act of repetition can be seen to figure in deliberations of musical perception. German composer and conductor Hans Zender, for example, describes a similar need to create strategies of non-repetition in order to override what he calls 'deformations of perception' in music: 'Classical music, for example, has used memory – to put it in very simple terms – in the sense that, through the frequent repetition of identical or similar forms, it has developed a kind of object-like presence in the process of form' (Zender, in Schulz, 2002a: 14). This takes ideas of formalism to a whole new level by suggesting that music becomes palpable, like a sculptural object, not through sound's physical presence but through its presence within the mind. Bernd Schulz considers the repercussions of Zender's approach in relation to sound art: 'This would mean the opposite of memory, "oblivion", is in fact required in the act of formation to move the unique experience of "now" into the limelight of perception' (Schulz, 2002a: 14). This strategy is in fact seen in the work of John Cage and related contemporary music techniques such as indeterminacy and free improvisation.

For Elff, the avoidance of a language is achieved through the use of 'generative' processes: 'By using a computer, I can randomly alter the nature and occurrence of the sounds so that the work is constantly transforming' (Elff, in Garry, 2002: n.p.). Despite subscribing to a definitional idea of 'place' to distinguish between sound art and music – 'I think one of the simplest and most easily definable distinctions is the context in which the work is presented' – Elff cannot help but note that the work of certain free improvisers are 'much closer in spirit' to sound art than the 'carefully crafted recordings that repeat over and over' presented in gallery and museum spaces that feel more like a musical composition (Elff, in Garry, 2002: n.p.). These comments point to another potential layer of definitional binaries between music and sound art, whether language/anti-linguistic or repetition/non-repetition or even memory/oblivion.

It is therefore interesting that repetition also appears as a characteristic within the definitional discourse of sound art. Licht, for example, identifies a 'transformative' element to sound art due

to its 'investigation of extended time duration and repetition' (2007: 121). This idea is also suggested in Lockwood's descriptions of her own practice:

I choose how long to let a particular segment/sound run; I base that on how complex its texture is and a rough estimate of how long a listener is likely to remain engaged by it. It's important to me that a listener be able to become absorbed by a sound, to really 'enter' it, which takes time. (Lockwood, in Aldrich, 2003: n.p.)

A connection between duration and memory is also suggested by Huberman:

There is also something about the accumulation of sound (over time) that can inform the art of sound in interesting ways. Sound functioning like dust: adding itself on top of itself layer by layer, over time. Memory, I suppose, is what I'm getting at - something that is very linked to time and something that is very relevant to sound art. (Huberman, 2004: n.p.)

Just as the idea of space still relies on the temporal idea of duration, this particular description seems to draw upon ideas of duration, repetition and memory to show that sound art might be reliant on the deformations of perception that Zender wishes to avoid. It suggests that 'oblivion' is perhaps too extreme a condition for any artistic practice; even if it rejects the traditional language of music, sound art is still engaging with human consciousness and therefore memory.

Noise theorist Paul Hegarty compares the distinction between music and sound art with a philosophical distinction in Western aesthetics between order versus nature that was originally proposed in relation to beauty by philosophers Georg Hegel and Jean-Jacques Rousseau. Hegarty argues:

Sound art has perhaps even overdone this Rousseauian belief, and if it is to be radical, offering genuinely new ideas about sound and its exploitation, sound artists need to be aware of the history of formal experimentation that has existed in avant-garde music, whether it be John Cage, industrial music, free jazz, experimental rock. Only then can it even become a modernist, let alone a postmodernist, art. We must not imagine that to use sound is inherently interesting, let alone experimental or new, any more than paint. (Hegarty, 2005: n.p.)

While this seems to return to the language/anti-linguistic binary used to distinguish music and sound art, Hegarty's comparison points to the importance of identifying and then interrogating such binaries in order for sound art to critically develop. It also highlights the way in which aesthetic ideals in sound art tend to draw upon established philosophical debates about human experience. The definitional idea that sound art escapes musical language is, ultimately, another variant of the prevalent idea that sound escapes language. Bound up in phenomenological ideals of aurality, that consider language and knowledge as rooted in the visual, this issue opens out
onto broader philosophical debates about reality, which are played out in key theoretical accounts of sound art.

Sensorialism in theory

In his *History of Sound in the Arts*, Kahn conveys a sense of dissatisfaction with existing scholarly approaches to sound in the arts. Reflecting on the reasons why music did not traditionally address the elements of a musical work outside its own language, he writes:

Sound inhabits its own time and dissipates quickly. Its life is too brief and ephemeral to attract attention, let alone occupy the tangible duration favoured by methods of research. Only recently in historical terms have there existed the conceptual and technological techniques available to sustain a full range of sounds outside the unstable environs of their own time. (Kahn, 1999: 5)

This implies that sound has escaped academic attention due to its ephemerality, although the introduction of recording technologies has somewhat remedied the situation. Kahn therefore describes his aims to 'counter long-standing habits of imagining that sounds transcend or escape meaning or that sounds elude sociality' (1999: 4). He explains: 'to hear past the historical insignificance assigned to sounds, we need to hear more than the sonic or phonic content. We need to know where they might touch the ground, momentarily perhaps, even as they dissipate in the air' (Kahn, 1999: 4). It appears that, for Kahn, these locations might be noise, water and meat, or the human body. His aims to reinstate the social in sound are clearly bound up in his particular interpretation of sound: 'by *sound* I mean *sounds, voices and aurality*' (Kahn, 1999: 3), and his concern with phenomenological issues can be seen in his description of the way in which 'visuality overwhelms aurality in the cultural balance of the senses' (Kahn, 1999: 158). Much of Kahn's history attempts to show that 'Cage set out to tilt the balance in favour of the ear, and many people have heard the world differently because of his efforts' (1999: 158).

In his theorisation of sound art several years later, LaBelle in many ways continues along the path laid out by Kahn, exploring the social, political and embodied nature of sound through the ideas of space and 'relationality' (2006a). His particular interest in how sound occurs among bodies and in listening as a form of public participation therefore not only looks at conditions of social space and behaviour (or place) but also at the condition of aurality. He explains: 'From questions of orality and audition, and aesthetics based on technologies of interaction, to soundscapes, social habits of listening, and the musicality found in urban environments, sound art promotes consciousness of the often *overlooked and underheard*' (LaBelle, 2006a: 295, emphasis added). In a footnote, LaBelle observes that 'a phenomenology of perception is taken as an overarching guiding principle for aesthetics' for much German sound art (2006a: 265). This

observation might be extended to his own study as well as the general discourse of sound art through the foregrounding of aurality.

Among the cursory place-based definitions in Alan Licht's account of sound art are some flippant comments that also seem to implicate issues of aurality. From the outset, he remarks that sound art, unlike music, 'addresses a basic human craving for sound' (Licht, 2007: 16), and this idea is echoed in his concluding remarks:

Music speaks to a listener as a human being, with all of the complexity that entails, but sound art, unless it's employing speech, speaks to the listener as a living denizen of the planet, reacting to sound and environment as any animal would (with all the complexity that entails). (Licht, 2007: 218)

This distinction seems to consider the physiological effects of sound, and almost subscribes to a language-based binary for music/sound art in its view that sound art, in its use of natural or raw sound material, provokes more of a visceral reaction than music. Licht's parting comment about the 'cosmic consciousness' that sound art potentially enables, and to which most art aspires, at least indicates an interest in the phenomenological (Licht, 2007: 218). He in fact draws on such concerns to reflect on the categorical situation of sound art that 'is indeed between categories, perhaps because its effect on the listener is between categories. It's not emotional nor is it necessarily intellectual' (Licht, 2007: 218).

In his review of these sound art publications, Cox observes that Licht's human/animal idea resembles the Lacanian distinction between the symbolic and the real as applied to audio by media theorist Friedrich Kittler: Where music, like speech, articulates sound according to a culturally regulated system and a measured organisation of time, sound art tends to engage sound as pure physical stuff and to present time in its fluid and interminable duration' (Cox, 2007: 128). This description in fact resembles Cox's own ideas on duration, based on a Bergson-Deleuzian idea of pulsed/non-pulsed time, connecting his earlier ideas about sound art with the phenomenological rather than the institutional. Cox also observes, however, that LaBelle is keen to shift sound art discourse away from a naturalistic interpretation. LaBelle notes that 'letting sounds be themselves' in the work of Cage paradoxically draws attention to the fact that sounds are 'culturally regulated'. He therefore considers the area outside of the social irrelevant: 'whether sounds ever truly become themselves in Cage's work is to miss the point' (LaBelle, 2006a: 21). Cox is not entirely convinced by either account, not only because of Licht and LaBelle's ready acceptance of space over time, but because their arguments are underpinned by a belief that there is little to be said about sound as a non-symbolic, non-discursive category. He concludes: 'there is thus a sort of humanistic presupposition in these accounts that prevent them from fully considering sound art as an exploration of the virtual sonic flux that precedes and exceeds human contribution' (Cox, 2007: 128). In Cox's opinion, this premise makes sound art 'rather

mysterious' for Licht but enables an 'ingenious and often persuasive' account of sound art by LaBelle (2007: 128). His criticism nevertheless suggests that an attempt to redress the issue that sound transcends, escapes, or eludes meaning through the social also subscribes to a language/anti-linguistic ideal, a debate that comes to the surface in later theoretical attempts of sound art.

In arguing that sonic art can be 'read as much as it is heard', since 'every sound work cannot help but signify' (Kim-Cohen, 2009: 156-7), artist and author of *In the Blink of an Ear*, Seth Kim-Cohen, appears to follow the path of LaBelle laid out before him by Kahn. He nevertheless criticises the general critical reception to sound, arguing that the theory has not benefitted from the hindsight of art history in going down the 'phenomenological cul-de-sac' of early minimalist criticism. He describes this cul-de-sac as the 'sound-in-itself' approach, which reduces the field of enquiry to what is only available in perception. This is, in his opinion, an essentialist trope which saturates artistic practice and its analysis, whether that of key historical figures such as Schaeffer or contemporary sound artists such as Christina Kubisch and Francisco Lopez. Kim-Cohen's 'non-cochlear' approach instead aims to connect the sonic arts to 'broader textual, conceptual, social and political concerns' in the manner of later minimalist criticism (2009: xix). In spite of his claims, this approach, in its focus on the cultural over the phenomenological, is not dissimilar to those of Kim-Cohen's predecessors.

Kim-Cohen explicitly engages with a language/anti-linguistic definitional distinction for sound art, presented in the form of a non-cochlear/sound-in-itself binary. His non-cochlear readings of sound art insist on the value of the social contexts of the phenomenal experience over the pursuit of sound as a physical phenomenon. In drawing on a range of other theorists, from art critic Rosalind Krauss to poststructuralist philosopher Jacques Derrida, Kim-Cohen's account serves to highlight the fact that binaries concerning issues of aurality and perception have been present in deliberations of art, meaning and consciousness throughout history. Although Kim-Cohen supports one particular, and supposedly neglected, side of the divide, his account indicates the potential theoretical relevance of the alternative. In his consideration of Merleau-Ponty's understanding of human experience in *Phenomenology of Perception* (1945), for example, which presents a dualism of culture/perception (or the primordial), Kim-Cohen raises the question of whether the focus of attention should be placed on the 'primordial' perceptual level of experience, or on the way in which this is resolved by culture (2009: 75).

In her preference of the former to the latter, Salomé Voegelin takes a very different view to Kim-Cohen in *Listening to Noise and Silence* (2010). Her argument that the theorisation of sound art should revolve around its direct experience is clearly founded on the phenomenological concerns relating to aurality discussed earlier. Voegelin identifies an 'impulse to subsume sound into the visual', for example, which in her opinion might 'blight music criticism and the discourse of

sound art' (2010: xi). She also suggests that the visual dominates music through its tradition of notation, lending emphasis to the score and performer, and sound art through its focus on visual manifestations such as the sounding object, the installation view, or documentation of the event rather than the sounds heard (Voegelin, 2010: xi). Voegelin therefore presents an aesthetic of listening based on 'the principle of sharing time and space with the object or event under consideration' in order to promote a more phenomenological approach (Voegelin, 2010: xi). This form of critical engagement with sound, which 'witnesses, documents and narrates what is going on', strives to contemplate the perceptual experience (Voegelin, 2010: xii). In doing so, Voegelin in fact encourages the listener to suspend what Kim-Cohen would describe as the 'non-cochlear' attitude and instead embrace the 'sound-in-itself'.

In explicitly referring to philosophical issues about language, knowledge and human experience, Voegelin seems to promote the anti-linguistic side of the phenomenological binary for sound art. She nevertheless observes that her particular sonic sensibility can connect the experience of sound with the notion of a virtual word, a world disconnected from the logic and rational of a visual reality (Voegelin, 2010: xiv). Furthermore, this visual reality might be augmented 'through the blind sight of sound within its depth' (Voegelin, 2010: xiv). Instead of creating a dialectic between sound and vision, Voegelin's call for a sonic sensibility 'unsettles the perceived certainty of a visual aesthetic' and potentially adds to the visual philosophy by illuminating unseen aspects of visuality (Voegelin, 2010: xii).

By writing about sound art, especially within an aesthetic that considers language as succumbing to the visual, however, Voegelin raises a paradox. In an earlier paper entitled 'I am not a Sound Artist; An Exploration of Sound as Concept and the Fear of Visual Definition' (2006), Voegelin argues that language is incapable of representing the contingency of sound. For this reason, she explains, certain types of sound work are therefore simply not available for discussion: This sound is a contingent practice, a doing of sound rather than a sonic knowledge. To write about its experience would mean, following Metz, to rehabilitate it into the visual order of language and losing its own resonance, so let's not' (Voegelin, 2006: 7). Voegelin uses this idea to argue that the identification of sound art with the visual arts carries with it the risk of encouraging a 'visual deterioration of sound' rather than a challenging of visual sensibility (2006: n.p.). Later, she openly recognises the paradox of the fact that her book on sound art 'is written in language while contesting, through a sonic sensibility, the very principle of language, its visuality' (2010: xiv). In response to this challenge, Voegelin appears to use narration as a bridge between perception and language, choosing to describe her listening experience of sound works in the first person before considering the philosophical questions these experiences raise. It is the listening to sound, the sensorial material', she explains, 'that leads the investigation and makes those philosophical questions and debates concrete and relevant for the reader as listener'

(Voegelin, 2010: xiii). Although it can be argued that Voegelin immediately contradicts her own aesthetic in writing about her experience of sound art, her account raises some complex and important issues in the philosophy of sound concerning the relationship between phenomena and perceptual experience that many would avoid (most probably under the guise of not succumbing to the hegemony of the visual in language). As Voegelin herself suggests, 'by revealing this paradox, sound re-evaluates the very basis of discourse and philosophy itself' (2010: xiv). By approaching sound as a non-symbolic, non-discursive category, Voegelin also engages with the other side of the language/anti-linguistic ideal, potentially offering the theoretical account of sound art that Cox seeks.

Cox's interest in the phenomenological, as indicated in his review of early sound art theory, is clearly evident in an earlier article about the discourse of synaesthesia. In his opinion, this discourse could potentially thwart the development of a 'genuine' sound art due to its conception of sound under the hegemony of the visual (2005: 239). He acknowledges a tension in sound art's negotiation of the visual, and argues that 'the best sound works neither reject the visual not succumb to it, but instead amplify differences among media and sensory modalities, drawing attention to sound as a semiautonomous power' (Cox, 2005: 241). Cox sees the emergence of sound art as part of a more general revaluation of the visual but should at least restore the position of sound in relation to the visual. These comments again clearly indicate Cox's phenomenological interests, and reflect a key ideology within the discourse of sound noted above.

In a later article on 'Sound Art and the Sonic Unconscious' (2009), Cox draws on the ideas of German rationalist philosopher Gottfried Wilhelm Leibniz about perception and consciousness in relation to sound in order to develop an ontology of sound for sound art. He defends a distinction between sound art and music, observing an important ontological distinction 'between 'two different domains of auditory existence' (Cox, 2009: 19). Cox concludes that the best sound art explores the *virtual* dimension of the sonic flux, a dimension he calls 'noise'; music, on the other hand, is a signal that temporarily emerges from this continuous flux, and explores an *actual* dimension that is a contraction of the virtual continuum. This account of sound art evokes the language/anti-linguistic definitional binary and then represents it as a continuum, a continuous and virtual sonic flux that will occasionally form into an actual signal. That Cox describes this virtual domain of sound (or 'noise') - to which sound art often calls attention - as transcendental points to his aims to address part of the sonic flux that 'precedes and exceeds' human expression and contribution, therefore addressing his earlier criticisms of sound art theory. In a footnote, Cox explicitly credits the philosophy of Immanuel Kant, who distinguishes between the 'empirical' domain of sensory experience and what lies entirely outside of this experience, or the 'transcendental'. This theory, which refers to the actual/virtual dimension, clearly shows that

issues of aurality, language, perception and reality are significant within the contemporary theoretical discourse of sound art.

These ideas are developed even further in the article 'Beyond Representation and Signification: Toward a Sonic Materialism' (2011), in which Cox explicitly relates the failure of prevailing theoretical models for the sonic arts to the fact that they are developed to account for the visual and textual rather than the sonic. Noting Kim-Cohen's study as an example, he observes that contemporary critical approaches that dominate aesthetic and cultural theory are concerned with signification, representation and mediation. In rejecting essentialist notions of the world consisting of fixed or material essences, these approaches also reject the idea of realism, since experience is always mediated by the symbolic field. Cox observes: 'these approaches often have a deep suspicion of the extra-symbolic, extra-textual, or extra-discursive, viewing such a domain as either inaccessible or non-existent' (2011: 146). Cox traces this ideal in history, noting that music was therefore analysed on 'purely formal' terms, and its non-representational state, which eluded analysis, also led to the idea of it being either a sub-representational 'primitive eruption of desire and emotion' or a super-representational example of 'pure mathematics' (2011: 148-9). In his opinion, a Kantian separation of nature and culture is implicit in the textual and discursive approaches to sound art, whereby nature either becomes another social construction or, if taking the firm position that nothing exists outside of the text or discourse, is non-existent. Notwithstanding Cox's critique of Kim-Cohen, it appears that they both blame the lack of sound art's theoretical discourse on its 'anti-linguistic' properties, although while Kim-Cohen calls for a return to language (and Voegelin attempts to escape it), Cox calls for alternative methods to tackle what lies outside of signification and representation in a 'materialist' approach.

In Cox's opinion, a rigorous critique must attempt to eliminate dualities such as 'culture/nature, human/non-human, sign/world, text/matter' (2011: 148). His solution lies in the ideas of philosophers Friedrich Nietzsche and Gilles Deleuze, who enable a move 'toward a thoroughgoing materialism that would construe human symbolic life as a specific instance of the transformative process to be found throughout the natural world' (Cox, 2011: 148). Returning to the Deleuzian distinction between the 'actual' and the 'virtual' (which is anticipated by Nietzsche's dichotomy of the 'Apollonian' and 'Dionysian'), Cox explains that this idea naturalises a Kantian opposition between culture and nature by marking the difference 'between empirical individuals and the forces, powers, differences, and intensities that give rise to them' within the flux of nature (Cox, 2011: 152). In his opinion, Deleuze's differences subsist in nature itself and therefore operate 'beneath' the level of representation and signification; relationships are therefore no longer of opposition but of 'transcendental conditioning' (Cox, 2011: 153). He also argues that this realist and materialist conception of sound as a signifying material escapes the charge of essentialism since sound is 'thoroughly immanent, differential, and ever in flux'

(Cox, 2011: 157). Cox sees this materialist approach to sound as a challenge to philosophy and cultural theory since the 'linguistic turn' and part of a revival of 'realism' in contemporary philosophy. Rather than viewing sound and the sonic arts as non-representational, it views them as 'firmly rooted in the material world and the powers, forces, intensities, and becomings of which it is composed' (Cox, 2011: 157). Instead of thinking in terms of representation and signification – which leads to binary distinctions such as culture versus nature – the complex of signs and representations is replaced with one of material forces, so that 'we might ask of an image of a text not what it *means* or *represents*, but what it *does*, how it *operates*, what changes it effectuates' (Cox, 2011: 157). In Cox's opinion, conceiving difference as manifestations of the field of nature and matter, and aesthetic production and reception through a materialist model of 'force, flow and capture', is the only way to theorise the sonic arts, and the only way to raise them to the level of sophistication characteristic of visual art and literary theory (Cox, 2011: 157). While it is difficult to see how this proposed solution to move beyond the many sensorial binaries and tensions within the discourse of the sonic arts might work in practice, this argument suggests that phenomenological issues concerning sound, aurality and reality are fundamental not only to the definitional discourse of sound art but also to its future theorisation.

In her article 'Music, Sound Art and Context in a Post-Cagean Era', researcher Anette Vandsø returns to the territorial in observing the inseparable relationship between sound works and their context at the SPOR annual festival for contemporary music and sound art in Denmark (2015: n.p). Vandsø views the expansion of sound work into the social situation since the 1990s as a general acceptance of Cage's ideas. While this 'post-Cagean aesthetic' is noted as typical to sound art, Vandsø also emphasises the fluid borders between sound art and contemporary music, arguing that musicology must therefore change its tendency to focus analysis on the work (or text, rather than context). Her solution is an approach in between the two predominant positions found within the current field of sound art studies: a phenomenological focus through listening as well as a focus on discursive dimensions such as the linguistic, symbolic, and intertextual. A compromise can be seen in Vandsø's understanding that the act of perception is 'always already conditioned by the discursive formations' (2015: n.p.). A leaning towards the discursive is nevertheless evident here and in the general focus on context as a definitional idea. While Vandsø favours the idea of 'a heterogeneous or expanded field of sounding arts, where no one tries to define whether a chamber orchestra composition is sound art or music, or a sound walk is music or sound art' (2015: n.p.), her closing thoughts refer to the way in which the institutions of the artworld shape definitions, and artistic categories are accompanied by generic conventions and expectations. Vandsø concludes that 'it seems as though there is a multitude of local ontologies in the field' (2015: n.p.). Despite championing the ambiguous borders between sound art and music, Vandsø's findings highlight important differences between these discourses. Her allusions to

works that are 'closer to what we would normally perceive as sound art' and 'the problem' of works that do not conform to a norm (Vandsø, 2015: n.p.) indicate the implicit assumptions controlling the definition and evaluation of sound art and music, and the significance of these ontological differences. This account does nevertheless seem to reiterate a general desire for a negotiation of the territorial and sensorial dialectic that has been observed within the discourse of sound art, and the potential benefits of this for the wider theorisation of sound in the arts. These ideas will be considered further in the following concluding chapter of this study.

Conclusions

An exploration of many ideas within the discourse of sound art illustrates that its definition is intimately bound up in its relationship to both music and visual art. This connection has not only contributed to the formation of its identity but also resulted in a range of contradictions and tensions.

A key strand in the discourse emphasising space as a feature was, for example, shown to be useful for distinguishing sound art from music and yet problematic for its definition within the visual arts, which relies on its counterpart, time. Such situations have led to polarisations and modifications of binary ideas used to define sound art from music in the discourse and, in turn, much ambiguity, debate and confusion. The definitional feature of space is nevertheless reinterpreted as one of place in order to highlight the ways in which the many permutations of the spatio-temporal definitional distinction in sound art – such as audio/visual, performance/installation and concert/exhibition – point to the institutional context of the visual arts. This also corresponds with the roots of the spatio-temporal distinction between the visual arts and music observed in the previous chapter.

Another key strand has been identified, which places emphasis on aspects of listening and perception. This discourse has been shown to position aurality against visuality, leading to a further range of binaries – such as anti-linguistic/language, non-representation/representation, nature/culture, real/symbolic, animal/human – that situate sound art away from the visual. Here, the definitional feature of aurality is reinterpreted as one of reality in order to point to these phenomenological interests that situate the problem of sound art's definition within a broader philosophical debate about cultural and human experience.

The two key strands that underpin the definitional discourse of sound art – one territorial, the other sensorial – therefore simultaneously pull towards and away from the visual, and their basis in the institutional and the phenomenological encapsulates a fundamental dialectic within the discourse of sound art's definition. These very tensions, encircling this unique cluster of debates

concerning space, place, sound, aurality and reality, distinguish sound art from other forms such as music and visual art, leading to a whole host of uncertainty but also creative possibility.

Chapter 7

Conclusion: The Significance of Definition for Sound Art

It is difficult to reach a conclusion at this point in the twentieth century where everything seems to be in a state of constant movement. To define one area means leaving out another. Collaboration between disciplines seems inevitable as the digital revolution gathers momentum, the horizon expands and barriers melt.

(Max Eastley, in an article for Contemporary Music Review, 1996)

What is sound art? This study has attempted to tackle this difficult and yet fundamental question, which has been a topic of much controversy and confusion within the artworld and yet has received little scholarly attention, through an analysis of existing discourse on and around the subject. This closing chapter will provide a brief overview of the key research findings and then explore some of their implications for the field of sound art, including possible future directions for research.

Key findings

This study has drawn upon a range of theories to explore key issues and ideas about sound art and its definition. It has shown that sound art, alongside a range of other sonic practices, has grown out of existing artistic traditions, including music. This has resulted in shared as well as individual concerns and trajectories. While sound art is clearly an ambiguous and mutable concept, it has also developed generic meaning. This meaning has been created socially, and is both shaped by and shaping artworld activity. Artistic categories such as sound art therefore have major ramifications for the institutions, industries and academies of art. Pursuing the definition of sound art is, ultimately, a task of clarification rather than classification in order to understand how the concept operates within these institutions of contemporary culture.

Salient characteristics of sound art include a concern with sound, space and perception, which emerge out of its relationship with the existing traditions and ideals of music and the visual arts. Although there are many different interpretations and also implications of these traits, an embrace of the spatial as opposed to the temporal is a key example of the way in which sound art has largely secured its identity by enabling a differentiation from music and association with the visual arts. This idea is challenged, however, by another tendency of sound art to favour the auditory over the visual sense that stems from its perceptual interests. This situation creates a significant and distinctive tension, resulting from sound art's connection with two different artistic traditions, which permeates its discourse. In simultaneously pulling towards and away from the visual, sound art embodies a conflict between the cultural and phenomenological in accounts of representation and meaning. It is this interplay between the discourses of music and visual art that results in its unique conceptual, philosophical and also material exploration of artistic and human experience through sound.

High-profile exhibitions have greatly contributed to the growth of sound art's discourse as well as the uncertainty surrounding it due to their complex representations of the genre. Their analysis reveals the ways in which sound art challenges artistic traditions of display, and exposes further ideological tensions relating to how the categorisation of contemporary art is rooted in concepts of media in postmodernity. The curatorial examples highlight how the definition of sound art is as much about difference as it is about shared characteristics. Sound art in exhibition also demonstrates its ability to traverse and exploit both physical and conceptual boundaries. This categorical porosity typifies sound art as a genre and results in its distinctive yet liminal identity.

Research implications and future directions

Definition and categories

The issue of definition permeates the discourse of sound art to the point that it might actually be considered a definitional trait in its own right. This characteristic probably results from its interesting position between established traditions, as well as the conceptual tendency of contemporary art to interrogate itself. The meaning and status of sound art will inevitably continue to develop and shift along with its discourse, and it is possible that this preoccupation with definition will eventually subside as sound art becomes even more established within the artworld. Artworld structures may eventually evolve beyond this media basis so that the term is superseded altogether.

Growing familiarity and acceptance of sound art is indicated by its increasing inclusion in contemporary art programming without need for introduction, explanation or justification. While those active in the field may therefore consider a preoccupation with the term and its definition as outdated or unnecessary, recent activity still nevertheless suggests otherwise. For example, an *ARTnews* magazine article following the *Soundings* exhibition at MoMA in 2013 entitled 'Now Hear This: Sound Art has Arrived' discusses how 'sound is being recognised and exhibited as an art form in its own right' (Pollack, 2013: n.p.). A subsequent article on 'The Rise of Sound Art' in *Apollo* magazine refers to the MoMA exhibition and the *Soundscapes* exhibition at the National Gallery in 2015, as well as a site-specific work commissioned for trains from London St Pancras (Yeung, 2015: n.p.). The striking similarity of these news articles to those from more than ten years ago suggests that it may be some time before the sound art term can be abandoned. It is clear that the definition of sound art as a genre has brought greater institutional commitment to

sound, and the growing institutional engagement – as evidenced in the exhibitions, events, galleries, organisations and publications noted in the introduction to this study – indicates that the concept still serves this purpose. In response to the 2013 MoMA exhibition, artist Stephen Vitiello speculates:

I guess maybe this moment will give us more opportunities, but I hope it will give us more than just sound-art shows alone. I'd prefer that, if someone was creating a show on architecture, they might think of me, rather than mount just another show in which ten people are making sound. (Pollack, 2013: n.p.)

It would seem that sound art must develop an artworld of its own before it can sit comfortably within the artworld at large. Some artworld communities are nevertheless further ahead than others on this journey, due to the nebulous nature of discourse formation.

The findings also respond to a general reluctance to define art and the supposed futility of such an enquiry, an attitude often found within the discourse of contemporary art. The case of sound art exposes the way in which the artworld operates and also evolves through its categories, which perform a deep-rooted communicative function influencing both practice and theory. Art is in itself a category that is produced and maintained socially. There are cultural, economic and intellectual implications of artistic definition, in the context of which the very meaning and value of art is at stake. An aversion to definition and categorisation results from an ideology of the aesthetic. The reflexive nature of sound art nevertheless encourages a useful reflection on the way in which the artworld functions, and on the significance of definition for all art.

Artistic evolution

It is possible to take a more nuanced and holistic approach to the persistent debate about the difference between sound art and music. Such a distinction is in fact contingent upon a whole range of complex social factors relating to the institutions, industries and academies of the artworld, and furthermore situated in relation to a broader network of activity that includes the visual arts. Since the values underlying the popular spatio-temporal definition of sound art are rooted in an historical ideological exercise to distinguish the arts, the favouring of space in the differentiation of sound art from music automatically implicates the visual arts. Arguments that sound art is a subset of music, or vice versa, do not acknowledge the full complexity of the arts and range of competing ideologies at play. The significance of the visual arts implicit in key definitional debates of sound art can also explain why sound works that follow traditions of form, content and display associated with visual traditions are more often described as sound art. It is in fact this connection with music *and* visual art that distinguishes sound art from other forms.

Much of the ambiguity and tension evident in the discourse of sound art results from its relationship with these two different artworld systems that were, at one point in history, ideologically opposed. This is in fact a situation faced by much of contemporary art in general in light of the continual expansion and hybridisation of art. The emergence of terms such as 'multimedia' and 'intermedia' to describe artistic works combining traditions or genres are indications of this. More recently, the artworld has also seen the rise of 'new media' art, a term that tends to refer to the use of media technologies. The growing popularity and assimilation of these terms is indicative of how artistic development has destabilised the medium-specific categories upon which the artworld was structured. At the same time, the very concept of a 'new' media art still indicates an attempt to incorporate these developments into existing institutional structures.

The importance of technology is yet another area of debate within sound art that can be situated within the wider debate of new media art. New media theorist Lev Manovich argues that digital technologies have completely upset the notion of the medium and therefore rendered the conceptual system of the artworld inadequate (2001: 1). He also observes with frustration the persistence of the medium concept and how this has led to the frequent creation of new generic categories based on new technologies rather than materials (Manovich, 2001: 4). While Manovich proposes an entirely new 'postmedia' conceptual system based around concepts from computer and network technology as a solution, the artworld is nevertheless a social phenomenon made up of durable infrastructures that are protected by a series of institutions. The option of throwing out an entire conceptual system in favour of another is unrealistic. In fact, although the artworld is slow to change, it is only through the existence of these structures and their transgression that change can occur. Media theorist Peter Weibel perhaps more productively considers the postmedia condition as simply 'the mixing of the media', a new phase following that of mediumspecificity, whereby all the different media now influence and determine each other (2012: n.p.). Rosalind Krauss, on the other hand, cites the work of artists such as Christian Marclay and Ed Ruscha as examples of how medium-specificity continues to be exploited by the contemporary avant-garde (2009: 42). It is no coincidence that these artists, whom Krauss later champions as 'the knights of the medium' (2011), also appear within the discourse of sound art and exhibitions discussed in this study.

In combining media through a dominant medium, sound art is an interesting example of how the postmodern artworld is still evolving *through* its existing media-based structures. The tensions and ambiguities resulting from this are therefore an inevitable part of artistic development. Sound art illustrates the way in which the artworld *actually* functions in regard to the apparent dissolution of boundaries. It reveals that, although boundaries may be more fluid, the artworld remains a social entity functioning around a set of shared beliefs and activities rooted in the categorical.

These observations have the potential to soften the so-called 'crisis' of art history, suggesting that even if the normal channels of operation begin to break down and be replaced, existing disciplines can and will still inform shifting paradigms.

Sound art draws attention to the somewhat paradoxical situation of contemporary art in postmodernity, in which categories are being simultaneously used and rejected. Although eagerly adopted in *Sonic Boom*, for example, the idea of sound art was used in *Volume* and *Treble* to illustrate the expansion of the arts and dissolution of boundaries. In these cases, the category of sound art seems to function almost as a 'non-category'. It is possible that the simultaneous embodiment of the medium-specific and intermedia, multimedia and new media in sound art reconciles this unrealistic ideological situation presented by the postmodern and postmedia artworld. This might be another explanation for the increasing popularity of sound art over the last thirty years. It is also likely that the problem of sound art and its definition is simply a symptom of the artworld attempting to accommodate artistic evolution within its structures. An analysis of emerging and difficult concepts such as sound art may therefore present solutions to some of the key issues underlying the contemporary artworld.

Artistic meaning

This study problematises a popular assumption that the lack of research on sound art results from the way in which sound escapes discourse (Cox, 2011: 145). This idea subscribes to part of a debate seen in recent approaches to the theorisation of sound art that revolve around issues of representation, meaning and language. Seth Kim-Cohen's 'non-cochlear' (2009) approach, which argues for a need to move beyond sonic experience and focus on the textual, symbolic grid of sound, might be seen to represent one school of thought; Salomé Voegelin's call for a 'sonic sensibility' (2010), which considers sound as an opportunity to understand experience that lies outside of language and the visual through listening, represents another. This theoretical debate reflects a key dialectic from which the identity of sound art is formed. It embodies a tension between the cultural and the phenomenological, which can be seen at its crudest in sound art's leaning towards the visual arts and yet away from the visual (see Chapter 4). In proposing that sound exists out there in the real world, Christoph Cox's 'materialist' model attempts to bridge the gap between the two schools of thought by avoiding the idea of sound as nonrepresentational as well as challenging conventional theories of representation (2011). However, the sensorium is itself 'an ever-shifting social and historical construct. The perceptual is cultural and political' (Bull et al., 2006: 5). Human experiences of sound will therefore arguably always resort to signification, especially within the context of cultural practices such as sound art. The practice clearly raises some interesting philosophical questions about the experience of reality through its concern with the senses, although will always participate at the level of discourse.

Such discussion highlights the relevance of cultural theory, as well as sound and sensory studies, for the fast-developing academic landscape of sound art, and vice versa.

This research contributes to the debate played out in recent theoretical accounts of sound art by foregrounding discourse as both a subject and object of study. It has assembled a wide range of material and identified and mobilised a range of ideas in all their complexity in order to expose and interrogate the many conflicting and convergent representations that make up the contemporary discourse of sound art. Like the subject matter in question, this study has therefore drawn from ideas across different disciplines and schools of thought. This interdisciplinary approach has enabled a unique account of sound art that can potentially contribute to a range of different fields such as art history, museology and contemporary art curatorship that currently have to grapple with the shifting paradigms of art beyond the visual. This research also has the potential to provide new perspectives for musicology and other sound-based studies through its integration of ideas from these other fields. Sound art also provides an interesting example of discourse formation for genre studies. This approach to the analysis of sound art has also highlighted the ontological specificities and histories of these different disciplines, which is actually fundamental to the very formation of the genre. While early theoretical studies of sound art had to rely on an interdisciplinary methodology, which focused on the individual histories and theories of music and visual art and the ways in which these might overlap, in this study it has also been possible to consider sound art as a site for analysis in its own right due to the growing body of informal and formal discourse on the subject (whether exhibitions, online forums, or the few existing scholarly studies themselves). This study therefore also contributes to this emerging field of sound art studies.

A focus on the discourse of sound art draws attention away from direct sensory experience and what might exist outside of the text. In relation to the interrogation of categories such as sound and music in the sonic arts, Kim-Cohen argues that an engagement with categories is by default textual (2009). The present enquiry, in its approach to sound art as a category of culture and therefore sound in its 'expanded situation', indirectly responds to his call for a more 'outward' approach to the theorisation and criticism of the sonic arts (as opposed to an 'inward' approach that focuses on issues of perception and the idea of sound-in-itself) (Kim-Cohen, 2009: 104; 261). While Kim-Cohen explains that 'every sound work cannot help but signify' – since sonic art is 'noise that functions linguistically and is therefore read as much as it is heard' – he also acknowledges that 'certain instances of sonic art engage the materiality of sound as a means to a semiotic end' (2009: 156). The present study does not, however, wish to discount the possibility or potential value of an exploration of sensory experience outside of discourse. Voegelin's endeavours to accommodate this aspect within a philosophy of sound art serve as a useful reminder of the materiality of sound, although they inevitably bring the sensory experience back to the textual by re-joining the discourse. And while Cox appears to present a compromise for the theorist of sound in his conception of sound as a continuous flux that only comes into meaning at certain times, it is nevertheless important to accept an inevitable recourse to meaning within any perceptual, cultural or theoretical activity. In using sound as material, it is likely sound artists can at least attempt to negotiate aspects of sound that might fall outside of meaning much more successfully than any theorist of sound art.

Artistic value

Despite its relatively short history, sound art is already beginning to develop a canon of artists and works, many of which feature in this study. This in itself points to some level of consensus and the gradual establishment of sound art as a discourse. It also raises further questions, such as why certain artists or works become more significant than others. Although the reasons for this are likely to be as complex as the dynamics of discursive formations, art historians Perry and Cunningham observe 'the power of critics, art historians and the institutions of art in helping establish, and sustain the value of, works which are now seen as landmarks within the western canon of art' (1999: 82). This again points to the importance of exhibitions and events as well the critical and theoretical discourse that surrounds them. The millennial exhibitions discussed in this study represent a pivotal moment in the discourse of sound art. Although there are those, such as Douglas Kahn, who observe with cynicism the recognition of sound art by 'the institutions and *organs of discourse* in the artworld, in particular powerful ones in New York and London' (2005: n.p., emphasis added), these events are part of the development of the discourse and have clearly played a role in raising the profile of sound art as well as influencing future artworld activity.

Future research might include the analysis of other large-scale exhibitions of sound art, whether the third international millennial exhibition *Sound Art: Sound as Media* at the ICC (2000), or the more recent *Sound Art: Sound as a Medium of Art* at ZKM (2012-13). This could allow further exploration into sound art's relationship with media art and technology, as well as provide further indication of how the discourse of sound art has developed over the last decade. A major volume accompanying this recent exhibition, claiming to map fifty years of artistic engagement with sound beyond the disciplinary divides established for sound art as an artistic genre since the beginning of the new millennium, is due for release in October 2016 (MIT, 2016). Edited by ZKM CEO and media theorist Peter Weibel, this forthcoming publication not only points to a continued interest in the definition of this generic category but would also be pertinent material for future analysis.

The *Sonambiente* festival, briefly referred to in this study, would also make an interesting focus for research, given its status as an international survey of sound art. The fact that the 1996 display was described as 'the *last* large-scale sound art event of the century' (Kawasaki, 1996: n.p.,

emphasis added) implies a range of previous activity that is perhaps less well known within the English-speaking artworld. It also indicates that sound art has taken some time to secure its position within the public consciousness. At the time of its sequel in 2006, Cox explains, 'the original festival offered a broad survey of sound art aimed at consolidating it as a viable field. Today sound art is more firmly, if not fully, established' (2006: 89). And yet he also observes that 'comparing "Sonambiente 2006" with its original incarnation reveals how little sound-art practice and discourse have developed in the intervening decade' (Cox, 2006: 89). In his opinion, 'if sound art is to end up being something more than a subcategory of visual art that makes noise, it will need to [...] consider the auditory as a problematic field rather than simply as another sensory modality to stimulate' (Cox, 2006: 90). Here, Cox clearly subscribes to one side of the debate in championing a practice in which sound artists 'more fully make this conceptual turn' instead of relying on sound-in-itself. It will be interesting to see what the next festival will bring, and whether the critical discourse since 2006 has had an impact on the practice.

Future events could also provide a contained environment in which to analyse an encounter with a work of sound art through a combination of theoretical and empirical analysis. A series of exhibitions might even be developed to explore different aspects of this research, including definitional ideas and curatorial approaches of sound art, to provide another, alternative contribution to the discourse.

It would also be insightful to delve even further into historical archives in order to uncover more information about one of the earliest sound art exhibitions, Hellermann's *Sound/Art* at SculptureCenter in 1984. The *Sound Art Exhibitions Timeline*, a wiki maintained by composer Jerome Joy and music historian Thom Holmes (2013), points to a range of even earlier examples – including *Sound as Visual/Visual as Sound* held in 1973 at Montreal's Véhicule Art Inc., one of Canada's first artist-run galleries, and *Space/Time/Sound* at San Francisco's SFMOMA in 1979-80 – that are also worth investigation. Such research could potentially change the shape of the history of sound art and consequently its contemporary discourse.

The ever-increasing number of databases in the area of sound art is in itself a sign that the subject is drawing the attention of other researchers. The *Sound Art Database* (containing the *Sound Art Exhibitions Timeline*) and *Sound Art Archive* are some examples (Joy and Holmes, 2013; Taylor, 2011b; see also Chapter 1). These also play an active part in sustaining and building the discourse of sound art. The *Her Noise Archive* is another good example of discourse-creation and, potentially, canon-making in action in its aim of 'investigating music and sound histories in relation to gender bringing together a wide network of women artists who use sound as a medium' (Her Noise, 2012a: n.p.). This resource, which includes books, catalogues, audio recordings and interview footage collected since the initiation of the research project in 2001 by Lina Džuverović and Anne Hilde Neset, was made public during a series of associated

exhibitions in 2005 and then toured internationally for several years. The physical archive, which was donated to CRiSAP and is housed at the Archives and Special Collections Centre at the London College of Communication, is being used as 'a catalyst for further work and discussions with students at LCC' (Her Noise, 2012b: n.p.). An online version of the archive also launched in 2012, presenting some of the audio-visual material, documentation of related events, and guest-curated responses to the archive 'in an effort to keep the archive alive' (CRiSAP, 2012: n.p.). This project may well prevent certain misrepresentations within the discourse of sound art that are more commonly found within the history of art. Given its infancy, this focus on feminist discourses could even skew the development of sound art discourse.

It has also been noted that the German literature is seldom referenced in English texts on sound art, largely due to barriers of language (Engström and Stjerna, 2009: 17-18; see also Chapter 2), and the present study might be counted among these. Translations of theoretical writing by the likes of Motte-Haber and others into English would therefore be a major contribution to the emerging Anglophone academic field of sound art. This might also shed further light on other sound art (or rather *Klangkunst*) related activity from the twentieth century, as suggested in the discourse surrounding the first *Sonambiente*. One online database suggests, for example, that an earlier international exhibition of sound art took place in Hanover (*SoundArt '95*, Eisfabrik, 1995) (Joy and Holmes, 2013: n.p.).

The stream of edited anthologies of writings, such as *Sound* (Kelley, 2011) and *On Listening* (Carlyle and Lane, 2013), are also crucial to the growth of the discourse. More generally, the role of art colleges and universities might be another avenue for future research, since the academy is in itself another important 'organ of discourse' to consider in relation to the historical as well as contemporary development of sound art.

As sound art gains weight as a discourse, evident in the growing number of research centres, conferences, exhibitions, events and publications, so, too, does the academic activity surrounding it. It is highly likely that the discourse community of sound art will continue to grow, perhaps also precipitated by the rise of social media, which is extending the reach of many of these groups. Just as the work of Helga de la Motte-Haber played an important part in establishing sound art as an academic research field in Germany, arguing that 'the advances in materials and technologies have made [sound art] into a genuinely unique, internally differentiated aesthetic field' (1999: 124), the present study participates in the validation of sound art as a cultural practice. In teasing out the ideological assumptions within the definitional discourse of sound art, it has highlighted a range of tensions that are inextricably bound up in its fight for definition that also implicitly translate into evaluative ideas. It points to sound art's unique and complex set of concerns with space and perception, and shows how these result from its intrinsic relationship with the different artworlds of music and visual art. It has shown the complexity of large-scale

and high-profile exhibitions, and their significant influence on the discourse of sound art, especially those occurring around the time of the new millennium. It also indicates how the artworld is an historical, cultural and also social institution that operates around categories and definition, even during this phase of postmodern reticence. In doing so, this study can hopefully provide artists, curators and critics with a better understanding of the cultural context of sound art and facilitate the development of its critical discourse. It is possible that many of the evaluative ideas about sound art resulting from the various dialectics within its discourse will come further to the fore as sound art increasingly draws attention from the academy.

The epigraph to this chapter points to some of the challenges faced by the contemporary artworld, although it is perhaps also an illusion to consider that it was ever 'once upon a time' easier to reach a conclusion. Definitional discourses are profoundly historical and change over time. Art is, and always has been, in a state of transition and it is important to realise and also accept the inevitable mutation of categories and development of meaning. In this study, I explore a slice of history that roughly equates to my own lifetime, and during this period of research some significant transformations have been witnessed. In the same way as the Oxford Dictionary can be viewed as a record of history (Williams, 1976: 18), this study reflects the current state of discourse on the definition of sound art and will therefore require continual revision. For these reasons it will always be impossible to reach a definitive conclusion.

The existing discourses of definition do nevertheless demonstrate the ontological, theoretical and practical significance of aesthetic categories such as sound art and their ideological expansion and synthesis in history. Genres such as sound art clearly present a range of challenges for the contemporary artworld, and will undoubtedly influence the way in which it develops. In response to the pluralism of contemporary art, philosopher and art critic Arthur Danto famously heralded 'the end of art', or at least the end of art history in view of art's departure from matters of aesthetics. Since art after the end of art is no longer primarily visual, it calls for an entirely different breed of curator and threatens the museum as the fundamental aesthetic institution (Danto, 1997: 16-17). And yet the conclusions are optimistic in view of contemporary art's concern with meaning, evident in its philosophical engagement with issues of representation, reality, knowledge, belief, truth, and the definition of art itself. Sound art is a prime example of a philosophical exploration of the world and our experience within it, and signals the fact that the artworld is not in the throes of a crisis but, rather, thriving on these creative opportunities.

References

Aldrich, N. (2003) 'What is Sound Art?', *The EMF Institute* [online]. Available at: http://emfinstitute.emf.org/articles/aldrich03/aldrich.html [accessed 08.02.07]

Allen, A. (2006) 'Audio Gallery', *Axis* [online]. Available at: http://www.axisweb.org/atATCL.aspx?AID=10andRIGHTAID=506 [accessed 11.10.06]

Allen, R. (1989) 'Bursting Bubbles: "Soap Opera" Audiences and the Limits of Genre', in Remote Control: Television, Audiences and Cultural Power ed. E. Seiter, H. Borchers, G. Kreutzner, and E. Warth. London: Routledge, pp. 44-55

Alva Noto (2000) 'Untitled', Prototypes [CD]. Frankfurt: Mille Plateaux. Track 7

Amacher, M. (1961) 'Living Sound, Patent Pending: Music For Sound-Joined Rooms Series (Edit)', in *OHM: The Early Gurus Of Electronic Music* by various artists (2000) [CD]. New York: Ellipsis Arts. CD3, Track 7

Andrews, I. (1996) 'What's Wrong with Sound Art?', *Soundsite* [online]. Available at: http://www.sysx.org/soundsite/texts/what_is_wrong.html [accessed 09.02.07]

Art, S. (1996) 'Foundations', *Soundsite* [online]. Available at: http://www.sysx.org/soundsite/texts/what_is_wrong.html [accessed 09.02.07]

Artforum (2004) 'Audio Files: Sound Art Now: An Online Symposium', *Artforum International* [online]. Available at: http://artforum.com/symposium/id=6682 [accessed 08.02.07]

Augaitis, D. and D. Lander (eds) (1994) Radio Rethink: Art, Sound and Transmission. Banff, Canada: Walter Phillips Gallery

Bandt, R. (2006) 'Sound Installation: Blurring the Boundaries of the Eye, the Ear, Space and Time', *Contemporary Music Review*, 25 (4): 353-365

Basan, B. (2006) 'Editor's Introduction', *The Iowa Review Web*, 8 (1) [online]. Available at: http://www.uiowa.edu/~iareview/mainpages/new/feb06/basen.html [accessed 01.02.07]

Basha, R. (2004) 'Curiously Groovy', *Terry Nauheim* [online]. Available at: http://mysite.pratt.edu/~tnauheim/Artwork/installation/Curiously_Groovy.html [accessed 07.12.11] BBC (2010) 'Turner Prize: Susan Philipsz Wins with Lowlands Away', *BBC News*, 7 December 2010 [online]. Available at: http://www.bbc.co.uk/news/entertainment-arts-11928557 [accessed 05.09.12]

Becker, H. (2003) Art Worlds. Berkeley: University of California Press

Bell, C. (2000) 'Multimedia', in The Wire: Adventures in Modern Music, June 2000 (196), p. 72

Berger, A. (2002) Reflections of an American Composer. Berkeley: University of California Press

Berry-Flint, S. (2003) 'Genre', in *A Companion to Film Theory* ed. T. Miller and R. Stam. Oxford: Blackwell, pp. 25-44

Blaauwbroek, M. (2011) *Detail Incidental Music* [image online]. Available at: http://www.kunstbeeld.nl/upload/nieuws/kb/11-06/jorge%20macchi/270511_jorge%20macchi%20smak_0031.jpg [accessed 01.09.14]

Boros, D. (2012) 'Public Art as Aural Installation: Surprising Musical Intervention as Civic Rejuvenation in Urban Life', *Evental Aesthetics*, 1 (3): 50-81

Bourdieu, P. (1993) *The Field of Cultural Production: Essays on Art and Literature*. New York: Columbia University Press

Bovee, K. (2005) 'All I Want Is Everything', *Portland Art.Net* [online]. Available at: http://www.portlandart.net/archives/2005/11/all_i_want_is_e.html [accessed 07.12.11]

Bowker, J. and S. Star (1999) *Sorting Things Out: Classification and its Consequences*, Cambridge, Massachusetts: MIT Press

Brades, S. (2000) 'Preface', in Sonic Boom: The Art of Sound. London: Hayward Gallery, pp. 11-13

Brand, J. (2004) *G-POD/G-Player* [image online]. Available at: http://www.jensbrand.com/images/gplayer/GPLAYER_03_ny.jpg [accessed 01.09.14]

Bull, M. (2013) Sound Studies: Critical Concepts in Media and Cultural Studies. London: Routledge

Bull, M. and L. Back (eds) (2003) The Auditory Culture Reader. Oxford: Berg

Bull, M., P. Gilroy, D. Howes, and D. Kahn (2006) 'Introducing Sensory Studies', *The Senses and Society*, 1 (1): 5-8

Cage, J. (1973) 'Foreword', in M: Writings '67-'72. Middletown, Connecticut: Wesleyan University Press, pp. ix-xvi

Cage, J. (1961a) 'Composition as Process', in *Silence: Lectures and Writings by John Cage*. Middletown, Connecticut: Wesleyan University Press, pp. 18-56

Cage, J. (1961b) 'Experimental Music', in *Silence: Lectures and Writings by John Cage*. Middletown, Connecticut: Wesleyan University Press, pp. 7-12

Cage, J. (1961c) 'The Future of Music: Credo', in *Silence: Lectures and Writings by John Cage*. Middletown, Connecticut: Wesleyan University Press, pp. 3-6

Cahen, J. (2011) 'Wet Sounds', Press release [online]. Available at: http://www.newtoy.org/wetsounds/press/ws2011_pressrelease.pdf [accessed 01.05.12]

Cain, M. (2010) 'Turner Prize: Susan Philipsz Wins Prestigious Art Award', *4 News*, 6 December 2010 [online]. Available at: http://www.channel4.com/news/turner-prize-susan-philipsz-wins-prestigious-art-award [accessed 05.09.12]

Campesato, L. (2009) 'A Metamorphosis of the Muses: Referential and Contextual Aspects in Sound Art', Organised Sound, 14 (1): 27-37

Cardiff, J. (1999) *The Missing Voice (Case Study B): Part 1* [MP3 download]. Available at: http://www.ubu.com/sound/cardiff.html [accessed 01.09.14]

Cardiff, J. (1999a) *The Missing Voice: Case Study B* [image online]. Available at: http://www.cardiffmiller.com/artworks/walks/missing_voice.html [accessed 01.09.14]

Carlyle, A. and C. Lane (eds) (2013) On Listening. Axminster: Uniform Books

Carter. M and A. Geczy (2006) Reframing Art. Oxford: Berg

Chandler, D. (1997) 'An Introduction to Genre Theory' [online]. Available at: http://www.aber.ac.uk/media/Documents/intgenre/chandler_genre_theory.pdf [accessed 03.10.10]

Chapman, O. (2009) 'The Icebreaker: Soundscape Works as Everyday Sound Art', Organised Sound, 14 (1): 83-88

Chion, M. (1994) Audio-Vision: Sound on Screen. New York: Columbia University Press

Cobb, A. (2005) 'Greetings', in *SoundasArt: A Forum Concerning the Emerging Artform Sound Art.* Post no. 48, 31 October 2005 [online]. Available at:

http://groups.yahoo.com/neo/groups/soundasart/conversations/messages/48 [accessed 02.06.06]

Collins, N. (2006) 'Noises Off: Sound Beyond Music', *Leonardo Music Journal*, 16: 7-8 [online]. Available at: http://www.leonardo.info/isast/journal/toclmj16.html [accessed 09.02.07]

Concannon, K. (1990) 'Cut and Paste: Collage and the Art of Sound', in *Sound by Artists* ed. D. Lander and M. Lexier. Toronto and Banff: Art Metropole and Walter Phillips Gallery, pp. 161-182

Connor, S. (2005) 'Ears Have Walls: On Hearing Art', FO(A)RM, 4, pp. 48-57 [online]. Available at: http://www.stevenconnor.com/earshavewalls [accessed 25.07.08]

Coomer, M. (2000) 'Sounds Like...:Stop Look and Listen at the Hayward', Art: Review, *Time Out*, May 10-17 2000, p. [illegible]

Cooper, H. (2005) 'An Eye for an Ear: Art and Music in the Twentieth Century', *Artforum International*, June 2005, 43 (10): 310-15

Cox, C. (2011) 'Beyond Representation and Signification: Toward a Sonic Materialism', *Journal of Visual Culture*, 10 (2): 145-161

Cox, C. (2009) 'Sound Art and the Sonic Unconscious', Organised Sound, 14 (1): 19-26

Cox, C. (2007) "About Time": Christoph Cox on Sound Art', Book Review, Artforum International, November 2007, 46 (3): 127-128

Cox, C. (2006) 'Reverb Time: Christoph Cox on "Sonambiente", *Artforum International*, September 2006, 45 (1): 89-90

Cox, C. (2005) 'Lost in Translation: Christoph Cox on Sound in the Discourse of Synaesthesia', *Artforum International*, October 2005, 44 (2): 236-241

Cox, C. (2004a) 'Audio Files: Sound Art Now: An Online Symposium', *Artforum International*. Posted 23-30 April 2004 [online]. Available at: http://artforum.com/symposium/id=6682 [accessed 08.02.07]

Cox, C. (2004b) "Treble": SculptureCenter, New York', *Artforum International*, September 2004, 43 (1): 262

Cox, C. (2003) 'Return to Form: Christoph Cox on Neo-Modernist Sound Art', Artforum International, November, 42 (3): 67

Cox, C. and D. Warner (eds) (2004) *Audio Culture: Readings in Modern Music.* London and New York: Continuum

Coyle, R. (1995) 'Sound in Space: A Curatorial Perspective', *Australian Sound Design Project* [online]. Available at: http://www.sounddesign.unimelb.edu.au/web/biogs/P000451b.htm [accessed 09.02.07]

CRiSAP (2012) 'Her Noise Website', CRISAP: Creative Research into Sound Arts Practice [online]. Available at: http://www.crisap.org/index.php?her-noise-website [accessed 01.05.13]

CRiSAP (2005) 'About CRiSAP', CRISAP: Creative Research into Sound Arts Practice [online]. Available at: http://www.crisap.org/index.php?about [accessed 01.05.12]

¡Cubanismo! (2000) 'Mardi Gras Mambo', in ¡Cubanismo! , *Mardi Gras Mambo* [CD]. London: Hannibal Records. Track 5

Cunningham, D. (2000) 'Exhibitions: Sonic Boom', Art Monthly, June 2000 (237), pp. 34-36

Danto, A. (1997) *After the End of Art: Contemporary Art and the Pale of History*. Princeton, New Jersey: Princeton University Press

Danto, A. (1964) 'The Artworld', Journal of Philosophy, 61 (19): 571-584

Davies, S. (2005) 'Listen - It's the Sound of a New Art', *Telegraph*, 15 June 2005 [online]. Available at: http://www.telegraph.co.uk/culture/art/3643754/Listen-its-the-sound-of-a-new-art.html [accessed 01.09.08]

DeLaurenti, C. (2006) 'Sound Argument (Extended Version): A Music Writer and an Art Critic Go Head-to-Head over Trimpin', *The Stranger*, 4 May 2006 [online]. Available at: http://www.thestranger.com/seattle/Content?oid=32150 [accessed 15.09.07]

Demers, J. (2009) 'Field Recording, Sound Art and Objecthood', Organised Sound, 14 (1): 39-45

Derrida, J. (1980) 'The Law of Genre', Glyph, 7: 202-29

Desmond, M. (2010) 'Joseph Beuys: Noiseless Blackboard Eraser', *Soft Sculpture* [online]. Available at: http://nga.gov.au/Exhibition/softsculpture/Default.cfm?IRN=43710&BioArtistIRN=18600& MnuID=3&ArtistIRN=18600&ViewID=2 [accessed 07.12.11]

Dickie, G. (1974) Art and the Aesthetic: An Institutional Analysis. Ithaca, New York: Cornell University Press

Dockstader, T. (1961) 'Apocalypse: Part 2', in OHM: The Early Gurus Of Electronic Music by various artists (2000) [CD]. New York: Ellipsis Arts. CD1, Track 12

Dono, H. (2006) *Watching Marginal People 2000* [image online]. Available at: https://www.flickr.com/photos/66881058@N00/298641922 [accessed 01.09.14]

Dono, H. (2000) 'Watching the Marginal People', in *Sonic Boom: The Art of Sound* by various artists [CD]. London: Hayward Gallery. CD2, Track 11

Drobnick, J. (ed.) (2004) Aural Cultures. Canada: YYZ Books

Dubrow, H. (1982) Genre. London: Methuen

Duncan, C. and A. Wallach (1980) 'The Universal Survey Museum', Art History, 3 (4): 448-469

Džuverović, L. (2007) 'The Love Affair between the Museum and the Arts of Sound', *Axis Webzine*, July-November 2007 [online]. Available at: http://www.axisweb.org/dlFULL.aspx?ESSAYID=85 [accessed 01.03.08]

Džuverović, L. (2002) 'Sonic Process: A New Geography of Sounds', *Artforum International*, December 2002, 41 (4): 134

Eastley, M. (1996) 'Future Applications of Sound Art and Design to Architectural and Natural Environments', *Contemporary Music Review*, 15 (4): 143-150

Echeles, J. (2000) 'Audio Artivity: An Introduction', XLR8R, August 2000 [online]. Available at: http://www.marklaliberte.com/frames/news.html [accessed 08.02.07]

Emmerson, S. and D. Smalley (2005) 'Electro-Acoustic Music', *Grove Music Online* [online]. Available at: http://www.oxfordmusiconline.com/subscriber/article/grove/music/08695 [accessed 18.07.07]

Engström, A and Å. Stjerna (2009) 'Sound Art or Klangkunst? A Reading of the German and English Literature on Sound Art, *Organised Sound*, 14 (1): 11-18

Eno, B. (2000) Music for Civic Recovery Centre [CD]. London: Opal Records.

EnoWeb (2002) Images from Civic Recovery Centre [image online]. Available at: http://music.hyperreal.org/artists/brian_eno/images/crctqc.jpg [accessed 01.09.14]

ERforS (2009) 'Sarah Pierce (artist)', *Enough Room for Space* [online]. Available at: http://www.enoughroomforspace.org/project_pages/view/381 [accessed 04.06.10]

Escriván, J. (2009) 'Sound Art (?) on/in Film', Organised Sound, 14 (1): 65-73

Ewing, J. (2004) "Treble: SculptureCenter', *ArtLies: A Contemporary Art Journal*, Spring 2004 (43) [online]. Available at: http://www.artlies.org/article.php?id=35andissue=43ands [accessed 07.12.11]

Exact Editions (2014) The Wire: May 2000 (Issue 195) [image online]. Available at: http://www.exacteditions.com/read/the-wire/may-2000-%28issue-195%29-35083/19/2 [accessed 01.09.14]

Feliciano, J. (2000) *Toyzone* [image online]. Available at: http://www.joaopaulofeliciano.com/selected-works/toyzone [accessed 01.09.14]

Finer, J. (2000) *Longplayer: 5th July 2000 01.02.00 – 01.14.59* [MP3 download]. Available at: http://longplayer.org/listen/live-stream [accessed 01.09.14]

Flanders, J. (2000) 'Making Tracks for Synaesthesiacs', Times Literary Supplement, 2 June 2000, p. 19

FONY (2004) *Janéad O'Jakriel* [image online]. Available at: http://www.pfony.com/jackolantern.jpg [accessed 01.07.17]

Forsyth, M. (1985) Buildings for Music: The Architect, the Musician, the Listener from the Seventeenth Century to the Present Day. Cambridge, Massachusetts: MIT Press

Foucault, M. (1991) Discipline and Punish: The Birth of a Prison. London: Penguin

Foucault, M. (1972) The Archaeology of Knowledge. New York: Pantheon Books

Fox, M. (2011) 'Prototype Theory: An Alternative Concept Theory for Categorizing Sex and Gender?', *Knowledge Organization*, 38: 328-34

Fried, M. (1968) 'Art and Objecthood', in *Minimal Art: A Critical Anthology* ed. G. Battcock. New York: Dutton, pp. 116-147

Frow, J. (2006) Genre: The New Critical Idiom. London: Taylor and Francis

Furlong, W. (1994) 'Sound in Recent Art', in *Audio Arts: Discourse and Practice in Contemporary Art* ed. W. Furlong. London: Academy Editions, pp. 128-133

Gann, K. (2000) 'It's Sound, It's Art, and Some Call It Music', *New York Times*, 9 January 2000, pp. 41-42 [online]. Available at: http://www.nytimes.com/2000/01/09/arts/it-s-sound-it-s-art-and-some-call-it-music.html [accessed. 01.07.09]

Garry, M. (2002) 'A Survey of Four Contemporary Sound Artists', *Vibrö* [online]. Available at: http://www.vibrofiles.com/essays_mark_gary.php [accessed 08.02.07]

Gebhardt, N. (1996) 'Can You Hear Me? What is Sound Art?', Real Time, 13 [online]. Available at: http://www.sysx.org/soundsite/texts/hear.html [accessed 09.02.07]

Gibbs, T. (2007) The Fundamentals of Sonic Art and Sound Design. London: AVA Publishing

Gibbs, T. (2002) 'Discover Sonic Arts', *Sonic Arts*. Available at: http://www.web.mdx.ac.uk/sonic/discover.html [accessed 01.06.11]

Gieryn, T. (1983) 'Boundary-Work and the Demarcation of Science from Non-Science: Strains and Interests in Professional Ideologies of Scientists', *American Sociological Review*, 48 (6): 781–795

Glandien, K. (2001) 'Sound Art Discourse in England'. Paper presented at the Ars Acoustica European Broadcasting Union plenary meeting, 13 December 2001 [online]. Available at: http://www.hoerspielbox.de/theorie/soundart.htm [accessed 01.08.05]

Glandien, K. (2000) 'Art on Air: A Profile of New Radio Art', in *Music, Electronic Media and Culture* ed. S. Emmerson. Aldershot: Ashgate, pp. 167-193

Glandien, K. (1996) 'Sonambiente: Sound Art Festival, Berlin, Summer '96', Resonance Magazine, 5 (1) [online]. Available at: http://kerstenglandien.com/pdf/sonambiente96.pdf [accessed 01.08.05]

Goldsmith, K. (2005) "The Politics of Sound/The Culture of Exchange", *Tate.* Posted 31 January 2005 [online]. Available at: http://www2.tate.org.uk/intermediaart/discuss/d_culture/politics1.shtm [accessed 07.08.12]

Goldsmith, K. (2004) 'Bring Da Noise: A Brief Survey of Sound Art', *New Music Box* [online]. Available at: http://www.newmusicbox.org/articles/Bring-Da-Noise-A-Brief-Survey-of-Sound-Art [accessed 01.03.04] Goldsmith, K. (2001) 'UbuWeb: Sound', *UbuWeb* [online]. Available at: http://www.ubu.com/sound [accessed 01.05.12]

Goldsmith, K. (2000) 'Sitting in a Room with Stephen Vitiello', *New York Press* [online]. Available at: https://www.wfmu.org/~kennyg/popular/articles/vitiello.html [accessed 01.07.14]

Gooding, M. (2007) 'Audio Arts; The Running Man: 35 Years of Artists in their Own Words; In Profile: William Furlong', *State of Art*, Autumn 2007, p. 8

Grant, M. (2005) 'Helga de la Motte-Haber, editor: Klangkunst: Tönende Objekte und klingende Räume', Reviews, *Computer Music Journal*, 29 (1): 89-91

Greenberg, C. (1986a) 'Avant-Garde and Kitsch', in *Clement Greenberg: The Collected Essays and Criticism, Volume 1: Perceptions and Judgments, 1939-1944* ed. J. O'Brian. Chicago: University of Chicago Press, pp. 5-22 (Original work published 1939)

Greenberg, C. (1986b) 'Modernist Painting', in *Clement Greenberg: The Collected Essays and Criticism*, *Volume 4: Modernism with a Vengeance, 1957-1969* ed. J. O'Brian. Chicago: University of Chicago Press, pp. 85-93 (Original work published 1960)

Greenberg, C. (1986c) 'Sculpture in Our Time', in *Clement Greenberg: The Collected Essays and Criticism, Volume 2: Arrogant Purpose, 1945-1949* ed. J. O'Brian. Chicago: University of Chicago Press, pp. 55-60 (Original work published 1958)

Greenberg, C. (1986d) 'The Recentness of Sculpture', in *Clement Greenberg: The Collected Essays and Criticism, Volume 4: Modernism with a Vengeance, 1957-1969* ed. J. O'Brian. Chicago: University of Chicago Press, pp. 250-256. (Original work published 1967)

Greenberg, C. (1986e) 'Towards a Newer Laocoön', in *Clement Greenberg: The Collected Essays and Criticism, Volume 1: Perceptions and Judgments, 1939-1944* ed. J. O'Brian. Chicago: University of Chicago Press, pp. 23-37 (Original work published 1940)

Greenberg, C. (1983) 'Beginnings of Modernism', Arts Magazine, April 1983 (57), pp. 77-79

Gunden, H. von (1980) 'The Theory of Sonic Awareness in "The Greeting" by Pauline Oliveros', *Perspectives of New Music*, 19 (1): 409-416

Haber, J. (2001) 'Sivilize Me', *Haber Art Reviews* [online]. Available at: http://www.haberarts.com/hickey.htm [accessed 01.09.08]

Hagendoorn, I. (2004) *Bruce Nauman Raw Materials* [image online]. Available at: http://www.ivarhagendoorn.com/files/blog/bruce-nauman-raw-materials.jpg [accessed 01.09.14]

Hall, S. (1996) 'Who Needs "Identity"?', in *Questions of Cultural Identity* ed. S. Hall and P. du Gay. London: Sage, pp. 1-17

Hanson, F. (2004) Visitors Listen to Bruce Nauman's Sound Installation Raw Materials [image online]. Available at: http://static.guim.co.uk/sysimages/Guardian/Pix/arts/2004/10/12/naumanfionahansonpa34344.jpg [accessed 01.09.14]

Harrison, J. (2006) 'Dilemmas, Dichotomies and Definitions: Acousmatic Music and its Precarious Situation in the Arts'. Paper presented at the *SoundAsArt: Blurring of the Boundaries* conference, University of Aberdeen, 24-26 November 2006

Harrison, J. (1998) 'Sound, Space, Sculpture: Some Thoughts on the "What", "How" and "Why" of Sound Diffusion', *Organised Sound*, 3 (2): 117-127

Hatanaka, M. (2000) 'Sound as Media', in *Sound as Art – Sound as Media* ed. M. Hatanaka and T. Nozaki. Tokyo: NTT Publishing, pp. 46-63

Hayward (2000a) 'Sonic Boom: The Art of Sound'. Press release. Hayward Gallery, London

Hayward (2000b) Sonic Boom: The Art of Sound. London: Hayward Gallery

Heckert, M. (1996) Resonator [image online]. Available at: http://www.mattheckert.com/MSO/Resonator.jpg [accessed 01.09.14]

Hegarty, P. (2007) Noise/Music: A History, London and New York: Continuum

Hegarty, P. (2005) 'From Noise to Sound to Music and Back', *Dot Dot Dot Music* [online]. Available at: http://www.dotdotdotmusic.com/hegarty5.html [accessed 15.09.07]

Heon, L. (2005) 'In Your Ear: Hearing Art in the Twenty-First Century', Organised Sound, 10 (2): 91-96

Her Noise (2012a) '[Home]', *Her Noise Archive* [online]. Available at: http://hernoise.org [accessed 03.04.14]

Her Noise (2012b) 'Introduction', *Her Noise Archive* [online]. Available at: http://hernoise.org/documentation/introduction [accessed 03.04.14]

Hodgkinson, T. (1987) 'An Interview with Pierre Schaeffer: Pioneer of Musique Concrète', ReR *Quarterly*, May 1987, 2 (1) [online]. Available at: http://www.timhodgkinson.co.uk/schaeffer.pdf [accessed 25.07.13]

Holzer, D. (2007) 'Hello All! I Have a Question For You All", in *SoundasArt: A Forum Concerning* the Emerging Artform Sound Art. Post no. 1503, 25 March 2007 [online]. Available at: http://groups.yahoo.com/neo/groups/soundasart/conversations/messages/1503 [accessed 01.03.09]

Howarth, S. (2000) 'From Roxy Glam-Rock to Quiet Club Installation', *Financial Times*, 29 May 2000, p. [illegible]

Huberman, A. (2005) 'The Sound of Space', ArtReview, May 2005 (56), pp. 54-59

Huberman, A. (2004) 'Audio Files: Sound Art Now: An Online Symposium', *Artforum International.* Posted 25 and 27 April 2004 [online]. Available at: http://artforum.com/symposium/id=6682 [accessed 08.02.07]

Huene, S. (2000) 'Extended Schwitters', in *Sonic Boom: The Art of Sound* by various artists [CD]. London: Hayward Gallery. CD1, Track 9

Huyghe, P. (2006) *Pierre Huyghe «The Scintillating Expedition» (L'Expedition scintillante) 2002* [image online]. Available at: http://www.orbit.zkm.de/files/scintillatingexpedition.jpg [accessed 01.09.14]

ICA (2007a) 'Ensemble', *Institute of Contemporary Art: University of Pennsylvania* [online]. Available at: http://icaphila.org/exhibitions/1738/ensemble [accessed 08.09.14]

ICA (2007b) *Ensemble, Curated by Christian Marclay* [image online]. Available at: https://www.flickr.com/photos/14468743@N07/1472559597/in/photostream [accessed 01.09.14]

Ikeda, K. and M. Inori (2000) 'Mariko Mori', in *Sonic Boom: The Art of Sound* by various artists [CD]. London: Hayward Gallery. CD1, Track 2

Ikeda, R. (2000) *A* [image online]. Available at: http://data.tomonaga.webfactional.com/static/ri_web/work/A-A-1.jpg [accessed 01.09.14]

Iosafat, D. (2009) 'On Sonification of Place: Psychosonography and Urban Portrait', Organised Sound, 14: 47-55

Januszczak, W. (2000) 'Lend Them Your Ears', Sunday Times, 4 June 2000, p.12

Jeck, P. (2000) 'Off the Record', in *Sonic Boom: The Art of Sound* by various artists [CD]. London: Hayward Gallery. CD2, Track 3

Jeck, P. (2000a) *Off the Record* [image online]. Available at: http://www.philipjeck.com/images/photos/Hayward.jpg [accessed 01.09.14]

Joseph, B. (2004) 'Audio Files: Sound Art Now: An Online Symposium', *Artforum International*. Posted 3 April 2004 [online]. Available at: http://artforum.com/symposium/id=6682&page_id=4 [accessed 08.02.07]

Joy, J. and T. Holmes (eds) (2013) *Sound Art Database: Sound Art Exhibitions Timeline* [online]. Available at: http://joy.nujus.net/SAET [accessed 02.04.14]

Judah, H. (2000) 'Painting with Sounds', The Times, 3 May 2000, p. 16

Kahn, D. (2006a) 'Defining Sound Art', in *SoundasArt: A Forum Concerning the Emerging Artform Sound Art.* Post no. 609, 18 February 2006 [online]. Available at:http://groups.yahoo.com/neo/groups/soundasart/conversations/messages/609 [accessed 18.02.06]

Kahn, D. (2006b) 'Sound Art, Art, Music', *The Iowa Review Web*, 8 (1) [online]. Available at: http://iowareview.uiowa.edu/TIRW/TIRW_Archive/feb06/kahn2.html [accessed 09.02.07]

Kahn, D. (2005) 'The Politics of Sound/The Culture of Exchange', *Tate*. Posted 31 January 2005 [online]. Available at: http://www2.tate.org.uk/intermediaart/discuss/d_culture/politics1.shtm [accessed 07.08.12]

Kahn, D. (1999) Noise, Water, Meat: A History of Sound in the Arts. Cambridge, Massachusetts: MIT Press

Kahn, D. (1990) 'Audio Art in the Deaf Century', in *Sound by Artists* ed. D. Lander and M. Lexier. Toronto and Banff: Art Metropole and Walter Phillips Gallery, pp. 301-328

Kawasaki, Y. (1996) 'Sonambiente Festival for Eyes and Ears', *Sound Arts: XEBEC SoundCulture Membership Magazine*, 10 [online]. Available at: http://www.sukothai.com/X.SA.10/X.10.Sonambiente.html [accessed 01.05.13]

Keller, A. (2001) 'Review of the Volume: Bed of Sound Exhibition', Alex Keller [online]. Available at: http://server2.noise.org/~xkellerx/writing.htm [accessed 09.12.11]

Kelley, C. (ed.) (2011) *Sound*, Whitechapel: Documents of Contemporary Art, Cambridge, Massachusetts: MIT Press

Kennedy, J. (2004) 'Art and Technique', *New Music Box* [online]. Available at: http://www.newmusicbox.org/articles/Art-and-Technique [accessed 01.03.11]

Kieffer, J. (2010a) 'Sound Art: Artists of the New Wave', *Independent*, 11 May 2010 [online]. Available at: http://www.independent.co.uk/arts-entertainment/art/features/sound-art-artistsof-the-new-wave-1970453.html [accessed 05.09.12]

Kieffer, J. (2010b) 'Sound Art is Here to Stay', *Guardian*, 7 May 2010 [online]. Available at: http://www.guardian.co.uk/artanddesign/2010/may/07/sound-art-susan-philipsz [accessed 05.09.12]

Kim-Cohen, S. (2009) In the Blink of an Ear: Toward a Non-Cochlear Sonic Art. London and New York: Continuum

Klein, G. (2009) 'Site-Sounds: On Strategies of Sound Art in Public Space, Organised Sound, 14 (1): 101-108

Krauss, R. (2011) Under the Blue Cup. Cambridge, Massachusetts: MIT Press

Krauss, R. (2009) 'The Guarantee of the Medium', Collegium (Helsinki Collegium for Advanced Studies), 5: 139–145

Krauss, R. (1979) 'Sculpture in the Expanded Field', October, Spring 1979, pp. 30-44

Krukowski, L. (1998) 'Formalism', in *Encyclopedia of Aesthetics* ed. M. Kelly [online]. Available at: http://www.oxfordartonline.com/subscriber/article/opr/t234/e0215 [accessed 06.07.12]

Kubisch, C. (2008) *Electrical Walks Copenhagen* [image online]. Available at: http://www.christinakubisch.de/en/works/electrical_walks [accessed 01.09.14]

Kubisch, C. (2006) 'A Personal History of Sound Art 1976-2006'. Paper presented at the *SoundAsArt: Blurring of the Boundaries* conference, University of Aberdeen, 24-26 November 2006

Kubisch, C. (2000) 'Oase 2000', in *Sonic Boom: The Art of Sound* by various artists [CD]. London: Hayward Gallery. CD1, Track 6

Kubisch, C. (2000a) *Oasis 2000* [image online]. Available at: http://www.christinakubisch.de/en/works/installations/2 [accessed 01.09.14] LaBelle, B. (2006a) Background Noise: Perspectives on Sound Art. London and New York: Continuum

LaBelle, B. (2006b) 'Speaking Volumes', *The Iowa Review Web*, 8 (1) [online]. Available at:http://iowareview.uiowa.edu/TIRW/TIRW_Archive/feb06/labelle.html [accessed 09.02.07]

LaBelle, B. (2005) Background Noise: Sound Art and the Resonance of Place. Doctoral thesis, University of London, Birkbeck College

LaBelle, B. (2003) 'Short Circuit: Sound Art and the Museum', *Contemporary*, 53/4: 66-71 [online]. Available at: http://www.web.mdx.ac.uk/sonic/research/brandon.html [accessed 18.07.06]

Lamont, M. (2012) 'How Has Bourdieu Been Good to Think With? The Case of the United States', *Sociological Forum*, 27 (1): 228–237

Lander, D. (1990) 'Introduction', in *Sound by Artists* ed. D. Lander and M. Lexier. Toronto and Banff: Art Metropole and Walter Phillips Gallery, pp. 10-14

Lander, D. and M. Lexier (eds) (1990) *Sound by Artists*. Toronto and Banff: Art Metropole and Walter Phillips Gallery

Landy, L. (2007) Understanding the Art of Sound Organization. Cambridge, Massachusetts: MIT Press

Landy, L. (2000) 'Book Reviews', Organised Sound, 5 (3): 191-194

Landy, L. and S. Atkinson (2005) 'About EARS', *EARS: ElectroAcoustic Research Site* [online]. Available at: http://www.ears.dmu.ac.uk/spip.php?page=articleEarsandid_article=10 [accessed 09.02.07]

Lawn, A. (2007) 'Reexamining Sound Art - 3 Recent Projects', *NY Arts Magazine*, 12 (1-2) [online]. Available at:

http://nyartsmagazine.com/index.php?option=com_contentandtask=viewandid=6751anditem= 238 [accessed 09.02.07]

Leitner, B. (2002) "The Whole Corporeality of Hearing: An Interview with Bernhard Leitner', in *Resonances: Aspects of Sound* Art ed. B. Schulz. Heidelberg, Germany: Kehrer Verlag, pp. 81-88

Levinson, J. (1990) Music, Art, and Metaphysics. Ithaca: Cornell University Press

Levinson, J. (1987) 'Review of Dickie: The Art Circle', Philosophical Review, 96: 141-46

Licht, A. (2009) 'Sound Art: Origins, Development and Ambiguities', Organised Sound, 14 (1): 3-10

Licht, A. (2007) Sound Art: Beyond Music, Between Categories. Rizzoli: New York

Lomholt, I. (2000) *Sonic Boom Hayward Gallery* [image online]. Available at: http://www.e-architect.co.uk/architects/ian-ritchie-architects [accessed 01.09.14]

Loydell, R. (2000) 'A Notion of Sound: Rupert Loydell Interviews David Toop', *Tangents* [online]. Available at: http://www.tangents.co.uk/tangents/main/pre-2001/notionofsound.html [accessed 01.08.12]

Lucier, A (1969) *I am Sitting in a Room* [MP3 download]. Available at: http://www.ubu.com/sound/lucier.html [accessed 01.09.14]

MacLeod, M. (2010) *Susan Philipsz* [image online]. Available at: https://images.huffingtonpost.com/2010-12-09-susanphilipsz.jpg [accessed 01.09.14]

MacMurtrie, C. (2000) 'Yoyo Berimbau', in *Sonic Boom: The Art of Sound* by various artists [CD]. London: Hayward Gallery. CD1, Track 11

Madan, E. (2004) *Freedom Highway: Part 1* [MP3 download]. Available at: http://cec.sonus.ca/econtact/8_2/Kevin.html [accessed 01.09.14]

Madan, E. (2004a) 'Freedom Highway', Undefine [online]. Available at: http://www.undefine.ca/en/projects/freedomhighway [accessed 09.09.14]

Maddocks, F. (2000) 'Sounds Like...Squashed Biscuit', Reviews, Observer, 7 May 2000, p. [illegible]

Madeleine, A. (2015) 'The Sound Art of Mofo 2015: Making Noise in the Art World', *Guardian*, 23 January 2015 [online]. Available at: https://www.theguardian.com/artanddesign/2015/jan/23/the-sound-art-of-mofo-2015-making-noise-in-the-art-world [accessed 30.07.16]

Madsen, V. (2009) 'Cantata of Fire: Son et Lumière in Waco Texas, Auscultation For A Shadow Play', Organised Sound, 14 (1): 89-99

Mandelbaum, M. (1965) 'Family Resemblances and Generalization Concerning the Arts', American Philosophical Quarterly, 2 (3): 219-228

Manovich, L. (2002) 'Generation Flash', *Manovich* [online]. Available at: http://manovich.net/index.php/projects/generation-flash [accessed 18.11.13]

Manovich, L. (2001) 'Post-Media Aesthetics', *Manovich* [online]. Available at: http://manovich.net/index.php/projects/post-media-aesthetics [accessed 18.11.13]

Marclay, C. (2000) 'Guitar Drag', in *Sonic Boom: The Art of Sound* by various artists [CD]. London: Hayward Gallery. CD1, Track 8

Marshall, A. (2000) 'Chronic Noisebleed', *The Wire: Adventures in Modern Music*, July 2000 (197), p. 8

Martin, J. (2008) 'Jean Martin: Biography', *Centre for Research and Development, University of Brighton* [online]. Available at: http://artsresearch.brighton.ac.uk/research/academic/martin/biography [accessed 12.08.08]

Martin, J. (2000) 'Sonic Boom: The Art of Sound', Exhibition review, *Seen&Heard: Music on the Web*, May 2000 [online]. Available at: http://www.musicwebinternational.com/sandh/2000/may00/SonicBoom.htm [accessed 01.08.05]

Matthews, C. (2012) 'Why Sound and Music is Failing Today's Composers', *Guardian: Music Blog* [online]. Available at:

http://www.guardian.co.uk/music/musicblog/2012/mar/30/classicalmusicandopera [accessed 01.05.12]

Maur, K. von (1999) The Sound of Painting: Music in Modern Art. Munich: Prestel

McElroy, S. (2005) 'Arts, Briefly', New York Times, 3 October 2006 [online]. Available at: http://www.nytimes.com/2006/10/03/arts/03arts.html [accessed 01.09.08]

McGonigal, M. (2003) 'Elliott Sharp', *BOMB*, Summer 2003 (84) [online]. Available at: http://bombmagazine.org/article/2582 [accessed 04.08.12]

McLuhan, M. (1964). Understanding Media: The Extensions of Man. Cambridge, Massachusetts: MIT Press

Melville, S. (1998) 'Greenberg, Clement', in *Encyclopedia of Aesthetics* ed. M. Kelly [online]. Available at: http://www.oxfordartonline.com/subscriber/article/opr/t234/e0242 [accessed 06.07.12]

Migone, C (2003) 'Volume (Of Confinement and Infinity): A History of Unsound Art', in S:ON: Sound in Contemporary Canadian Art ed. N. Gingras. Montréal: Artexte, pp. 79-91

Miller, C. (1984) 'Genre as Social Action', Quarterly Journal of Speech, 70: 151-167
Miller, C. and D. Shepherd (2004) 'Blogging as a Social Action: A Genre Analysis of the Weblog', in *Into the Blogosphere: Rhetoric, Community, and Culture of Weblogs* ed. L. Gurak, S. Antonijevic, L. Johnson, C. Ratliff, and J. Reyman. University of Minnesota Libraries [online]. Available at: http://blog.lib.umn.edu/blogosphere/blogging_as_social_action.html [accessed 18.02.08]

Mills, R. (2000) *Mantle 2000* [image online]. Available at: http://russellmills.com/russell_mills/mantle [accessed 01.09.14]

Minard, R. (2002) 'Musique Concrète and its Importance to the Visual Arts', in *Resonances: Aspects of Sound* Art ed. B. Schulz. Heidelberg, Germany: Kehrer Verlag, pp. 44-48

Miner, E. (1986) 'Some Issues of Literary Species, or Distinct Kind', in *Renaissance Genres: Essays* on Theory, History, and Interpretation ed. B. Lewalski. Cambridge: Harvard University Press, pp. 15-44

MIT (2016) 'Sound Art: Sound as a Medium of Art', *The MIT Press* [online]. Available at: https://mitpress.mit.edu/books/sound-art [accessed 30.07.16]

MOCA (2005) *Visual Music* [image online]. Available at: http://www.moca.org/museum/exhibitiondetail.php?&id=350 [accessed 01.09.14]

MoMA (2010) Marcel Duchamp: The Readymade as Reproduction [image online]. Available at: https://www.moma.org/interactives/exhibitions/2010/originalcopy/intro05.html [accessed 01.09.16]

Moore, P. (1965) Charlotte Moorman and Nam June Paik Performing 26'1.499" for a String Player [image online]. Available at:

http://www.artnet.com/Magazine/FEATURES/honigman/Images/honigman1-30-2.jpg [accessed 01.09.14]

Morley, P. (2010) 'Paul Morley on Music: Lou Reed's Metal Machine Music', Observer, 11 April 2010 [online]. Available at: http://www.theguardian.com/music/2010/apr/11/morley-lou-reed-metal-machine [accessed 07.12.13]

Morley (2015a) 'Immersive Soundscapes Come to Morley', *Learning for Life at Morley*, 4 May 2015 [online]. Available at: https://www.morleycollege.ac.uk/news/156-winners-announced-for-the-engine-room [accessed 30.07.16]

Morley (2015b) 'Winners Announced for the Engine Room', *Learning for Life at Morley*, 12 May 2015 [online]. Available at: https://www.morleycollege.ac.uk/news/156-winners-announced-for-the-engine-room [accessed 30.07.16]

Morley (2016a) 'The Engine Room', *The Engine Room* [online]. Available at: https://engineroomlondon.org/pages/about [accessed 30.07.16]

Morley (2016b) 'The Engine Room: International Sound Art Competition and Exhibition 2017', *The Engine Room* [online]. Available at: https://engineroomlondon.org [accessed 30.07.16]

Mosquera, G. and A. Samos (2003) 'CíudadMULTIPLEcity: Riding on a Wild One', *Zing Magazine*, 19 [online]. Available at: http://www.zingmagazine.com/issue19/mosquera.html [accessed 07.12.11]

Motte-Haber, H. (ed.) (1999) Klangkunst: Tönende Objekte und klingende Räume. Laaber: Laaber Verlag

Motte-Haber, H. (ed.) (1996) Klangkunst. Munich: Prestel

MUMOK (2016) *Frantisek Kupka, Nocturne, 1911* [image online]. Available at: https://www.mumok.at/en/nocturne [accessed 01.09.16]

MUMOK (2014) Joe Jones, Bird Cage, 1964 [image online]. Available at: http://images.dazedcdn.com/1000/an/300/3/303661.jpg [accessed 01.09.14]

Murray, I. (1990s) 'Towards a Definition of Radio Art', *Kunstradio* [online]. Available at: http://www.kunstradio.at/TEXTS/manifesto.html [accessed 01.03.12]

Naumann, F. (2005) 'Duchamp, Marcel', *Grove Art Online* [online]. Available at: http://www.oxfordartonline.com/subscriber/article/grove/art/T023894 [accessed 18.07.05]

Negus, K. (1999) Music Genres and Corporate Cultures. London: Routledge

Neuhaus, M. (1994) Max Neuhaus: Inscription, Sound Works Vol. 1. Ostfildern, Germany: Cantz Verlag

Neuhaus, M. (2005a) 'Max Neuhaus', *Max Neuhaus* [online]. Available at: http://www.max-neuhaus.info [accessed 01.09.08]

Neuhaus, M. (2005b) '[Untitled]', ArtReview, May 2005 (56), p. 55

Neuhaus, M. (2000) 'Sound Art?', in *Volume: Bed of Sound* by various artists [CD]. New York: MoMA PS1. Liner notes [online]. Available at: http://www.maxneuhaus.info/soundworks/soundart/SoundArt.pdf [accessed 01.09.14]

Neuhaus, M. (1995) *Circumscription Drawings* [image online]. Available at: http://www.max-neuhaus.info/drawings/circumscription [accessed 01.09.14]

NGA (2009) Joseph Beuys: Noiseless Blackboard Eraser [image online]. Available at: http://nga.gov.au/Exhibition/softsculpture/Images/400/43710.jpg [accessed 01.09.14]

Nichols, C. (2011) 'From the Dusty Corners of the Museum...Cornelia Parker', *The Museum of Ridiculously Interesting Things* [online]. Available at: http://ridiculouslyinteresting.wordpress.com/2011/07/24/from-the-dusty-corners-of-the-museum-part-two-cornelia-parker [accessed 07.12.11]

Noon, J. (2000) 'A Symphony of the Sounds that Surround Everyday Life', *Independent on Sunday*, 30 April 2000, p. [illegible]

Nordschow, R. (2004) 'Stephen Vitiello and Marina Rosenfeld', *New Music Box* [online]. Available at: http://www.newmusicbox.org/assets/59/interview_vitiello.pdf [accessed 01.03.11]

Nyman, M. (1999) *Experimental Music: Cage and Beyond*, Music in the Twentieth Century, 2nd edition. Cambridge: Cambridge University Press

O'Hagan, S., K. Fox, N. Spencer, and L. Hanley (2006) 'Come on, Feel the Noise', Observer, 11 June 2006 [online]. Available at: http://www.guardian.co.uk/music/2006/jun/11/jazz [accessed 01.09.08]

Obadike, K. (2001) 'What's in a Name? Seeing Sound Art in Black Visual Traditions', *Art Journal*, 60 (4): 4-5

Obadike, K. and M. (2004) 'Ya Heard: Sounds from the Rhizome ArtBase', *Rhizome* [online]. Available at: http://archive.rhizome.org/exhibition/ya_heard [accessed 09.02.17]

Ouzounian, G. (2009) 'Impure Thinking Practices and Clinical Acts: The Sonorous Becomings of Heidi Fast', Organised Sound, 14 (1): 75-81

Packer, W. (2000) 'Having Fun with the Art of Noise', Financial Times, 2 May 2000, p. 16

Page, T. (1984) 'Music: A Show of Sound and Art', *New York Times*, May 6 1984 [online]. Available at: http://www.nytimes.com/1984/05/06/arts/music-a-show-of-sound-and-art.html [accessed 08.02.07]

Pater, W. (2005) The Renaissance. New York: Cosimo (Original work published 1877)

Peer, R. (1993) Interviews with Sound Artists. Eindhoven: Het Apollohuis

Perry, G. and C. Cunningham (1999) *Academies, Museums, and Canons of Art.* New Haven and London: Yale University Press

Petts, H. (2008) *Max Eastley's Kinetic Drawings* [video online]. Available at: http://vimeo.com/11556485 [accessed 01.09.14]

Pierce, S. (2008) *The Metropolitan Complex: Sonic Pass* [pdf] Available at: http://themetropolitancomplex.com/wp/wp-content/uploads/paper14.pdf [accessed 01.09.14]

Pollack, B. (2013) 'Now Hear This: Sound Art Has Arrived', *ARTnews*, November 2013 [online]. Available at: http://www.artnews.com/2013/11/14/now-hear-this-sound-art-has-arrived [accessed 30.07.16]

Pompidou (2002) 'Sonic Process: A New Geography of Sounds'. Press release. Pompidou Centre, Paris

Poole, S. (2001) 'Prick Up Your Ears', Review, Guardian, 17 November 2001, p. 9

Project Dark (2000) 'Step 1, Step 2, Step 3', in *Sonic Boom: The Art of Sound* by various artists [CD]. London: Hayward Gallery. CD1, Track 4

Project Dark (2000a) *Step* [image online]. Available at: http://www.projectdark.demon.co.uk/hayward.htm [accessed 01.09.10]

PS1 (2012) 'Warm Up 2012', *MoMA PS1* [online]. Available at: http://momaps1.org/warmup [accessed 07.08.12]

PS1 (2010) *Christian Marclay: 2822 Records* [image online]. Available at: http://momaps1.org/slideshow/view/191 [accessed 01.09.17]

PS1 (2008) 'MoMA PS1 Profile', *MoMA PS1* [online]. Available at: http://momaps1.org/about [accessed 01.09.08]

PS1 (2006) 'Music is a Better Noise', *MoMA PS1* [online]. Available at: http://momaps1.org/exhibitions/view/126 [accessed 01.09.08]

PS1 (2000a) 'Volume: Bed of Sound', *MoMA PS1* [online]. Available at: http://www.ps1.org/cut/volume/about.html [accessed 04.08.08]

PS1 (2000b) 'Volume: Bed of Sound', Undo.net [online]. Available at: http://www.undo.net/it/evento/1384 [accessed 04.08.08]

PS1 (2000c) 'Volume: Bed of Sound'. Press release. MoMA PS1, New York

PS1 (2000d) Volume: Bed of Sound [image online]. Available at: http://41.media.tumblr.com/02e6c50c5dd0f4c07c320a6e3b242d7c/tumblr_mq5k0jxtN61rnoiev o2_1280.jpg [accessed 01.09.14]

Pyke, S. (2000) *The Listening Post at the Lighthouse* [image online]. Available at: http://longplayer.org/img/rhs-pykeshed321.jpg [accessed 01.09.14]

Ratnam, N. (2000) 'Right Hear, Right Now', The Face, 40, p. 247

Ray, A. (2006) 'Inhalatorium', *Andrea* Ray [online]. Available at: http://web.mac.com/rayandrea/Andrea_Ray/Inhalatorium.html [accessed 07.12.11]

Ray, A. (2004) *Inhalatorium* [MP3 download]. Available at: http://www.andrearay.net/Andrea_Ray/Inhalatorium.html [accessed 01.09.14]

Reed, L. (1975) 'Metal Machine Music, Part 1', in *Metal Machine Music* by L. Reed (2000) [CD]. New York: Buddha Records. Track 1

Rejo, A. (2011) *Create Your Own Art* [image online]. Available at: https://anjalirego.com/2011/03 [accessed 01.09.17]

Reynolds, K. (2013) *Singles Club Catalogue* [image online]. Available at: http://www.kirstenreynolds.co.uk/project_dark [accessed 01.09.14]

Rimbaud, R. (2000) *The Collector* [image online]. Available at: http://www.scannerdot.com/art/2000/thecollector.html [accessed 01.09.14]

Ritchie, I. (2008) 'The Hayward at 40: Architects Pay Tribute', *Building Design*, 2 May 2008 [online]. Available at: http://www.bdonline.co.uk/culture/the-hayward-at-40-architects-pay-tribute/3112476.article [accessed 04.08.08]

Roden, S. (2005) 'Active Listening', *Soundwalk 2005*. Long Beach, California: Flood [online]. Available at: http://www.inbetweennoise.com/texts/active-listening [accessed 18.02.06]

Roden, S. (2004) 'Audio Files: Sound Art Now: An Online Symposium', *Artforum International*. Posted 25 April 2004 [online]. Available at: http://artforum.com/symposium/id=6682&page_id=1 [accessed 08.02.07]

Romney, J. (2000) 'Only Here for the Ear', Guardian, 31 May 2000, p. 13

Rondinone, U. (2017) *So Much Water So Close to Home* [image online]. Available at: https://ugorondinone.com/artwork/rondi30754 [accessed 01.07.17]

Rosch, E. (1975) 'Cognitive Representations of Semantic Categories', *Journal of Experimental Psychology*, 104 (3): 192-233

Rosenfeld, C. (2004) 'Audio Files: Sound Art Now: An Online Symposium', *Artforum International*. Posted 29 April 2004 [online]. Available at: http://artforum.com/symposium/id=6682&page_id=4 [accessed 08.02.07]

Rudi, J. (2009) 'Editorial', Organised Sound, 14 (1): 1-2

Rummel, S. (2006) *Schattengemeinde* [image online]. Available at: http://www.stefanrummel.info/inhalt/schattengemeinde/schattengemeinde4.jpg [accessed 01.09.14]

Samson, J. (2008) 'Genre', *Grove Music Online* [online]. Available at: http://www.oxfordmusiconline.com/subscriber/article/grove/music/40599 [accessed 18.07.08]

SARC (2004) 'About Us', *Sonic Arts Research Centre* [online]. Available at: http://www.sarc.qub.ac.uk/sites/sarc/AboutUs [accessed 01.05.12]

Scanner (2000) 'The Collector', in *Sonic Boom: The Art of Sound* by various artists [CD]. London: Hayward Gallery. CD1, Track 1

Schafer, D. (2009) 'Projects', *David Schafer* [online]. Available at: http://davidschafer.org/archives/2525 [accessed 07.12.11]

Schafer, D. (2000) *General Theory: Lecture #1* [MP3 download]. Available at: http://www.ubu.com/sound/schafer.html [accessed 01.09.14]

Schedel, M. (2004) 'Alternative Venues for Computer Music: SoundGallery_Living Room_ARTSHIP', Organised Sound, 9 (3): 301-303

Schirn (2002) *Frequencies [Hz]* [image online]. Available at: http://www.schirn.de/en/exhibition.html [accessed 01.09.14]

Schöning, K. (1991) 'The Contours of Acoustic Art', trans. M. Cory, *Theatre Journal*, 43 (3): 307-324

Schulz, B. (2002a) 'Introduction', in Resonances: Aspects of Sound Art ed. B. Schulz. Heidelberg, Germany: Kehrer Verlag, pp. 14-18

Schulz, B. (ed.) (2002b) Resonanzen: Aspekte der Klangkunst/Resonances: Aspects of Sound Art, Heidelberg, Germany: Kehrer Verlag

Schütze, P. (2000) 'The Head, The Soles of the Feet, An Arm', in *Sonic Boom: The Art of Sound* by various artists [CD]. London: Hayward Gallery. CD2, Track 7

Schütze, P. (2000a) *Third Site* [image online]. Available at: http://dressingtheair.com/uploads/584/other/DRPP242Vkwxitn5L-178x252.jpg [accessed 01.09.14]

Scott, C. (2006) 'Sound Argument (Extended Version): A Music Writer and an Art Critic Go Head-to-Head over Trimpin', *The Stranger*, 4 May 2006 [online]. Available at: http://www.thestranger.com/seattle/Content?oid=32150 [accessed 15.09.07]

SculptureCenter (2004a) "Treble: An Exploration of Sound as a Material and Subject in Contemporary Art'. Press release, 20 April 2004. SculptureCenter, New York [online]. Available at: http://sculpture-center.org/pressSpecific.htm?id=10326 [accessed 15.08.08]

SculptureCenter (2004b) 'Treble'. Introductory panel text from the *Treble* exhibition, SculptureCenter, New York, 16 May - 1 August 2004

SculptureCenter (2004c) 'Treble: SculptureCenter Floorplan'. SculptureCenter, New York

SculptureCenter (2004d) *Treble* [image online]. Available at: http://www.sculpture-center.org/exhibitionsExhibition.htm?id=10113 [accessed 01.09.14]

Searle, A. (2010) 'Turner Prize Winner Susan Philipsz: An Expert View', *Guardian*, 6 December 2010 [online]. Available at: http://www.guardian.co.uk/artanddesign/2010/dec/06/turner-prize-susan-philipz [accessed 05.09.12]

Seijdel, J. (ed.) (2005) *Sound: Sound in Art and Culture*, Open 9: Cahier on Art and the Public Domain. Rotterdam: NAi Publishers

Shaff, S. (2006) *Audium* [image online]. Available at: http://www.audium.org/audium_1.jpg [accessed 01.09.14]

Sharp, E. (2000a) 'Writings: SoundArt Talk', *Elliott Sharp Datacide* [online]. Available at: http://datacide.info/index.php/writings#soundarttalk [accessed 15.08.14]

Sharp, E. (2000b) 'Volume Introductory Notes', *Elliott Sharp: Datacide* [online]. Available at: http://www.repple.se/datacide/installations.html#vol [accessed 01.09.08]

Shaw-Miller, S. (2006) 'Visual Music and the Case for Rigorous Thinking', *The Art Book*, 13 (1): 3-5

Shaw-Miller, S. (2002) *Visible Deeds of Music: Art and Music from Wagner to Cage*. New Haven and London: Yale University Press

Sheridan, M. (2006) 'In Conversation with Brandon LaBelle', *New Music Box* [online]. Available at: http://www.newmusicbox.org/articles/In-Conversation-with-Brandon-LaBelle-2006-8-21 [accessed 01.03.11]

Smith, J. (1979) The Experiencing of Musical Sound. New York: Gordon and Breach

Smith, N. (2010) 'So How Do You Install a Piece of Sound Art?', *BBC News*, 7 December 2010, [online]. Available at: http://www.bbc.co.uk/news/entertainment-arts-11934816 [accessed 05.09.12]

Smith, R. (2004) 'At Shows Painted With Sound, Be Prepared to See With Your Ears', *New York Times*, 21 May 2004 [online]. Available at: http://www.nytimes.com/2004/05/21/arts/artreview-at-shows-painted-with-sound-be-prepared-to-see-with-yourears.html?pagewanted=allandsrc=pm [accessed 08.02.07]

Sonic Youth (1991) 'Tamra', in *Dirty by* Sonic Youth (2003) [CD]. Los Angeles: Geffen Records. CD2, Track 4

SoundCulture (2004) 'Background', *SoundCulture* [online]. http://www.soundculture.org/background.html [accessed 09.02.07]

SoundFjord (2010) 'About', SoundFjord: The Online Home of the United Kingdom's Only Sound Art Devoted Gallery and Research Unit [online]. Available at: http://www.soundfjord.org/about.htm [accessed 05.09. 12] Star, S. and J. Griesemer (1989) 'Institutional Ecology, "Translations" and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39', *Social Studies* of Science, 19 (3): 387–420

Sturges, F. (2000) 'How to Make a Big Noise in the City', Independent, 9 May 2000, p. [illegible]

Sutcliffe, A. (2015) *Engine 27: Old Fire Station Frontage, Franklin St, Tribeca. NYC* [image online]. Available at: https://c1.staticflickr.com/5/4285/35181819935_84fc846dab_b.jpg [accessed 01.09.15]

Swales, J. (1990) Genre Analysis: English in Academic and Research Settings. Cambridge: Cambridge University Press

Tallichet, J. (2010) 'It's All Good', *Jude Tallichet* [online]. Available at: http://judetallichetstudio.com/index.php?/project/2004 [accessed 07.12.11]

Tate (2005) 'The Politics of Sound/The Culture of Exchange', *Tate* [online]. Available at: http://www2.tate.org.uk/intermediaart/discuss/d_culture/politics1.shtm [accessed 07.08.12]

Tate (2004) 'Twenty Years of the Turner Prize: 1984–2004', *Tate* [online]. Available at: http://www.tate.org.uk/whats-on/tate-britain-other-venues/exhibitionseries/turner-prizeseries/twenty-years-turner-prize [accessed 05.09.12]

Tatolli, C. (2014) 'Fondazione Prada Examines Sound as Art in a New Exhibition in Venice', *Architectural Digest*, 31 May 2014 [online]. Available at: http://www.architecturaldigest.com/story/fondazione-prada-venice [accessed 30.07.16]

Taylor, J. (2011a) *A History of Sound Art* [image online]. Available at: http://suborg.net/a-historyof-sound-art [accessed 01.09.14]

Taylor, J. (2011b) *Sound Art Archive* [online]. Available at: http://www.soundartarchive.net [accessed 01.05.12]

Taylor, J. (2009) *ImMApp: Noise* [image online]. Available at: http://suborg.net/wp-content/gallery/phd/immapp-noise.jpg [accessed 01.09.14]

Taylor, J. (2008) 'The ImmApp: A Digital Application for Immersive Interaction with Sound Art Archives', in *Computer Music Modeling and Retrieval: Sense of Sounds (Revised Papers)* ed. R.
Kronland-Martinet, S. Ystad and K. Jensen. Berlin: Springer Verlag, pp. 426-440 [online]. Available at: http://suborg.net/the-immapp-a-digital-application-for-immersive-interactionwith-sound-art-archives [accessed 30.04.14]

Taylor, J. and J. Cahen (2011) *A History of Sound Art: Excerpt 1 1920s* [MP3 download]. Available at: http://www.newtoy.org/mp3s/AHoSA [accessed 01.09.14]

Temkin, A., S. Rosenberg and M. Taylor (2000) *Twentieth Century Painting and Sculpture in the Philadelphia Museum of Art.* Philadelphia: Philadelphia Museum of Art

The Wire (2000) *Issue#195* [image online]. Available at: http://www.thewire.co.uk/img/scale/460/555/images/issues/issue195/covers/originals/460x5 55xCOVER195.jpg.pagespeed.ic.ZiZ5GsH5ne.jpg [accessed 01.09.14]

The Wire (2016) 'Major Sound Art Exhibition in Lima', *The Wire*, 8 March 2016 [online]. Available at: http://www.thewire.co.uk/news/40790/sound-art-exhibition-lima [accessed 30.07.16]

Thompson, B (2005) 'Definitions and Other Thoughts', in *SoundasArt: A Forum Concerning the Emerging Artform Sound Art.* Post no. 32, 30 October 2005 [online]. Available at: http://groups.yahoo.com/neo/groups/soundasart/conversations/messages/32 [accessed 18.02.06]

Thwaites, T., L. Davis, and W. Mules (1994) *Tools for Cultural Studies: An Introduction*. South Melbourne: Macmillan

Tittel, C. (2009) 'Sound Art as Sonification, and the Artistic Treatment of Features in our Surroundings, *Organised Sound*, 14 (1): 57-64

Todorov, T. (1976) 'The Origin of Genres', New Literary History, 8: 159-170

Todorov, T. (1973) The Fantastic: A Structural Approach to a Literary Genre. Ithaca: Cornell University Press

Toop, D. (2005) 'The Art of Noise', *Tate Etc.*, Spring 2005, pp. 62-69 [online]. Available at: http://www.tate.org.uk/tateetc/issue3/theartofnoise.htm [accessed 06.02.07]

Toop, D. (2000a) 'Introduction', in *Sonic Boom: The Art of Sound*, London: Hayward Gallery, pp. 15-17

Toop, D. (2000b) 'Sonic Boom', in *Sonic Boom: The Art of Sound*, London: Hayward Gallery, pp. 107-122

Toop, D. (1995) Ocean of Sound: Aether Talk, Ambient Sound and Imaginary Worlds. London: Serpent's Tail

Toronyi-Lalic, I. (2010) *John Cage Preparing a Piano* [image online]. Available at: http://www.theartsdesk.com/sites/default/files/imagecache/mast_image_portrait/mastimages/ d433389b35164ea4979aa29364addb9c.jpg [accessed 01.09.14]

Trans (2002) 'Salto Del Agua at Trans Area', *e-flux* [online]. Available at: http://www.e-flux.com/announcements/salto-del-agua-at-trans-area [accessed 07.12.11]

Valdez, S. (2001) 'Mungo Thomson at Margo Leavin', *Art in America*, February 2001 [online]. Available at: http://mungothomson.com/files/text/30.pdf [accessed 07.12.11]

Van Assche, C. (ed.) (2002a) Sonic Process: A New Geography of Sounds, Barcelona: Actar

Van Assche, C. (2002b) 'Sonic Process: A New Geography of Sounds', in *Sonic Process: A New Geography of Sounds* ed. C. Van Assche. Barcelona: Actar, pp. 5-15

Vandsø, A. (2015) 'Music, Sound Art and Context in a Post-Cagean Era', *Seismograf Peer Review*, 18 February 2015 [online]. Available at: http://seismograf.org/en/pr/vandsoe [accessed 30.07.16]

Vartanian, H. (2013) *John Cage, "4'33" (In Proportional Notation)" (1952/1953)* [image online]. Available at: http://hyperallergic.com/85779/the-original-john-cage-433-in-proportionalnotation-19521953 [accessed 01.09.14]

Vassie, X., J. Chambers, P. Wyeth, P. Cameron, and M. Golden (2001) 'What's the Point of Sound Art? Your Reactions: The Artists aren't Engaging with Humanity', *Guardian*, 24 November 2001 [online]. Available at:

http://www.guardian.co.uk/technology/2001/nov/24/difficultartforms.arts [accessed 08.02.07]

Veltman, C. (2002) 'Art: In the Ear of the Beholder', *Wired News*, 15 February 2002 [online]. Available at:

http://www.chloeveltman.com/features/digital_culture/activating_the_medium.html [accessed 23.08.12]

Vitiello, S. (2004) 'Audio Files: Sound Art Now: An Online Symposium', *Artforum International*. Posted 26 April 2004 [online]. Available at:

http://artforum.com/symposium/id=6682&page_id=2 [accessed 08.02.07]

Vivacqua, P. (2004) *Sentinels* [MP3 download]. Available at: http://www.forumpermanente.org/rede/arte-e-patrimonio/projetos-1/sentinelas/Sentinels.mp3/view [accessed 01.09.14]

Voegelin, S. (2010) Listening to Noise and Silence: Towards a Philosophy of Sound Art. London and New York: Continuum

Voegelin, S. (2006) 'I Am Not a Sound Artist; An Exploration of Sound as Concept and the Fear of Visual Definition'. Paper presented at the *SoundAsArt: Blurring of the Boundaries* conference, University of Aberdeen, 24-26 November 2006

Walton, I. and R. Mills (2000) 'Mantle', in *Sonic Boom: The Art of Sound* by various artists [CD]. London: Hayward Gallery. CD2, Track 1

Walton, K. (2007) 'Aesthetics – What?, Why?, and Wherefore?', Journal of Aesthetics and Art Criticism, 65: 147-162

Walton, K. (1970) 'Categories of Art', Philosophical Review, 79: 334-367

Warburton, N. (2003) The Art Question. London and New York: Routledge

Weibel, P. (2012) 'The Post-Media Condition', *Mute* [online]. Available at: http://www.metamute.org/editorial/lab/post-media-condition [accessed 04.03.14]

Weitz, M. (1956) "The Role of Theory in Aesthetics", *Journal of Aesthetics and Art Criticism*, 15 (1): 27-35

Whitehead, C. (2007) 'Establishing the Manifesto: Art Histories in the Nineteenth-Century Museum', in *Museum Revolutions: How Museums Change and are Changed* ed. S. Knell, S. MacLeod, and S. Watson. London and New York: Routledge, pp.48-60

Williams, R. (1976) Keywords: A Vocabulary of Culture and Society. Oxford: Oxford University Press

Wilson, M. (2006) 'Invisible Geographies: New Sound Art from Germany', *Artforum International*, November 2006, 45 (3), pp. 298-299 [online]. Available at: http://artforum.com/inprint/issue=200609andid=43064 [accessed 01.09.08]

Wilson, R. (2005a) 'Contents: ArtReview April', Art Review, May 2005, p. 8

Wilson, R. (2005b) 'Editor's Letter: Making Waves', ArtReview, May 2005, p. 13

Wimsatt, W. and M. Beardsley (1954) *The Verbal Icon: Studies in the Meaning of Poetry*. Lexington: University of Kentucky Press

Winderen, J. (2006) 'Sound Art in the White Cube, Seminar at UKS, 2006', *Jana Winderen: Exhibitions* [online]. Available at: http://www.janawinderen.com/productions/sound_art_in_the_white_cube_se.html#.U7iA3pR dW_Q [accessed 01.09.08]

Wishart, T. (1996) On Sonic Art. London: Harwood Academic Publishers

Wittgenstein, L. (1958) Philosophical Investigations. Oxford: Blackwell Publishing

Woensel, J. (2007) *Installation View: Vienna HWY Song 1,3, 2(7-8)* [image online]. Available at: http://whitehotmagazine.com/articles/2-interview-with-lee-ranaldo/images/article_images/Vienna%20HWY%20SONG%20%201,3,2%20(7-8)(2).jpg [accessed 01.09.14]

Wolfson, R. (2000) 'Too Much Noise and Not Enough Space at the South Bank's Sound Art survey', *Daily Telegraph*, 17 May 2000, p. [illegible]

Yeung, P. (2015) 'The Rise of Sound Art', *Apollo*, September 2015 [online]. Available at: http://www.apollo-magazine.com/the-rise-of-sound-art [accessed 30.07.16]

Young, E. (2000) 'Eleanor Young Reviews David Toop on Making Spaces Out of Sound', The Architects' Journal, 4 May 2000, p. 8

Young, R. (2000a) 'Editor's Idea', The Wire: Adventures in Modern Music, May 2000 (195), p. 5

Young, R. (2000b) 'Moving Shadows', The Wire: Adventures in Modern Music, May 2000 (195), p. 34

Young, R. (2000c) 'Sonic Boom', The Wire: Adventures in Modern Music, May 2000 (195), p. 19

ZKM (2012) 'Exhibition', *Sound Art: Klang Als Medium der Kunst* [online]. Available at: http://soundart.zkm.de/en/informationen [accessed 01.08.13]