

**Perceiving Voices in Contemporary Art:
An auditory exploration of image, sculpture and architecture**

Merrilee Wolsey

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ABSTRACT

Perceiving Voices in Contemporary Art:
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Merrilee Wolsey

This thesis investigates some recent developments of sound in contemporary art through an exploration of image, sculpture and architecture. While the areas of image, sculpture and architecture are so crucial to art history that they are included in most important introductory texts to art history, most of these texts remain relatively silent as to the impact that sound and visual art has mutually had on the other. Three contemporary art case studies are presented: (1) Geneviève Cadieux's *La voie lactée* (1992) an image which incorporates the soundscape, (2) Myriam Laplante's sculptural installation *Elixir* (2004) that draws on acousmatic sound to give presence to objects, and (3) Janet Cardiff's video walk *Conspiracy Theory* (2002) a critical examination of the voice in architecture. Through an interpretive exploration of these works, the author seeks to understand how sound might be important to the "silent" image, object, or building. This thesis argues that sound and image can be used together in art to map out new territory, that psychologically stimulating effects occur when sound is projected on to objects, and that sound spaces can be constructed giving an impression of architecture space and material. By approaching sound in art through image, sculpture and architecture, this thesis may assist in establishing the lexicon of sound that is so familiar in other fields of study in art historical terms. This is absolutely crucial for ongoing studies of contemporary art where sound has become so prevalent.

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Merrilee Wolsey, August, 2008.

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“And after the earthquake a fire; but the LORD was not in the fire:
and after the fire a still small voice.”

- 2 Kings 19:12 (The Holy Bible, King James Version)

INTRODUCTION

The trend of using several media, such as audio and visual elements together, is becoming a frequent occurrence in contemporary art. Just as photography or other technological inventions revolutionized art and gave rise to whole new fields of investigation, the advent of sound recording technologies presented new problems and additional possibilities for art. Thomas Edison was the first to reproduce sound with his 1877 phonograph (also called the gramophone) in Menlo Park, New Jersey. As this technology became more sophisticated and developed, the focus would be on *fidelity*, making the reproduction of sound as much like the original as possible. This technology permitted the introduction of real world sounds into music composition and performance and expanded the playing field of the auditory art form. Developments in contemporary art seem to have resulted in an inclusion of sound as an essential component to the sensorial art experience.

Developmental psychologist Peter Hepper believes that hearing is the third of our five senses to develop (our sense of touch being the first and taste being the second). While there has been much scientific debate over what the human foetus and newborns actually are able to hear, Hepper says that the foetus begins responding to sound at approximately 22-24 weeks.¹ The maturity of the human ear at such an early stage seems to suggest that hearing and the practice of listening are essential to human development, perception and understanding. While clearly all our senses play an important role in learning, it is interesting to consider that one possible reason that our

¹ Peter Hepper, "Unraveling our Beginnings: On the Embryonic Science of Fetal Psychology," *The Psychologist* 18, no. 8 (August, 2005), 474-477.

sense of hearing develops so early is because it is so crucial to the way humans are able to make sense of the world. In *A History of the Senses* Diane Ackerman demonstrates that etymology confirms this:

“In Arabic, absurdity is not being able to hear. A ‘surd’ is a mathematical impossibility, the core of the word ‘absurdity,’ which we get from the Latin *surdus*, ‘deaf or mute,’ which in a translation from the Arabic *jad̄r asamm*, a ‘deaf root,’ which in turn is a translation from the Greek *alogos*, ‘speechless or irrational.’ The assumption hidden in this etymological nest of spiders is that the world will still make sense to some who are blind or armless or minus a nose. But if you lose your sense of hearing you lose track of life’s logic. You become cut off from the daily commerce of the world, as if you were a root buried beneath the soil.”²

Akerman’s quote seems to suggest that hearing does play a substantial role in making sense of our world and that sound contributes significantly to the experience of what is sometimes called “visual art”. Is it going too far to believe that, if we aren’t listening, there is a potential for our overall perception of art to be incomplete?

Listening to art is as crucial to our observation and study of art as looking at it is. Generally speaking, this thesis investigates some recent developments of sound in contemporary art through an exploration of three essential areas of art historical study: image, sculpture and architecture. While music may have overlapped at various moments with the history of visual art, the field of music history has already produced a significant body of documentation relating to sound that art historians need not rewrite. It is with sound’s migration into the visual fields of art (which has been going on for at least a century) that some interesting breakthroughs begin to occur in art history. Throughout the ages there have always been artists who demonstrate a sensitivity to the way sound can stir feelings and produce an aesthetic experience. But these artists, most often categorized as “musicians,” had a limited palette of sounds that were generated

² Diane Ackerman, "Hearing" In *A Natural History of the Senses*, 1st ed. -- ed. (New York: Random House, 1990), 175.

from limited sources of instrumentation. With sound's migration from the concert hall into the art gallery, photography becomes an insufficient method of documenting works for secondary observation. Rather than tackling all of the complex issues surrounding the documentation of sound art, this thesis responds to the critical question of how vital listening can be when experiencing contemporary art works.

More specifically this thesis will examine three contemporary art works in terms of sound. Each will serve a case study for one of three main visual art visual forms of image, sculpture and architecture. These three works include Geneviève Cadieux's public billboard installation, *La voie lactée* (1992) (image), Myriam Laplante's installation (sculpture), *Elixir* (2004), and Janet Cardiff's video walk, *Conspiracy Theory* (2002) (architecture). All three artists are still actively producing work and these pieces exemplify how sound continues to be important to contemporary art practices. These artists can be considered part of an extraordinary burst of aesthetic interest in sound, in the contemporary art world. These artist were chosen because of the sophistication in which they address the idea of sound and the material world and the complex issues that are raised in the process. In each of the three cases covered, (even Cadieux's "silent" image) sound is important because the voice emerges as a central theme. Sound may be suggested through silence, it may be symbolically implied, used concretely and/or treated as a navigational tool. But in all three cases there is a voice present. It is through sound and the voice that these works communicate some of their most fascinating impressions. The voice provides an avenue by which one can critically examine how important sound really can be to contemporary art works and to art in general. The thesis will be divided into three main sections which will allow for a more

in depth analysis of ways that sound holds an important role in the respective areas. Each of the three main chapters will include a short section giving a theoretical background that will provide the basis for the interpretive examination of a work of art and the theme of the voice that arises from the examining the visual art form with sound in mind. These case studies will shed light on the larger phenomenon of sound in contemporary art.

Some important ideas from interdisciplinary sound scholarship can shed light on sound's crucial role in image, sculpture and architecture. The most vital to this thesis are the *audio-visual contract*, the *sonorous object (l'objet sonore)*, and *acoustic ecology*. Michel Chion's idea of the *audio-visual contract* comes from film sound theory, and proposes that when an image and sound are presented together, sound adds an additional affective dimension for the viewer. The cinematic illusion can only be fully achieved when the viewer agrees to accept the audio and visual as a single unit, rather than two devices used in combination. Pierre Schaeffer's notion of *sonorous object* comes from music and is the abstract notion of sound as a unit independent of its sound source that can be manipulated and/or repeated to create various effects. *Acoustic ecology*, sometimes called soundscape studies, is a field that started with Murray Schafer's investigations into the way that changes in sound in the environment can have an effect human behaviour and our perception of the world. The World Soundscape Project, headed up by Schafer, was responsible for collecting audio recordings of various sites in order to preserve the sounds that were vanishing from the environment and to study changes in the sonic world.

Other ideas will buttress these foundational theories. Jacques Derrida's notion of *the parergon*, which deconstructs the notion of an easily delimited barrier between the essential and non-essential elements in art works, will be important. Slavoj Žižek's adaptation of the Lacanian idea of *le sinthome* with Chion's *la voix acousmatique*, helps to address the idea of "the gaze" and subjectivity in terms of listening and objects. *Aural architecture*, an idea presented by Barry Blesser and Ruth Salter, proposes that sound spaces are constructed by architectural spaces and it suggests that these spaces are a complex configuration of materials and bodies in space. These ideas will provide the foundation for this thesis' exploration of how sound infiltrates contemporary image, sculpture and architecture.

Historical Background

Sound has indeed been an important consideration in most major twentieth-century art movements. Some of these movements include Futurism, Constructivism, Dada, Surrealism, Minimalism, and Conceptual Art. Luigi Russolo, who trained as a painter, is best known for his manifesto, *The Art of Noises* (1913). This letter to musicologist and composer, Balilla Pratella, which is considered an important contribution to Italian Futurism, asserts that urban industrial sounds must be integrated into the instrumentation for the music of the future. Vladimir Tatlin is arguably the most important figure in the Constructivist movement. His most celebrated work, *Monument to the Third International* (1917), which commemorated the Communist International organization, was never built, but models of it were constructed. Plans clearly determined that the 400 metre tall twin helix spiralling tower was to be "crowned with a

radio station.”³ Author of the *Dada Manifesto* (1916), Hugo Ball wrote a series of six sound poems that were performed at the Cabaret Voltaire in Zürich, Switzerland. By using nonsensical sound, Ball attempted to transcend the polyglot environment where speakers of Russian, French, Polish, Italian, German, Romanian, etc. would all be able to fully participate in listening without the necessity of language translation. In his 1944 essay “Silence is Golden” Surrealist André Breton suggested that music and poetry be fused into one art.⁴ All of these artists provided a foundation for sound to become more prevalent in art practices.

John Cage is an influential figure in the development of visual, auditory and performance arts. After a 1948 spring tour, Cage and dancer/choreographer Merce Cunningham paid a visit to Black Mountain College in the foothills of North Carolina to give a piano and dance performance. In these collaborations between Cage and Cunningham, the artists would work independently and merge their two art forms in a controlled chance performance encounter. Also, Cage’s radical approach to music, which was more concerned with time and duration than it was with harmonics left quite an impression. Martin Duberman describes the encounter of Cage with the artists and thinkers of Black Mountain College as “an authentic meeting of the minds.”⁵ Here Cage’s ideas would be embraced and would flourish throughout the tightly knit avant-garde art community. His orchestration of *Theatre Piece No. 1* (1950) would be hailed as “the first ‘Happening,’ a kind of art event that developed in the late 50s.”⁶ This work involved the incorporation of many different media including music, dance, light,

³ Hank Bull, "Radio Art in a Gallery?" *TDR* (1988-) 37, no. 1 (Spring, 1993), 164.

⁴ André Breton and Franklin Rosemont, eds., *What is Surrealism : Selected Writings [of] André Breton* (London: Pluto Press, 1978).

⁵ Martin B. Duberman, *Black Mountain : An Exploration in Community*. (New York: Dutton, 1972), 278.

⁶ *Ibid*, 278.

design and text. Like his collaborations with Cunningham, all of these elements were made separately and then combined together to perform “chance operations.” This approach was embraced and led to compositions like *Imaginary Landscape No. 5* (1952) where Cage collaged “fragments from 43 records of jazz music” and spliced these sound units together using magnetic tape. His acquaintance with painter Robert Rauschenberg in the summer of 1952 would also inspire Cage’s most well known piece *4’33’’* (1952), “in which a pianist sits down at the piano and plays nothing.” Cage would continue compose time-based performances and interactions of concrete sound. One example, *Water Walk* (1959) (Fig. 1), was televised and drove the studio audience to hysterical laughter. While perhaps not readily accepted as art by this television audience, concerts such this would provoke listeners to consider the world of sound in new ways and to think of how the audience and the acoustic environment each play significant roles in art.

Robert Morris, known best for his minimalist sculpture also branched out into sound. *Box with the sound of its own making* (1961) (Fig. 2) was a seminal work which demonstrates clearly the kind of theatricality that Michael Fried railed against in “Art and Objecthood.”⁷ Inside the original nine-inch cube made of walnut, was housed a cassette recording of Morris hammering nails and sawing the wood to make the box. His use of audio recording during the building process and playback while displayed clearly shows that sound was a key element of this work. Inspired by his teacher, John Cage, at the New School for Social Research, George Brecht produced one of the genre-defining works of Fluxus, called *Drip Music* (1959-1962). This performance work involved having a water source drip into a vessel. Clearly referring to Jackson Pollock’s

⁷ Michael Fried, “Art and Objecthood,” *Artforum* 5 (Summer, 1967), 12-23.

drip paintings, this work made him “the second-best known art-dripper.”⁸ Possibly inspired by the work of Czech Fluxist Milan Knizak, known for his radio works in which “Snowstorm is broadcast”, as well as Zen master Hakuin’s writings which allude to listening to the sound of falling snow, Yoko Ono was interested in playing with sound and silence in her conceptual work.⁹ Her *TAPE PIECE III/Snow Piece* (1963) gave instructions to “Take a tape of the sound of the snow falling...Do not listen to the tape....” and then cut the tape up to use as strings to tie gifts with.¹⁰ All of these artists and the way they have explored sound in their works have been foundational to contemporary art practices.

70s, 80s, 90s and beyond...

Exhibitions featuring sound have been going on for decades. One of the earliest travelling exhibitions where sound was a main subject was in *The Record as artwork* (Fort Worth Art Museum, 1977 curated by Anne Hodge Livet). This exhibition examined the vinyl record and showed works that used the vinyl record as a sculptural material or manipulated it on a record player to create new forms. A recent local example of sound as the focus of an art exhibition is *Ces images sonores* at Musée d’art contemporain de Montréal (MACM) (from November 3, 2007 to March 24, 2008). Curators have also been seeking ways to transport sound from the concert hall and the radio waves into the museum and the gallery. A leading example is Daina Augaitis, who made her most significant contributions to creating a critical dialogue about sound and art exhibitions while she was the director of the Walter Phillips Gallery located at the

⁸ Kahn, *Noise, Water, Meat: A History of Sound in the Arts*, 276

⁹ *Ibid*, 238.

¹⁰ *Ibid*, 238.

Banff Centre for the Arts in Alberta. Her project, *Radio Rethink* (1994) produced an exhibition, conference and publication that have proved to be cornerstones in curatorial practice involving sound and art.¹¹ Sound art exhibitions have also reached a certain status on an international level. The Sonambiente Festival of Sound Art (Berlin, 1996 curated by Matthias Osterwold, Georg Weckwerth, and Christian Kneisel; Berlin, 2006 curated by Matthias Osterwold, Georg Weckwerth) is one of these. David Toop is another major figure based in the UK who calls himself a “sound curator.” While his most important contribution to bringing sound and art together is arguably the *Sonic Boom* (2000) exhibition at the Hayward Gallery in London, his curating is not limited to the physical space of the museum or gallery. His “sound curating” involves compiling audio works and distributing them together in CD format. His double CD *Not Necessarily English Music* (2001-2002) is an example. In 2002, The Whitney Museum of American art in New York put out a CD entitled *Bitstreams*, in conjunction with their exhibition exploring digital art (curated by Lawrence Rinder).¹² The CD is a compilation of short sound works by various artists using digital technology. In addition, Sophie Duplaix at the Centre Pompidou in Paris examined sound in an important exhibition and text called *Sons et lumières*¹³ in 2004. Museum of Contemporary Art, Los Angeles was responsible for an exhibition entitled *Visual Music*¹⁴ (co-curated by Jeremy Strick and Ari Wiseman) which examined art and the senses. Christof Migone is another figure of note whose recent work as visiting curator

¹¹ Daina Augaitis and Dan Lander, eds., *Radio Rethink : Art, Sound, and Transmission* (Banff, Alta., Canada: Walter Phillips Gallery, 1994).

¹² *BitStreams Sound Works from the Exhibition at the Whitney Museum of American Art* (New York Amsterdam: Whitney Museum of American Art ; Jdk Productions, 2001).

¹³ *Sons & Lumières : Une Histoire Du Son Dans l'Art Du XXe Siècle* (Paris: Centre Pompidou, 2004).

¹⁴ Kerry Brougher and Olivia Mattis, eds., *Visual Music : Synaesthesia in Art and Music since 1900*, 1st ed. (New York Washington, D.C. Los Angeles: Thames & Hudson ; Hirshhorn Museum ; Museum of Contemporary Art, 2005).

at the Leonard and Bina Ellen Gallery in the past few months that has produced some fascinating displays of art. His two-part exhibition, *Start/Stop* complicated issues related to sound and visual art and invited “the viewer” to also be a listener. These are only a few examples of what curators have been doing in recent years involving sound.

Of course, curators gather the work of artists to make their exhibitions and there have been, and still continue to be, a significant number of contemporary artists who are exploring sound in one fashion or another. Some of the key figures include Laurie Anderson, Vicki Bennett (aka People Like Us), Janet Cardiff, Tacita Dean, Brian Eno, Christian Marclay, Paul D. Miller (aka DJ Spooky), Pauline Olivero, Robert Rimbaud (aka Scanner), Jean Routhier and Hildegard Westerkamp. But this is only a very short list of examples.

Recent Scholarship

The important place that sound holds in the visual art world has been more widely acknowledged in recent years. Publications such as *Sound by Artists* (1990),¹⁵ *Sound and the Visual Arts* (1993),¹⁶ *Noise Water Meat* (1999),¹⁷ *Background Noise* (2006)¹⁸ and *Sound Art* (2007)¹⁹ are texts that attempt to grapple with the issues of sound in an art historical context. But some of the most important texts that attempt to understand sound as a notable cultural form fall under other fields of study such as music,

¹⁵ Micah Lexier and Dan Lander, eds., *Sound by Artists* (Toronto Banff, Alta: Art Metropole ; Walter Phillips Gallery, 1990).

¹⁶ Jean-Yves Bosseur and Alexandre Broniarski, eds., *Sound and the Visual Arts : Intersections between Music and Plastic Arts Today* (Paris: Dis Voir, 1993).

¹⁷ Douglas Kahn, *Noise, Water, Meat: A History of Sound in the Arts* (Cambridge and London: The MIT Press, 1999).

¹⁸ Brandon LaBelle, *Background Noise: Perspectives on Sound Art* (New York: Continuum International, 2006).

¹⁹ Licht, Alan. *Sound Art: Beyond Music, Between Categories* (New York: Rizzoli, 2007).

philosophy, sociology and physical sciences to name only a few. Three volumes, *Sound States* (1997)²⁰, *Audio Culture* (2004)²¹ and *The Auditory Culture Reader* (2003)²² address various issues in relationship to art, culture and sound. Jonathan Sterne's *The Audible Past* (2003)²³ is a history of phonography and it provides a valuable reference to the study sound communication and sound art.

Marshall McLuhan and Walter Ong are important scholars whose work has been foundational in this explosion of scholarly writing on sound. Marshall McLuhan's concepts on visual and acoustic space helped to describe a particular current that he believed was caused by media. As he saw it, a paradigm shift had occurred in which people had become accustomed to absorbing the world through their sense of sight, and as a result, the senses of hearing and touch had become suppressed. Walter Ong's *Orality and Literacy*²⁴ is a sociological and historical work that follows McLuhan's ideas and methodically attempts to show how written language has transformed oral societies into visual communities because of their reliance upon written texts. This book underlines the ways in which the voice and hearing are the foundation to the way we interpret texts and culture.

While sound has become a key topic in art and art history in recent years, art historians must still turn to scholarship outside of the field if they wish to explore sound and art within the field. Much of what has been written in art history draws upon what is

²⁰ Adalaide Kirby Morris, ed., *Sound States: Innovative Poetics and Acoustical Technologies* (Chapel Hill: University of North Carolina Press, 1997).

²¹ Christoph Cox and Daniel Warner, *Audio Culture: Readings in Modern Music* (New York: Continuum, 2004).

²² Michael Bull and Les Back, eds., *The Auditory Culture Reader* (Oxford, UK ; New York: Berg, 2003).

²³ Jonathan Sterne, *The Audible Past: Cultural Origins of Sound Reproduction* (Durham, N.C. ; London: Duke University Press, 2003).

²⁴ Walter J. Ong, *Orality and Literacy: The Technologizing of the Word* (London ; New York: Routledge, 1991, 1982).

seen in art. This, of course, has been absolutely necessary since most arts, including painting, sculpture, architecture and even live performances of music, draw primarily upon the visual to generate aesthetic experience or provide a means by which such an experience can be enhanced. But if art has a story to tell us, are all of these stories found only in looking? Clearly this is not the case, since the recent scholarship just mentioned (especially *Noise Water Meat* and *Background Noise*) suggests that listening is another fascinating way to explore works of art and many artists have explicitly given us something to listen to.

Case Study 1: Sound in the Art Image

Art historian, Susan Douglas points out that Cadieux focuses on vision and visuality in her piece *La voie lactée* (1992) but doesn't discuss ways that the voice can be implied through the image of lips that she uses in several of her works.²⁵ In light of Roland Barthes's idea that the body is the grain of the voice, it seems strange that one should simply see Cadieux's work as giving body to vision.²⁶ This chapter demonstrates how Cadieux's work infers not only looking, but also speaking and listening. The case study will explore Cadieux's public art installation, *La voie lactée* (Fig. 3) which has no audio component. By using the theories of sound and image drawn from film theory, however, it is possible to see how this apparently silent image is charged with tensions particular to an auditory frame.

Some important theoretical concepts relating to image and sound will be covered. In addition to discussing Chion's *audio-visual contract* and *la voix*

²⁵ Susan Douglas, "In the Field of Visibility: Cadieux, Houle Lukacs," *University of Toronto Quarterly* 71, no. 3, Summer 2002 (Oct 24, 2006), 755.

²⁶ Roland Barthes and Stephen Heath, eds., *Image, Music, Text* (New York: Hill and Wang, 1977), 188.

acoustmatique from *Audio-Vision* and *The Voice In Cinema*, this section of the thesis will introduce the notion of how imagery can act as iconographical representation for sound. Richard Leppert's interdisciplinary studies of music and art demonstrate the way that sound and image together can establish a new kind of social history. Karin von Maur's study of music and painting shows how image and sound have shared parallel themes, ideas, terminology and even converged at times to create new and progressive works of art.

For interpreting the work, Chion's *audio-visual contract* and Derrida's notion of the *parergon* will be most important. Chion's *audio-visual contract* analyzes the way sound and vision work together in film to enhance the narrative experience.²⁷ He recognizes that through an "audio-visual contract" sound is the masked element that adds value for the receiver.²⁸ Derrida's chapter, "The Parergon," in *The Truth in Painting* will be a resource to further expand upon Chion's theories. Derrida's use of the term, "*parergon*," provides a critical foundation for examining and redefining the limits of sound in the art image. Ways of "listening" to this work are addressed in order to show that a combination of listening and looking help provide additional interpretations of art works that visual observation alone might not be able to immediately reveal. Film sound theory will be the basis for my methodology because it can assist in understanding ways that sound approaches the visual field of image like in the work of Cadieux. Cinema is a medium that has mastered the fusing of the auditory and the visual to create an over all impact and this is why film sound theory can be so useful to observing art, both visually and aurally. By using the index of the still mouth

²⁷ Michel Chion, *Audio-Vision : Sound on Screen*, eds. Claudia Gorbman and Walter Murch (New York: Columbia University Press, 1994).

²⁸ Ibid.

image, Cadieux presents the dialectic between implied sound and actual silence. By exploring the meaning of this silence, by examining the title of the work, and by considering the environmental sounds surrounding *La voie lactée* as crucial to the art work, additional interpretations of this work can be offered that might otherwise be overlooked.

Case Study 2: Sound and Sculpture

This chapter will study the relationship between sculpture and sound through Myriam Laplante's *Elixir* (Fig. 4 - Fig. 7). *Elixir* is a curious installation that looks like a testing laboratory which performs experiments on dolls. The work includes a shelf filled with test tubes, beakers, petri dishes and rubber tubing through which flows a mysterious liquid. There are several dolls, which have been reconfigured to form strange miniature mutant bodies. Most of these have been encased under glass domes and displayed on another shelf, while a few have been placed under the configuration of tubes which drips liquid on the each of the dolls heads. Reminiscent of Chinese water torture, the work becomes increasingly irritating as time goes on because of the continuously looping audio component. In order to interpret this work, this chapter turns to Schaeffer's writing on the "sonorous object" and John Grayson's edited book, *Sound Sculpture* to show the ways that sound approaches material objects. Rosalind Krauss' essay, "Sculpture in the Expanded Field" will also be discussed and her methodology used to experiment with sound's place in contemporary sculptural practices. Krauss acknowledges that modern sculpture is evidence of some of the changes that have occurred in this art form since initial its role as monument, and that it is continuing to

change. She seeks a method of preserving the category of sculpture by showing how emerging sculptural practices are rooted to long held definitions of sculpture. This chapter will use Krauss's logic of the monument to examine these objects within the definitions of sculpture and attempt to examine the sound in *Elixir*. "Happy Trails," the continually looping tune whistled by the voice transforms the possibilities for the sculptural elements in the installation. Laplante's selection of kitsch music and her references to popular culture are major components in *Elixir*. Slavoj Žižek's clearly laid out explanation of the Lacanian notion of *le sinthome* will be suggest that there are some disturbing resonances in our material relationship to sculpture. These ideas become more apparent in light of Žižek's *sinthome* and they demonstrate that sound can illuminate debates about sculpture's relevance as a category in art.

Case Study 3: Architecture of Sound

This chapter will review some of the important texts on architectural acoustics before presenting a case study that investigates Janet Cardiff's *Conspiracy Theory* (2002) (Fig. 8 - Fig. 10) in this context. By drawing from writings on sound and architecture from both cultural theorists and engineering scientists, this section will show how important sound is to architectural spaces and to art in general. Working with her partner George Bures-Miller, Cardiff is internationally celebrated for her guided audio tours or "walks" that use sound as a psychoanalytic device that disorients the receiver of her work. Cardiff uses a special binaural sound recording technique in works, such as in *Conspiracy Theory*. This technique which involves recording with the use of two small high-fidelity microphones placed in the ears of the head of dummy. The placement of

the microphones in this way produces the illusion of hyper realistic 360 degree sound when played back through headphones. While Cardiff's voice plays a significant role in *Conspiracy Theory*, this chapter will demonstrate how the ambient sounds recorded in the museum also play an important role in establishing the uncanny in the work. Most importantly, Cardiff's *Conspiracy Theory* invites the participant to look and listen to architecture of the museum and beyond. As demonstrated by modern architectural acoustics, every building has an ability to influence the sounds that we hear. Wallace Clement writing on "the whispering gallery effect" has shown that the geometry of architecture determines the way the sound is transmitted and refracted in space. While much has been written about the institutional critique embedded in Cardiff's work in sound, there has been relatively little discussion about what introducing architectural acoustics into the equation can do for the interpretation of works like *Conspiracy Theory*. This section of the thesis will turn to recent writing on sound, space and architecture in Peter Grueneisen's *Soundspace* and Brandon LaBelle's *Architecture and the Ear*. Emily Thompson's essay "Noise and Noise Abatement in the Modern City", outlining the way sound and technology have modified our architectural soundscapes, will be foundational for my arguments as well as Blesser and Salter's introduction of the idea of aural architecture. These texts provide a means for critical reflection on Cardiff's art. By discussing her work in terms of architecture and sound, this case study will show how Cardiff draws upon sound and architecture to create her work. In addition to discussing the way Cardiff's voice is essential to this work, this chapter will explore ways that architecture is what makes this work possible and that Cardiff's work illuminates this relationship between sound and architecture.

By focusing on image, sculpture and architecture, this thesis aims to contribute to the understanding of sound in the principal categories of art history—like a proverbial hearing trumpet if you will—in order to underline their continuing relevance to contemporary art. These three forms are so essential in the field of art history that they can be found in most introductory texts to art history. Yet within the exploration of these categories, sound is hardly given a passing mention in these texts. But that does not mean that sound doesn't hold an important place within these art forms, their movements and genres.

This project seeks to encourage the art-viewer to think about art as form of sensorial communication. It suggests that sound in art can be a visual, tactile and spatial experience. It poses the question of what it means to hear art when there seems to be nothing to listen to. It proposes that sound can commemorate people, events and places. It implies that sound can alter the perception of space and the built environment. Most importantly, this thesis seeks to bring forward interpretations and ideas that might be overlooked if one is not thinking about sound, which is constantly framing the visual art world.

These cases are only a few of the many examples in the history of art where sound, silence and the practice of listening have been the process and object of art. These kinds of hybrid art practices have caused an emergence of sub-categories in art, which begs more critical investigation. One of the main challenges in attempting to establish sound in art history's predominantly visual lexicon is that most sound scholarship is not considered part of the field of art history, whereas many other fields,

such as music, communications, film, literature, physics, biology, psychology and sociology to name only a few, have already examined sound. These sources can provide a starting point for understanding how sound is important to art and how it can also be examined in terms of art history.

By approaching sound in art through image, sculpture and architecture, this thesis will potentially assist in establishing the lexicon of sound, which is so familiar in other fields of study, in art historical terms. This is absolutely crucial for ongoing studies of contemporary art where sound has become so prevalent. It will also assist in showing how many of the themes and methodologies that already exist in art historical studies can be expanded upon by delving into art in terms of the aural. Sound in art can open up the liminal spaces in between art and life and overlaps on both. Sound's presence in art gives rise to the fusion of media and in so doing shows how they remain applicable classifications in art history.

CHAPTER 1: SOUND IN THE ART IMAGE

Geneviève Cadieux has been an important contributor to contemporary art making for over twenty years now. Born in Montreal in 1955, Cadieux studied visual arts at the University of Ottawa. Her participation in the Venice and Sao Paulo Biennales demonstrates that Cadieux's work is acknowledged on a global scale and at home in Canada. Much of her photo-based work, which often alludes to the voice through iconographic images of mouths (both open and closed), invoke indexical sound in these "silent" images. Some of these works include *Hear Me With Your Eyes* (1989) (Fig. 11) *Amour aveugle* (1992) (Fig. 12) and *La voie lactée* (1992) (Fig. 3). This study focuses on Cadieux's *La voie lactée* (1992) to examine sound's relationship to her images. By drawing on scholarship in music, art history, film theory and sound studies this chapter explores how sound is manifest in apparently silent images in order to build a theoretical and historical foundation for an interpretive study of Geneviève Cadieux's *La voie lactée* (1992). This interpretation will draw largely from "The Truth in Painting" by cultural theorist, Jacques Derrida and *Audio-Vision* by film theorist Michel Chion.

La voie lactée

La voie lactée (1992) is a monumental public art work, a light billboard on the roof of the Musée d'art contemporain de Montréal (MACM). This site specific piece was commissioned by the MAC, who gave Cadieux *carte blanche* to create a piece for the collection. The work was installed for the inauguration of the MACM building in its

new location at Place-des-Arts in downtown Montreal.²⁹ *La voie lactée* was also considered part of the inaugural exhibition at the MACM, *Pour la suite du monde* (1992), which was curated by Gilles Godmer, Réal Lussier and Manon Blanchette. By virtue of its size (measuring 183 cm x 457 cm) and format, *La voie lactée* is mimetic of both a billboard and a theatre screen.³⁰ Instead of simple signage with the museum's name, this work functions cleverly as a non-textual symbol for the building, the architectural program and the purpose of the institution that is housed within the architecture. As a billboard, it also acts as an advertisement for the museum's collection. The work is best noticed after dusk, because its lighting illuminates in against the dark city skyline and makes the work appear as signage based in a visual language.³¹ Because it looks so much like a billboard, the work could be mistaken for an advertisement at first glance. Produced through a special computerized inkjet printing process on translucent flexible canvas, the artist's image source is her own body of work. The image in this public piece is photographic, containing a close up of a mouth with red lips. Rather than being the lips of a young supermodel posed in an ad for selling some kind of commodity, the ambiguous red lips, that seem so luscious at first glance, are in fact a cropped detail from a portrait of the artist's middle-aged

²⁹ The new location of the MACM in the central downtown district of Place-des-arts is easily accessible by public transit. The establishment of this very visible and active location can be seen as an important step in making contemporary art an important part of city life in Montreal. Since its inception in 1964 the MACM seems to have been experiencing a perpetual state of homelessness, having been moved three times to various locations. While its first location at Place Ville-Marie was quite central, this was only intended to be a temporary location. Some of the other locations, such as Château Dufresne, were less central and in the case of the Cité du Havre site, were less accessible by public transit. Michael Champagne, "Musée d'Art Contemporain De Montréal" In *The Canadian Encyclopedia = L'Encyclopédie Canadienne*, Computer data ed. (Toronto, Ont.: Historica Foundation of Canada, 2001).

³⁰ The aspect ratio of *La voie lactée* is approximately 2.49:1. Although aspect ratios can vary between directors they are usually measure from 1.85:1 to 2.35:1. Typically large epic movies employ wider aspect ratios.

³¹ This could be seen as a subversive and alternative solution to the demand for the exclusive use of the French language in signage as proposed by *The Act to amend the Charter of the French Language*, S.Q. c. 54 (also known as Bill 178).

mother. The disembodied mouth is a cropped and magnified detail retrieved and recycled from the series, *Portrait de famille* (1991) (Fig. 13). Cadieux also used this same image source for part of the diptych, *Amour aveugle* (1992). In *La voie lactée*, the large rectangular photograph with rounded corners is framed in an aluminium casing which is painted black. Although some describe the lips as “parted”, closer examination of the photograph and the source image from which Cadieux created *La voie* shows that the lips are clearly closed and pursed as if the mouth is about to pucker, whistle, or perhaps speak.

La voie lactée seems to imply a relationship and acknowledgement of other texts in visual media.³² Susan Douglas points out that *La voie lactée* makes reference to Man Ray’s painting entitled *Lips (L’heure d’observatoire)* (1966) (Fig. 14) in which a giant set of red lips floats above a landscape.³³ However Cadieux’s work can evoke many additional interpretations once the viewer is aware that it is an image of her mother’s lips that “float” over the cityscape of Montreal.

Musical Iconography

The relationship that exists between sound and image has sometimes been addressed through the question of music. The scholarly work of Richard Leppert is an interesting

³² Arthur Berger described this kind of referentiality as “intertextuality” which is the idea that “all texts are related to all other texts, even though they may not consciously borrow from a given text or formula or genre (although in some cases texts do quote from other texts).” Arthur Asa Berger, “Genre Theory” In *Popular Culture Genres: Theories and Texts* (Newbury Park, Calif.: Sage Publications, 1992), 47. Meaning is altered by intertextuality in Cadieux’s *La voie lactée*. I have argued elsewhere that the fact that this photographic installation shares the same title as Luis Buñuel’s film from 1969—which openly satirized and criticized the Catholic Church—and it mimics the same kind of close up Orson Welles used during the climax in the film in *Citizen Kane* (1941) alludes to Quebec’s religious heritage and the Quiet Revolution. Merrilee Wolsey, “*Une Voix Tranquille*: Listening to the Works of Geneviève Cadieux,” *WRECK: Graduate Journal of Art History, Visual Art & Theory* 2, no. 1 (2008), 55-67.

³³ Douglas, *In the Field of Visibility: Cadieux, Houle Lukacs*, 2006, 758.

part of the dialogue about sound and image, especially since his dual training in art history and musicology adds credibility to this kind of scholarship. His work, which strives to merge the study of painting and the study of music, is in effect, an iconographic study of music in art. This kind of iconography “employs the depiction in the visual arts of musical writing, musical instruments, and musical performance situation as a means of increasing the modern scholar’s knowledge of musical activity from historical eras.”³⁴ The benefits of this kind of image research provide performers with access to the kind of information that allows them, if they wish, to interpret musical performance according to the techniques, styles and instrumentation of the era in which a work of music was produced. In addition Leppert asserts that musical iconography is a “largely untapped source of information” for the musicologist as social historian.³⁵ One of Leppert’s early books, *The Theme of Music in Flemish Paintings of the Seventeenth Century* (1977), is a detailed and comprehensive cataloguing of the appearance of musical instruments and musicians in action. He details as many as 40 different instruments and covers categories such as the instruments in “art music”, in common life, in military use, and even music in hunting. Leppert’s study invites the reader to consider how references to music in paintings can evoke sound in our imagination. In *Art and the Committed Eye*, Leppert draws on this idea support a social historical reading of music in the painting *A Musical Party* (1633) (Fig. 15) by Jan Miense Molenaer. The dominant figures in this image are refined noble people listening to music, while on the left in the background there is the image of two peasants wrestling. He contrasts the actions of the figures in this painting, describing the

³⁴ Richard D. Leppert, *The Theme of Music in Flemish Paintings of the Seventeenth Century* (München: Musikverlag Katzschler, 1977), VII.

³⁵ *Ibid*, VII.

imagined sounds of the brawling and violent figures on the far left with the tranquil and civilized figures on the right. While Leppert is examining the work from a social historical perspective he draws on sound to support his idea that binary class relations are evidenced through the image that would make a sound, such as an image of two peasants wrestling or a man playing music.

The painting's sights engender sounds in opposition: namely the sounds of art music versus the groans of brutality, for fights are punctuated by animal-like grunts and groans and often by cries of pain.³⁶

In this way he shows how important sounds and music are in the silent medium of painting where music, associated with nobility, is given priority over other uncultured sounds associated with peasantry. His work offers some tools that will open the way for additional interpretations that enrich the social history of both sound and images.

Music in Painting

Karin von Maur's book, *The Sound of Painting* is another example of an attempts to address the question of sound and image through music in modern painting. Maur's book sets out to demonstrate ways that music acted as a model for and a source of innovation for modern painters. The author provides examples that show how music also "received its key impulses from art."³⁷ The book briefly notes the influence of Johann Sebastian Bach (1685-1750), Ludwig van Beethoven (1770-1827), Richard Wagner (1818-1883), Claude Debussy (1862-1918), Igor Stravinsky (1882-1971), and John Cage (1912-1992). Just as painters used music as muse, musicians demonstrated a desire to draw on painting for new visual methods for recording and notation. The

³⁶ Richard D. Leppert, *Art and the Committed Eye : The Cultural Functions of Imagery* (Boulder, CO: Westview Press, 1996), 177-178.

³⁷ Karin von Maur, *The Sound of Painting: Music in Modern Art* (Munich: Prestel, 1999), 7.

examples in the text exemplify how music and painting became so intertwined at certain points that it becomes difficult to distinguish between music notation and painting. One of the most interesting examples is the pencil on music paper drawing, *Sheet from the Cycle "Duo"* (1930) (Fig. 16) by Gerhard Rühm. Starting with the musical ground, the work ends up looking more like a gestural automatic drawing that defies the grid of the five line music staff. By doing this, Rühm literally *draws on music* to make an abstract image. But the focus of the book remains primarily on the examples of musical expression in modern painting and not painterly expressions in music. One of Kaur's fascinating ideas is that painters held a sort of longing towards music which intrigued them because it freed them by,

its incorporeality, its sovereign independence of the visible and tangible, and its freedom from the obligation to imitate nature that for centuries was felt to be binding on European art [...] music was able to unfold in a free realm delimited only by the rules of tonal harmony derived from its intrinsic means.³⁸

Artists such as Paul Klee (1879-1940), Wasily Kandinsky (1866-1944), Piet Mondrian (1872-1944) and Yves Klein (1928-1962) have all been noted for drawing on music as a source of inspiration.³⁹ Maur explains that painting and the other arts competed for the prominence that music held in the arts. The author goes on to explain that the Romantics aspired to an art that would incorporate all forms and give rise to the *Gesamtkunstwerk*, pointing out that in contemporary terms, we might call this multimedia or interdisciplinary art. Maur maintains that interdependence between the auditory and the visual arts has, in the case of modern art, advanced art's progress. Maur's history of modern painting essentially tries to establish that music and painting

³⁸ Ibid, 7.

³⁹ Ibid, 8-9, 97-98.

have always been sibling arts that would eventually and “inevitably converge”.⁴⁰ Maur provides the example of Dick Higgin’s paint spatters on music paper entitled *Symphony No. 48* (1969) that nods to both the chance music of John Cage and the drip paintings of Jackson Pollock. In the section “The Intermedia Synthesis,” Maur identifies Pollock and Cage as the leading innovators who would transform the practices of their art forms and influence a generation of artists (the Fluxists) who, in turn would strive to overcome the barriers between genres, resulting in a disintegration of the barriers between art and life.⁴¹

Siamese twins: image and sound as sibling arts

Some of the most intriguing examples of the convergence of sound and image appear in computer generated music. The advent of the computer has permitted the generation of both sound and images as a creative activity that can be accomplished simultaneously. The graphic representation of sounds has become a common technology whereby most home stereo systems now include some kind of graphic display of the sound output. Advancement in this kind of technology through the use of computers has enabled a translation of audio information into the visual realm. Computers are able to analyse audio data and transduce it into an image, as well as to transform a given image into an audio output. Where painters looked to music as a source of inspiration, now images can be the source for creating actual sounds. Sound frequencies can be used as a drawing tool. By using specialized computer programming, an artist has the ability to analyse visual data from a photograph or drawing to convert the image into sound. Here

⁴⁰ Ibid, 110.

⁴¹ Ibid, 110.

image becomes the sound source, the muse for music. Iannis Xenakis (1922-2001) is credited for being the first to use this kind of technology with his work entitled *Mycenae-Alpha* (1978) (Fig. 17). His unconventional training, including a stint with the architect Le Corbusier, was the background for his pioneering work in computer music. Composing with the help of the UPIC graphic computer, Xenakis used his drawings to generate one of the most interesting musical compositions of the twentieth-century, *Mycenae-Alpha*. Of course others followed in Xenakis' path, but "the big boom came during the nineties."⁴² A better known example of this type of transformation of sound into image is found on Richard D. James's *Windowlicker* (1999) CD. Also known as Aphex Twin, James used a composition and sound design program called Metasynth to create an image of himself which he inserted in the spectrogram of his music (Fig. 18).⁴³ These kinds of practices are more recent examples that demonstrate well the ways in which using sound and image together has become another way of making art. But more importantly, this exemplifies that limits between what is sound and what is image is being blurred by these practices.

Chion

The relationship that exists between sound and image has also been addressed through the question of cinema. Chion's theories on sound in cinema prove useful in considering the way sound might be manifest in still photography. Chion strives to analyse films in

⁴² Esther Lemi and Anastasia Georgaki, "Reviewing the Transformation of Sound to Image in the New Computer Music Software" (4th Sound and Music Computing Conference, Lefkada, Greece, National and Kapodistrian University of Athens, 11-13 July, 2007).

⁴³ A spectrogram is a three dimensional plot of the energy of the content of frequency. This information is collected by an instrument called a sonograph, which can be used to detect and analyze phonetic, musical or other sounds.

terms of both audio and visual elements and to show how these two elements work together synergistically to produce the overall effects of film. Chion's expression "the audio-visual contract" is primarily meant for the purposes of studying the moving image, but it can also be useful for examining sound in still images. Chion's important work *The Voice in Cinema*⁴⁴ is particularly relevant to unlocking the iconographic audio elements in Cadieux's *La voie lactée* (1992). The audio-visual contract asserts that in order to become drawn into the narrative of a movie, the casual watcher suspends disbelief that the audio and visual are in fact two separate elements of the movie. The assumption on the part of the receiver is that what is seen and heard is a unified whole. For example, when the voice of an actor heard and her mouth seen moving in synchronicity on the screen, one assumes the audio corresponds to the voice of that character. One assumes that the sound belongs to the visual, even though upon reflection, the viewer knows full well that the synchronized sound is not coming from the image but from audio speakers. Chion points out that if the viewer refuses to accept the audio and visual as a unity it will become immediately apparent that sound doesn't belong to the image. Sound adds value to the image and creates an "audiovisual illusion".⁴⁵ With this added value, Chion would have us understand that the image has been transformed by the sound, giving us the false impression that "sound is unnecessary, that sound merely duplicates a meaning which in reality it brings about, either all on its own or by discrepancies between [the sound] and the image."⁴⁶ He goes

⁴⁴ Michel Chion, *The Voice in Cinema*, ed. Claudia Gorbman (New York: Columbia University Press, 1999).

⁴⁵ Chion, *Audio-Vision : Sound on Screen*, 3-9.

⁴⁶ *Ibid.*, 5.

on to say that the only way to be able to formally analyse a film's audio and visual elements separately is to refuse to accept the audio-visual contract.

In film editing, framing occurs not only in images but also in sound. Film sound editing is thus similar to photography's cropping (in the darkroom setting) and is employed to subtly punctuate a shot or a scene, creating psychologically stimulating effects.⁴⁷ Chion says that even in silent movies, sound was always implied even though it was absent. This last comment allows room for us to question whether the still photographic image also implies sound by its silence, as was the case when the voice was implied in the silent moving image. Music that accompanies silent movies adds value to the visual by demonstrating the emotions of the characters on screen. But the visual voices remained silent due to the technological limitations. According to Chion, silence could only be used as a device in film when the technology of talking pictures became available. In order to recognize the silence of the voice as a contrasting dramatic device, there had to be the ability to hear the sound of the voice as a cinematic element, not just see it."⁴⁸ Chion says that since the advent of talking pictures "...silence is never a neutral emptiness."⁴⁹ In terms of the still photographic image, I would suggest that if silence of the photographic image also is not a "neutral emptiness", then it could be because of its relationship to talking pictures. That is to say, if the contemporary photograph's inevitable relationship to talking pictures is taken into account, this can allow us to consider the photo in terms of sound. That is not to say that a photographic image made before talking pictures cannot imply sound. But if we are discussing images that we made before the advent of cinema, perhaps Leppart's

⁴⁷ Ibid, 3-4.

⁴⁸ Ibid, 55-56.

⁴⁹ Ibid, 56-57.

methodology might be a better applied because we cannot take into account all the implications of a televisual context. But a photographic image made since talking pictures, by virtue of its place in our largely televisual and cinematic visual culture can be strongly related to the audio-visual contract.

It becomes important, then, that Chion describes the human voice as taking a primary role in film sound. He bases this on his belief that human behaviour is generally centred on speech and that environmental sounds take background status to the human voice. He says,

“When in any given sound environment you hear voices, those voices capture and focus your attention before any other sound (wind blowing, music, traffic). Only afterward, if you know very well who is speaking and what they’re talking about, might you turn your attention from the voices to the rest of the sounds you hear.”⁵⁰

Chion proposes here that the sound of the human voice tends to distract us away from other kinds of sound. This might suggest that humans are seeking for something beyond the background noise that surrounds them constantly, framing their existence; they keep an ear open for the voice above all else.

“The Parergon”

In his essay entitled “The Parergon”, Derrida sets out to critique the Kantian notion of what is extrinsic to art by considering what is intrinsic to art. For Derrida, the Latin word “*parergon*” means “a surplus, an addition, an adjunct, a supplement”.⁵¹ It also implies that which is superfluous, unimportant or incidental. Derrida says that clothing or drapery on nude statues is one example of *parerga*. But attempting to decisively

⁵⁰ Ibid, 6.

⁵¹ Derrida, *The Parergon*, 57.

define what the intrinsic and extrinsic is, is complicated; and so, too, is defining the *parergon*. Meaning changes when certain elements are classified as non-essential. The frame, which in some cases has been seen as an ornament in painting might be considered thus a *parergon*. But by virtue of the fact that it defines the borders of the art object its importance is so critical. Framing is anything but superfluous, unimportant and incidental. Although it is not *ergon*, it is still essential to the meaning of the work and to the meaning of art in general. There exists, therefore, a disquietude in the frame's traditional function vis-à-vis the work of art, its ability to separate art from what is not art.

Derrida's "The Parergon" is a unique and important essay because he problematizes the definition of art. The formal elements of the text itself exemplify the in-between space between what is intrinsic and extrinsic. Laden with gaps, small right angle markings as well as a concrete use of punctuation and grammar, this essay demonstrates how meaning changes when considering the possibility of what can be considered *parergon*. His point is made with the use of a period when he writes, "Where does a *parergon* begin and end."⁵² However as we hear the phrase it seems to naturally form a question. By doing this Derrida forces his reader to question whether Derrida intends the word "*parergon*" to be the subject or direct object of the sentence. Is a *parergon* the thing doing the action or the thing having the action done to it? Why would Derrida do such a thing? Did Derrida intend us to understand that he was suggesting that location defines the *parergon*? Was he purposefully rejecting the traditional visual structure in language to prove how text acts as a *parergon* for speech? Is that we hear things in our minds regardless of the visual cues of punctuation? It is

⁵² Ibid, 57.

precisely these kinds of important questions that are raised by Derrida's "The Parergon" that have caused a debate about the frame in art. An edited volume by Paul Duro is one example of this dialogue that addressed the perhaps irresolvable question of where the art starts and where it stops.⁵³ Derrida's concept of "The Parergon" problematizes the edges of art and the relationship between inside and outside; between foreground and background.

All of these ideas become important and provide clues to how visual language can help to bring sound out of the background in art, especially in Geneviève Cadieux's *La voie lactée*. Chion's "The Audio Visual Contract" is helpful for explaining how sound and image work synergistically to generate fictions with the production of images and sound together. Chion is able to clearly show that since the advent of motion pictures, sound has played an important role and has developed into an essential framing device for the image. Using Derrida's ideas will clarify how the urban sound environment is implicated as an essential element in Cadieux's work.

My Audio-Visual Contract

Chion's audio-visual contract helps the film viewer better understand the way sound is used to punctuate the visual sequences. To fully understand the impact of "added value" that Chion describes, the film watcher must watch the visual sequence—first with the sound and then again with the sound turned off. He asserts that it will become clear how the moving images lose their emotional or dramatic effects by doing this. He believes that this is the best way to be able distance ourselves from the narrative in cinema.

⁵³ Paul Duro, ed., *The Rhetoric of the Frame: Essays on the Boundaries of the Artwork* (New York: Cambridge University Press, 1996).

While this theory was written especially for the analysis of film, it might be inverted to gain another perception on *La voie lactée*. What if we assumed that, because the piece has no audio portion, we were already “audio-viewing” *La voie lactée*? That is to say, we were watching it like film with the sound taken out. What happens when we think about what kind of sound could dramatically punctuate this image? If these lips made a sound what kind of sound would they make? These are all questions that pertain to diegetic sounds in film, or sound “on screen”. These are the sounds that are heard where the sound source is visible within the projected frame. But offscreen sounds are just as important to the overall feeling in cinema. The acousmatic voice, a voice that seems to come from nowhere, is one very important component of film sound. Chion presents the critique that has been made about these two strict categorical distinctions between on- and offscreen sounds. He says, “Critics have problematized it with increasing fervor, because of the exception and special cases it doesn’t seem to account for.”⁵⁴ Chion therefore introduces a third category of sounds which he calls *nondiegetic*. These are sounds whose source can be determined as being on the screen, such as voices that come from a device like a phone, a radio, a loud speaker or the voice of a character’s conscience or memory. It is in this in-between sound space where the lips of *La voie lactée* become animated an interesting way.

My parergon: The Soundscape

Derrida’s statement/question “Where does a parergon begin and end.” can be understood quite literally in *La voie lactée*. It supports the idea that location and context (“where”) determines the meaning of art. Like all cities, Montreal has its own

⁵⁴ Chion, *Audio-Vision: Sound on Screen*, 74.

“personality” and its soundscape is an important part of what makes up Montrealness. Starting with R. Murray Shaeffer and following through the movement of acoustic ecology, scholars have explored how the sounds of a city go beyond geography and architecture and fill the environment.⁵⁵ These sounds, as they change over time, serve as the ever-changing frame for our world. Since *La voie lactée* is part of the architecture and geography of Montreal, we can understand the Montreal soundscape, and in particular the neighbourhood around Place-des-arts to be its framing device, its *parergon*. Could it be that this soundscape is the mouth’s unheard voice?

Here is where the work’s references to cinema come into play with Chion’s audio-visual contract. Because *La voie lactée*’s size and format allude to the movie screen, the work implies that the work’s sound environment, the sound of the city, belongs to this giant screen. This sound adds value to the visual elements and helps generate additional meanings. The soundscape can also be considered the voice belonging to the mouth. In so doing, every sound one hears while remaining focused on *La voie lactée* becomes the “soundtrack” for *La voie lactée*.

Listening to *La voie lactée* means to think of its soundscape, or off-screen sound as an ever-changing frame, which is constantly redefining the meaning of the work. This audio-frame can be used to examine the aural possibilities of this work. This involves going out on location and taking field recordings and then considering these sounds as an important support to the image’s interpretation. In order to anchor these sounds to the image, only sounds heard while the image remains fully visible should be considered. In geographical terms, this leaves one free to listen to *La voie lactée* from

⁵⁵ R. Murray Schafer, *The Soundscape: Our Sonic Environment and the Tuning of the World* (Rochester: Destiny Books, 1994), 2-12, 205-225.

interior spaces as well as outside, so long as the work can be seen. An audio-frame for *La voie lactée* can be mapped out that starts just below the image and stretches out to half a block west of Jeanne-Mance on Ste-Catherine to the south west corner of René-Levesque Ouest and Jeanne-Mance to the south west corner of Ste-Catherine and St-Urbain (Fig. 19).

The results of such an experiment can be interesting precisely because each time it is performed one may hear different things, depending on the weather conditions of the recording equipment selected. Some of the sounds may include the flapping of pigeon wings, the cry of a gull, the sound of a skateboard, people walking, car horns, traffic sounds and conversations in French and English, foot steps, music, the creaking of a door, music from inside a café and a store, the clanging of a metal grate as someone steps on it. From recent listening and recording experiments, the most dominant sound was the construction noise from across the street at the future site of Place-des-festivals. The new urban square will be a focal point for the cultural activity in the downtown area of “Quartier des Spectacles”.⁵⁶ This leads one to think about the sounds produced by the activities that take place each year in the vicinity of *La voie lactée*’s audio-frame, which ultimately goes back to music and cinema. Right underneath the giant lips of the MACM, crowds gather each year to participate in the Montreal International Jazz Festival. Les FrancoFolies is another summer music festival that has been celebrating French-language and musical expression since 1989. “Cinema Under the Stars” (part of the Montreal World Film Festival) also takes place in this spot literally making other movie soundtracks the soundtrack for *La voie lactée*.

⁵⁶ Quartier des Spectacles is the area of downtown Montreal where most of the major festivals and cultural events in the city take place. Its boundaries are generally defined by City Councillors Street, Berri Street, Sherbrooke Street and René Lévesque Boulevard.

One author describes Cadieux's work this way:

Not seeing the bigger picture, not getting the message, not making the connections seem to be the conditions set by Cadieux's art.⁵⁷

This ambiguity follows Chion's theory of the audio-visual contract, which makes room for my creative interpretation, which acknowledges the ways sound can factor into the interpretation process and help us to hear what images might be saying even when they don't make a sound. Chion's and Derrida's theories show that if this piece is ambiguous to us, it is because its frame, the soundscape, is ever-changing, every second being reframed by another sound, another voice. When we look at a still image, like *La voie lactée*, perhaps we don't immediately accept an audio-visual contract. But if we would, we can find additional interpretations by considering the audio-frame as the image's constant companion, or even as belonging to the image. In order to further help the film watcher understand which sounds might be considered onscreen Chion says,

At what point should it be said that someone's voice is 'offscreen'? The answer is, when it can't strictly be localized to the symbolic place of vocal production, which is the mouth; the answer is, when the mouth isn't visible.⁵⁸

Adapting this last statement by Chion, even sounds that are happening outside of the image might be considered the voice of *La voie lactée*, so long as the mouth remains visible to us. As well, the work's title is both a play on the French word for the voice (*la voix*) and the notion of a mother's speech having a calming effect as it mingles with the voice of a cooing baby as it suckles from its mother's breast. For some the constant hum of the city, like the whisper of a mother's voice, is a lulling and comforting experience. For others the cacophony of the city is annoyance—like a mother's constant nagging.

⁵⁷ Schaffner, Ingrid. "Skin on Screen" *Artscribe International*, No. 89 (Nov-Dec 1991), 54.

⁵⁸ Chion, *The Voice in Cinema*, 127.

Equally the sounds a child makes in its mother's arms might be soft peeps or colicky crying. Either way, the silence of this image is so special because there is always something to be heard under *La voie lactée*. And yet it remains ambiguous what roles image and sound each take on, which one engenders the other. This analysis of *La voie lactée*, in terms of sound, opens up this work to so many interesting possibilities for interpretation. As one considers sound as belonging to the image, its meaning is constantly changing from moment to moment, while the image stays still and fixed. Whether we notice it or not, sound, like the *parergon* inhabits a liminal space between art and life that is, at once, essential to art, and an integral part of everyday experience.

CHAPTER 2: SOUND AND SCULPTURE

Myriam Laplante's installation entitled *Elixir* (2004) (Fig. 4 - Fig. 7) is quite different from the previous case example of Cadieux's photo-based installation, *La voie lactée*. While Cadieux work might also be seen sculpturally, its relationship to sound is best revealed through image. Laplante's work faces different issues as it is not image-based and its parts, both aural and material, relate more to the processes of sculpture. But both pieces seem to invite the viewer to engage with the sonic environment beyond the edge of the frame, and, as we will see in this second artwork, beyond the borders materiality and of the gallery walls. *Elixir* is a work that plays with both material objects and the sonorous object. Walls are lined with shelves that contain plush toys reconstructed into bizarre figurines. One part of the installation looks like a science laboratory where liquid is dripped on a select few of the dolls. The faces of each of these test subject dolls are modelled in clay and the mouths form a puckering shape as if they are whistling. A whistled tune, the sound component included in this strange conglomeration of post-pop sculptural materials, creates a disruptive tension in the work that may cause the viewer to focus on the sound content rather than the material content of the work. Much of sound art has a sculptural component, but this dimension is not usually addressed. This chapter examines more closely the relationship between sculpture and sound in order to explore how the presence what results from the presence of material objects combined with audio media.

There are many contemporary examples that exhibit the directions that sound sculpture has taken in contemporary art. For example, Akio Suzuki transformed his

sculpture *From One Bamboo* (2004) (Fig. 20) into a musical instrument by playing it at an exhibition opening.⁵⁹ This work is a series of sculptures that are made of rectangular shaped cement block pedestals, with a hollow bamboo tube protruding from each block. The bases and tubes are of various heights and the tubes also vary in width. By striking the surface of the bamboo, different tones are produced. Here, material objects are foundational in the process of sound-making as art performance. Another fascinating piece is Sachiko Kodama and Minako Takeno's kinetic sound installation *Protrude, flow* (2001) (Fig. 21). This sculpture is made of a thick black magnetic liquid which responds to sounds, rhythms and synchronized noises and these sounds dictate the forms that the black goop takes on. The sharply pointed geometric shapes that emerge are surprisingly contrary to the regular form of a flowing liquid. This work is a metaphor for the fluid and malleable boundary between sound and material structure that the work displays. Rather than the material being a medium for sound making as in the previous example, in *Protrude, flow*, sound gives form to material. But it is the relationship of objects and things to the human voice that is my main focus. Tony Oursler's work uses the voice in way that animates his objects. Some of these installations incorporate figurines, stuffed or hanging clothing that suggests a kind of human figure. The blank faces of these bodies act as a screen for Oursler's audio-visual projections. The synchronous dialogue creates an illusion that these sculptures are coming to life, giving a nod to the story of Pygmalion. *Keep Going* (1995) (Fig. 22) is one example, incorporating a monologue and projected moving image of face above a hanging plaid suit and scarf. Because of the audio-video projection, these empty

⁵⁹ Alan Licht, *Sound Art: Beyond Music, between Categories* (New York, N.Y.: Rizzoli International Publications, 2007), 127.

garments seem to become the body of an eccentric film director shouting to his crew and actors such things as, “I don’t want alpine horns! No! no! We told them accordions! ...send them back...”⁶⁰ As sound and image are projected onto the sculptural forms, a person appears, a body materializes and a character develops out of the inanimate objects through a correspondence between sound and sculpture.

Myriam Laplante’s installation, *Elixir* (2004), also uses sound to animate sculpture and this chapter examines the role that sound plays in this piece. After giving some brief background information on the artist and providing a description of the work, this chapter looks at some relevant texts that will assist in interpreting *Elixir*. A brief review of John Grayson’s text *Sound Sculpture* will show that the relationship between sound and sculpture has been going on since the 1970s. I will also turn to a text by the founder of *musique concrète*, Pierre Schaeffer (1910-1955), in which he describes the idea of the *sonorous object*. Rosalind Krauss’ “Sculpture in the Expanded Field” will serve as a foundation for an experiment in which sound is introduced into the logic of sculpture in order to consider how new fields of sculpture that use sound may be emerging. Slovenian philosopher Žižek’s explanation of the *sinthome* serves to illuminate ways that the sound in *Elixir* acts with the materials of the installation to produce stimulating affects.

Myriam Laplante

Born in Chittagong, Bangladesh, Myriam Laplante grew up in Quebec and has been living and working in Italy for at least 15 years. She has been actively exhibiting on the

⁶⁰ Tony Oursler and Deborah Menaker Rothschild, eds., *Introjection: Tony Oursler, Mid-Career Survey, 1976-1999* (Williamstown, MA: Williams College Museum of Art, 1999), 62-63.

international level for over eighteen years. While studying at the University of Ottawa, Laplante began doing performances, but focused on painting, installations and photography. Laplante returned to performance in the early nineties and began exploring various themes including the circus side-show, mutation and alienation. This case study focuses on an installation work from 2004 entitled *Elixir* that was part of the exhibition *La Tête au ventre* at the Leonard and Bina Ellen Gallery (Ellen) in 2006. The work demonstrates that the artist continues to address these themes as well as a fascinating relationship between sound and sculpture. I chose to focus on this work because it articulates an interesting relationship between sound and sculpture. The introduction of sound in the work suggests a sonic-sculptural permutation. The arrangement of objects and things, even without sound, would be captivating on its own, but it is precisely the use of sound that causes the installation to take on additional significance. The chapter draws on theory from art history and communications to show how sound has emerged as an important element in sculptural practices.

Elixir (2004)

Elixir is a curious installation work that looks like a testing laboratory for performing experiments on dolls. The work includes a shelf lined with test tubes, beakers, petri dishes and rubber tubing through which flows a certain liquid. Mutant dolls are exhibited in the space; some of these have been encased under glass domes and displayed on another shelf, while others appear to be undergoing testing where liquid drips on the each of the dolls heads. Reconstructed from dismembered doll parts and plush toys, modelling clay and other materials, each figure has been modified into a

unique little oddity. For one of the figures, the plastic doll face, which has been turned inside out, has been fused to the furry head of a teddy bear. Its marble eyes, that probably had lids which rolled closed calmly by themselves when a child laid it to rest, now protrude severely as it stands frozen and trapped under the glass display dome. Another doll on display has the armless body of a tiger (including its tail), the legs of a plastic doll and a clay-modelled face with brown hair that stands on end. A plush toy bunny head is glued to a doll body that has four arms and two legs. These are just a few examples of the ways that these toy parts are reassembled in strange and disturbing ways, perhaps more so because the very process of making each doll exhibits the scars of a sort of violent dismemberment of a once loved childhood object. This is ironically reminiscent of violent images from art history such as *Severed Limbs* (1818) by Théodore Géricault (Fig. 23) or Francisco Goya's *Saturn Devouring his Children* (c. 1820) (Fig. 24). The theme of dismemberment has been explored in sculpture through the partial figure. *Winged Victory of Samothrace* (c. 220-199) (Fig. 25) is one example from the history of sculpture, which although was probably not intended to be a partial figure, the fact that it has been widely study and appreciated despite it being a fragment, implies the importance of the partial figure. Auguste Rodin's *Hand of God* (1907) (Fig. 26) is another example where the partial figure is the intended subject matter. The bust is another example of how a body fragment represents the whole body.

But Laplante's mismatched members are cartoonish caricatures of these epic, fantastic or horrific mutations. Both the materials and these caricatured figures in *Elixir* are more reminiscent of talking toys in our commodity culture like Tickle-Me Elmo, Furby or Tinky Winky Teletubby. Pop culture narratives, in which dolls come to life,

such as *Child's Play* (1988) and *Toy Story* (1995), seem foundational to *Elixir*. In addition, Laplante's installation possesses aspects similar to Hans Bellmer's sculpture, *Doll* (1936) (Fig. 27), which uses ball-and-socket doll parts to create a disconcerting anatomical mutation. Bellmer's series of freakish dolls gave rise to a series of equally disturbing and suggestive photographs. Laplante's approach also seems to draw from Annette Messager's work. Messager's installation *The Story of Little Effigies* (1990) (Fig. 28) is one example where toys act as a substitute for the tortured subject. Stuffed animals are massed into a corner and doll clothes framed and mounted on the wall just above the heap of toys. In one installation of the work, "Some of the figures were blindfolded, intimating loss of sight and, combined with their strung-up appearance, even torture."⁶¹ Paul McCarthy is another artist where themes of toys and torture, play and pain, arise through the use of dolls and doll parts. These objects became subjected to mutilation during his performances and many of these tortured toys have been displayed as sculpture (Fig. 29).⁶² All three of these artists are known for their use dolls and doll parts as a kind of fetish object.

In *Elixir*, the tubing apparatus in the work is also reminiscent of water torture, an ancient method of torture in which the victim was strapped down and water was slowly, repeatedly dripped on the victim's forehead. The supposed result was that a small hollow would form on the victim's head and the aggravating repetition would eventually drive the victim into a frantic state or even insanity. But perhaps what is most disturbing about this work is its audio component—a never ending whistled

⁶¹Sheryl Conkelton, Annette Messager and Carol S. Eliel, eds., *Annette Messager* (Los Angeles New York: Los Angeles County Museum of Art ; Museum of Modern Art : distributed by H.N. Abrams, 1995), 9.

⁶² Paul McCarthy and Fredrik Nilsen, eds., *Propo* (Milan: Charta : Studio Guenzani, 1999).

version of the popular tune “Happy Trails”. Even though the song is whistled and the songs lyrics are not actually heard, the tune can evoke the familiar words to this catchy (kitschy) song as it repeats over and over again. Made famous by the voices of Roy Rodgers and Dale Evans, the words and music acted as the theme song to their popular radio programme called *Happy Trails* from the 1940s and 1950s. The show encouraged the young “buckaroos” (among other things on list of Roy Rodgers Rider’s Club rules) to protect the weak, to be kind to animals and take care of them. My first and deepest impression of *Elixir* at the Ellen Gallery was how the continuously looping tune echoed equally in the white cube space and in my mind. The sound was so prominent that I couldn’t stand to be in the space for too long without that tune and its lyrics getting stuck in my head. Upon leaving the gallery space, I found myself trying to force the words and recurring melody from my mind. The actual source of the sound in this sculpture is hidden and the way that the song echoes in the installation surely gives additional significance to the objects in the space. This audio on its own carries significant layers of information, but its juxtaposition with material objects opens up additional interpretations of the sculpture. A closer look at some literature on sound and sculpture provides a necessary foundation for interpreting the work and understanding sound’s important role in emerging sculptural practices.

The Sonorous Object

Pierre Schaeffer is best known as a composer and founder of the *avant garde* movement of *musique concrète*. Schaeffer’s important contribution to music history is also important to sound sculpture, because of his concern with *les objets sonores*. Schaeffer

defines the sonorous object by first making it clear that it is not the source of the sound. Schaeffer did not believe that a musical instrument could be considered as such, but rather he thought that the sound itself had a concrete existence and it was this unit that that made up the substance of the sonorous object. He clarified that the sonorous object “is never revealed clearly except in the acousmatic experience.”⁶³ In order to be able to fully perceive the sonorous object, the sound source must be out of sight. Schaeffer defines “acousmatics” by providing a brief history of the followers of Pythagoras who were called The Acousmatics. These students of Pythagoras listened to his teachings while he remained hidden behind a curtain. The Acousmatics never saw their teacher, but observed a strict silence. “Hidden from their eyes, only the voice of their master reached the disciples.”⁶⁴ What resulted from this strict silence was the students’ acute awareness of their perpetual state of subjectivity and the objectification of their teacher’s voice. Schaeffer makes clear that he uses the term “acousmatic” to describe the phenomenon of hearing a noise without being able to see its source. Schaeffer saw the act of listening to a voice from behind a curtain as similar to listening to a voice through a speaker. He acknowledged that sound reproduction technology is important to the sonorous object. In *musique concrete*, magnetic recording tape was often used to record sounds and was manipulated to create sonorous objects. Schaeffer explained that the sonorous object has an intrinsic existence. While Schaeffer’s sonorous object seems to seek a kind of materiality of sound, Schaeffer did not suggest that the sonorous object was a material thing. Magnetic tape could act as a container for sonorous objects, but

⁶³ Pierre Schaeffer, "Acousmatics" In *Audio Culture: Readings in Modern Music*, eds. Christoph Cox and Daniel Warner (New York: Continuum, 2004), 79.

⁶⁴ *Ibid*, 77.

manipulations of the tape were merely alternate methods of observing the sonorous object.

Schaeffer's idea of acousmatics is important to Laplante's *Elixir* because the sound's source in the installation is hidden from view. Thus the sound takes on a life of its own as a sonorous "object" that can then affect the interpretation of the other material objects in the installation. It is important to point out that while it approaches a kind of concrete idea of sound, the sonorous object still is not a material thing. Schaeffer explained that the pre-condition of acousmatic listening sets in motion a critical questioning of perception.⁶⁵ The recognisable tune in *Elixir* exists as a sonorous object that is already loaded with a text. Even though only the tune is heard, the text (or words of the song) can be easily retrieved from memory. These lyrics retraced in the mind hold a complex and uncanny relationship to the figurines and their material volume. Perhaps "happy trails" refers to death, a relief from torture. Perhaps "happy trails" refers to the "trip" taken in a pleasurable drug induced state. Either way, questions are raised as to why these lyrics, which are not part of the sonorous object, are invoked and how the aura of these words, drawn from memory, creates a narrative set up by the artist.

Grayson

The idea of sound as a sculptural element takes more prominence in the 1970s. While *l'objet sonore* was a concrete unit of things heard, sound sculpture tended towards

⁶⁵ "The concealment of the causes [...] is a pre-condition, a deliberate placing-in-condition of the subject. It is towards it, then, that the question turns around: 'What am I hearing? ... What exactly are you hearing?'—in the sense that one asks the subject to describe not the external references of the sound it perceives but the perception itself." *Ibid*, 77.

actual materials that form sounds, but it could also be sounds which mould or animate material. While Schaeffer was more concerned with the sound produced, Grayson is interested in the object that makes the sound. While Schaeffer was more concerned with the objectification of sound (its observation and perception), the sound sculpture of the seventies demonstrated a shift in how artists may have thought of sound; a process and exchange of energy that is rooted in time and takes place between people and things in space. This usually meant making a structure which could produce sound. This later idea of sound sculpture is exemplified in John Grayson's edited collection of essays entitled *Sound Sculpture* (1975). This edited book contains mostly short essays by artists on their works and it seems that the book's intention was to demonstrate the direction of a new genre of sculpture that incorporates sound and/or music as material. Many of the articles in the collection touch on some aspect of music and serve as proposals for art works, descriptions of sculptural sound practices or particular material constructions in which sound may be produced or implied. Some of the works make sound because they are animated and kinetic, as in the case of works by Stephan Von Huene and Max Dean. Other sculptures act as large musical instruments, such works by Harry Partch, Tony Price and Luis Frangella. Another body of work explored is that of the brothers François and Bernard Baschet whose primary focus is to create shapes and sounds.⁶⁶ The Baschet brothers say, "We have tried to create a synthesis between sculpture and sound, because it seems clear to us that there exist firm links between

⁶⁶ "My brother Bernard and I want to make a synthesis of the following three elements: shapes, sounds and public participation." John Grayson, ed., *Sound Sculpture: A Collection of Essays Artists Surveying the Techniques, Applications and Future Directions of Sound Sculpture* (Vancouver: Aesthetic Research Centre of Canada, 1975), 13.

sound and physical forms.”⁶⁷ “Sound sculpture” is merely one branch that results. This text suggests that the creation of material form and sounds is at the very heart of this genre of sculpture. While it is arguable whether *Elixir* can be considered a “sound sculpture,” because the objects themselves are not the main source of the sound, there are however some important similarities and differences with the works mentioned in Grayson’s text. To start with, *Elixir* is a conglomeration of forms (which contain shapes) and sound (the whistled tune). But it is not a musical art object that begs the viewer to play it. It is in effect the inverse; it introduces sound as a means to produce an interaction between objects and the viewer in the gallery. While Laplante’s mutant dolls remain still, the whistling implies a kind of animation that almost brings the odd little characters to life. The puckered lips of the dolls under the dripping apparatus can suggest that the sound source, which cannot be located by merely looking, may be coming from the mouths of these inanimate objects.

Expanding the fields: Krauss

Rosalind Krauss is an American art historian whose important writings from the late 1970s address expanding fields in sculpture. Krauss’s position is that sculpture is changing over time and its fields of exploration are increasing to include sculptural activities that have not been previously considered as sculpture. She determines that these fields are fixed to sculpture’s logic that is rooted in its relationship to architecture and landscape. By so doing, she seeks to legitimize various art practices in terms of sculpture. Krauss begins her argument by explaining that the 1970s was a decade in

⁶⁷ Bosseur and Broniarski, *Sound and the Visual Arts : Intersections between Music and Plastic Arts Today*, 81.

which “rather surprising things” had been called sculpture.⁶⁸ However Krauss is very critical of the notion that sculpture, as a category, is “infinitely malleable.”⁶⁹ She seems to stand against the idea that, so long as art criticism is able to draw upon historical examples to situate the new, the category of sculpture can be infinitely expanded. Krauss believes by drawing on history to legitimize certain practices the term “sculpture” becomes so obscured that it begins to lose its meaning.⁷⁰

Rather than drawing upon historical examples that are formally similar to the works she is trying to legitimize, Krauss turns to the logic of sculpture which she sees as being firmly rooted in the monument. The logic of the monument, which she believes is “inseparable” from sculpture’s logic, then serves as her model for accepting new practices as sculpture or an extension of it. She explains that monuments were specific to their sites as markers that served the purpose of identifying land and buildings.⁷¹ However, Krauss points out that something happened to the logic of the sculpture in the nineteenth century. One change in modern sculpture included the integration of the pedestal into the sculptural form.⁷² She points out that this caused sculpture to cease functioning as a landmark. It became a rootless object that was neither tied to landscape nor to architecture as it previously was. Sculpture ceased to function as a site marker, becoming more decorative and more autonomous from place.⁷³ She goes on to explain that modern sculpture, by virtue of its “being the negative condition of the monument,”

⁶⁸ Rosalind Krauss, “Sculpture in the Expanded Field,” *October* 8 (Spring, 1979), 30.

⁶⁹ *Ibid*, 30.

⁷⁰ *Ibid*, 33.

⁷¹ *Ibid*, 33-34.

⁷² *Ibid*, 34.

⁷³ *Ibid*, 34.

had to examine and define itself by what it was not; neither architecture, nor landscape.⁷⁴

Krauss uses the semiotic square to demonstrate that “*not-landscape*” and “*not-architecture*” can act to form logical oppositions that map out a definition for sculpture.⁷⁵ In other words *not-architecture* is, another way of expressing the term *landscape* and vice versa.⁷⁶ By graphing out these binaries and their logical opposites, she demonstrates sculpture as just one expression in terms of material relationships to both landscape and architecture. Using this logic, Krauss goes further to demonstrate how art practices of the time fall into these categories. An experiment with Krauss’s definition of sculpture by introducing sound into the semiotic square can produce some interesting results. Clearly, there are many things besides sculpture that are not-landscape and not-architecture and sound might be considered one of them.

While it could be argued that sound is *not-landscape* and *not-architecture* and, therefore, is sculpture, this line of thinking is, of course, an oversimplification of Krauss’ logic of the monument; it also ignores the complex relationship that exists between sound and the liminal and marginal places of site and building. While sound could be considered as an axiomatic structure, a way of marking a site or constructing a site, it is imperative to remember that Krauss maintains that sculpture as a convention with “its own internal logic, its own set of rules, which [...] are not themselves open to very much change.”⁷⁷ Krauss argues that sculpture’s logic and the monument’s logic are one and the same. In terms of function, Krauss calls the monument (and sculpture) “a

⁷⁴ Ibid, 34.

⁷⁵ Ibid, 36.

⁷⁶ Ibid, 36-37.

⁷⁷ Ibid, 33.

commemorative representation” that “sits in a particular place and speaks in a symbolic tongue about the meaning or use of that place.”⁷⁸ Understanding this as a definition of sculpture can prove useful to understanding a variety of practices that involve sound which act to trigger memory and communicate the meaning of materials, objects and things.

How have current sound art practices emerged as part of an expanded field of sculpture that includes sound? Beginning with Krauss’ complete schema of *landscape/not-landscape* and *architecture/not-architecture* as she drew it (Fig. 30), where might sound fit into this diagram? How can we imagine a definition of sculpture if *sound/not-sound* replaces the complex and neuter of *landscape/not-landscape*? How would sculpture’s fields change and what new forms would emerge from them when they are defined in this way? By introducing *sound/not-sound* into Krauss’s diagram, some interesting results occur (Fig. 31).

First, the definition of “sculpture” isn’t significantly altered; in these terms, sculpture can remain a silent object. To the right, the complex and neuter remain entirely intact and can, therefore, retain the meta-term of *axiomatic structure*. To the left, in the diagram however a new artistic practice emerges, where an object is marked with intermittent sound. We might imagine *sound* and *not-sound* leaving us with the kind of sculptural practice that produces sound some of the time. It could be a sculptural sound art practice that uses discontinuous sound to disrupt or alter the material and its meta-term might be called *object intermittently punctuated by sound* (Fig. 32). In Sachiko Kodama and Minako Takeno’s kinetic sound installation *Protrude, flow* might be considered an example of an *object intermittently punctuated by sound*. At the top of

⁷⁸ Ibid, 33.

the diagram another new artistic practice emerges that incorporates both *sound* and *architecture*. One might call it an *acoustic construction*. This might be a work where both sound and architecture are constantly present. I would like to consider the *acoustic construction* as a conglomeration of building materials that form an acoustic space where enduring sound fills an architectural container (Fig. 33). One extraordinary example of this might be *Silophone* (2000-). This ongoing piece incorporates the space of an old grain elevator in Montreal as a container for sounds broadcast into the structure. The duration of the encounter with the work is equal to the time it takes for the broadcasted sounds to decay. Using the Internet and audio streaming, anyone can rejuvenate this outmoded agricultural building by broadcasting sound into its empty space and enjoying the sonorous reverberations played back to them over the Internet.

Elixir is a work which defies the strict logic of the semiotic square grid. The sound in the work however, “sits in a particular place and speaks in a symbolic tongue about the meaning or use of that place.”⁷⁹ It also maintains some elements of both the *object intermittently punctuated by sound* and the *acoustic construction*. The whistling voices suggest that Laplante’s creatures are lively little beings, in this way the animation of the material by the audio component in the installation could put this work in the realm of the *object intermittently punctuated by sound*. On the other hand I believe this work falls more in line with the acoustic construction because the never-ending audio loop is constantly present within the space. It is the sound’s constant presence which produces the work’s disconcerting and grinding effect on the viewer.

Žižek

⁷⁹ Ibid, 33.

Slovoj Žižek describes some key concepts in *Looking Awry: An introduction to Jacques Lacan through Popular Culture* that assist in critically examining *Elixir*. Presenting examples from cinema, Žižek explores Lacan's theories in order to discuss how sound can suggest materiality and that the voice can act as an object. He begins his chapter called "The Ideological Sinthome" by stating that Derridian deconstruction and Lacanian psychoanalysis comprehend "the voice" completely differently. Deconstruction believes that the voice "is always already split/deferred by the trace of writing."⁸⁰ In other words, while the voice for Derrida might act as affirmation of the self, Žižek explains that in terms of Lacan, the voice can never be heard from the place of the source and because of this, the voice's "inert presence interferes like a strange body and prevents me from achieving my self-identity".⁸¹ The author introduces the idea of the voice as object which finds its roots in Chion's notion of the acousmatic and was further developed in Michel Chion's notion of *la voix acousmatique* (acousmatic voice). This acousmatic voice which Chion describes in film is similar to Schaeffer's acousmatic but applies specifically to the voice for which no body can be attached. It is "the all pervasive presence of a nonsubjectivized *object*."⁸² In film this translates to a human presence that resides in a liminal space where the voice is heard but its source is not seen. A tension is created between the viewer's tendency to identify a body for the voice and the process of "*désacousmatisation*," or the moment where the voice's body is revealed.⁸³ This is where the potential for the uncanny arises, when the viewer realizes their initial assumption about which body belongs to the acousmatic voice is

⁸⁰Slavoj Žižek, "The Ideological Sinthome" In *Looking Awry: An Introduction to Jacques Lacan through Popular Culture* (Cambridge, Mass.: MIT Press, 1991), 125.

⁸¹ Ibid, 126.

⁸² Ibid, 127.

⁸³ Ibid, 126.

incorrect. *Le sinthome* is another important concept related to the acousmatic voice that Žižek summarizes. Lacan uses the term *sinthome* to denote the part of a signifier that is infused with stupidity and meaninglessness and results in an enjoyment in meaning retrieved from the signifier as a whole. Despite it being an absurd sort of symptom of pathological deformity, the *sinthome* is not a symptom or symbol to be deciphered so much as it is an object that provides a sense of meaningless enjoyment. Žižek proposes that the *sinthome* be isolated from its context because that is where “it exerts its power of fascination in order to expose the *sinthome*’s utter stupidity.”⁸⁴

The whistling voice(s) in *Elixir* works like the acousmatic voice described by Žižek. It fills the space while its sound source remains completely hidden from sight. As Žižek describes it, “its free-floating presence is the all-pervasive presence of a nonsubjectivized object, i.e, a voice-object without support.”⁸⁵ However, the tendency remains with this work for the viewer to seek to attach a body to the acousmatic whistling voice. What is most interesting is that this voice in *Elixir* begs us to see the deformed dolls as the support for the acousmatic voice. The repetitive and looping song however becomes implanted in the mind of the viewer and furthermore the tune conjures up the familiar words from memory that are not sung: “Happy trails to you, until we meet again...” But the intrusively repetitive and irritating song and its lyrics don’t stop upon exiting the installation space. At the Leonard and Bina Ellen Gallery, they followed me throughout the entire exhibition of *La tête au ventre*, and continued to

⁸⁴ Ibid, 129.

⁸⁵ Ibid, 127.

loop in the mind once I had left the space and I could no longer “hear” the piece.⁸⁶ Was the sound source of this acousmatic voice in the exhibition space at all or actually retrieved from memory where it continues to repeat long after one has left the gallery. This uncertainty becomes a crucial aspect of the work in relation to the sculptural material in the installation. If one is to consider the whistling sound as the *sinthome*, which must be isolated from the context that gives rise to its efficacy, this context must be determined. I suggest that it is actually outside of the gallery space that the memory of this music gains its power. As such, the materials of the installation, most specifically, the mutant dolls, act as the context that gives rise to the “*jouis-sense, enjoyment-in-meaning*”.⁸⁷ By combining the materials and sound together a tension is created between the real, the fantasy and the imaginary.

It is the *mélange* of sound and sculpture that makes *Elixir* both mesmerizing and disrupting. Its combination of irritating sound and toy objects are indeed suggestive of torture, but the question remains: Who is being tortured? Is it the dolls or the art viewer? If, as Schaeffer suggests, the process of acousmatisation makes the listener more aware of their perpetual state of subjectivity, then perhaps it is the one observing the work. The viewer-listener becomes the taunted and tortured subject that remains perpetually pestered by the annoying music that continues to loop in the acoustic imagination even after leaving the gallery. Sound in sculpture can lead one to consider the ways that what we hear is a pervasive part of our temporal and material experiences, and it has become an important part of many art practices.

⁸⁶ “the stupid song [...] that resounds compulsively [...] This music, whose status is never quite clear (when part of the diegetic reality [...]) embodies, by means of its painfully noisy repetition, the superego imperative of idiotic enjoyment.” Ibid, 129.

⁸⁷ Ibid, 129.

The word sculpture comes from the Latin *sculptura* meaning “to carve or engrave”. While this etymology doesn’t define what sculpture is, it sheds some light on possible metaphors. The way that sound is etched into our memories and recalled by the experience of observing sculptural art practices suggests that “things” – both material objects and sound – can be productive activity. As sound becomes more prevalent in contemporary sculpture, it is necessary to experiment with the logic of sculpture and expand our definitions of sculpture’s fields in terms of sound. Understanding sculpture as monument and as commemoration means making room for sound and perhaps other media into a definition of sculpture. Introducing sound into the logic of sculpture does not obliterate the relevance of sculpture as an important and meaningful category in art. In fact, it makes it more relevant, because first, sound can be successfully introduced into Krauss’s semiotic square and remain rooted in the logic of the sculpture and the monument, which is essential in order for sculpture to remain a relevant category in contemporary art practice, and second, it considers the emerging practises in sound art that have been occurring since the 1970s. Establishing sound as an important part of sculpture’s expanding fields helps sculpture to remain intact and our experience of it renewed and enriched. It seems that this is what Grayson’s *Sound Sculpture* is trying to show us. In *Elixir*, the introduction of the time-based medium of sound gives room for interpretations that would not otherwise surface without the sound. Sound unites the objects and invokes the memory of the viewer. It is crucial that the sound source be invisible because the sound can become visually linked to the dolls in the space and produce a kind soundtrack for the experience which can linger in the memory of the viewer.

CHAPTER 3: ARCHITECTURE OF SOUND

Exploring various media in collaboration with her partner George Bures-Miller, Janet Cardiff is considered a key figure in the art world, especially because of the ways she uses sound. The Canadian-born multimedia artists were awarded two prestigious prizes at the 49th Venice Biennale for *The Paradise Institute* (2001), a audio visual installation that layers audio and visual as well as multiple narratives as it invites the viewer to be a spectator of a film and its audience. One of the awards, The Benesse Award, recognizes an artist or group as trying to “break new artistic ground with an experimental and pioneering spirit.”⁸⁸ While Cardiff’s recognition has been heightened by the positive response to her participation in the Venice Biennale, she has also received international acclaim for her guided audio tours or “walks” that she has been making since the early 1990s. These walks are a fascinating part of her corpus because they subtly address the issue of site-specific sound in architectural environments. Cardiff says, “Enabling the audience to move throughout the space allows them to be intimately connected with the voices. [...] I am interested in how sound may physically construct a space in a sculptural way and how a viewer may choose a path through this physical yet virtual space.”⁸⁹

Cardiff’s work is not necessarily associated with the acoustic ecology movement but her work maintains a loose relationship with mobile sound practices that are. For instance Hildegard Westerkamp’s “sound walks,” which predate Cardiff’s walks by

⁸⁸ Marnie Fleming, "Cardiff, Janet" In *The Canadian Encyclopedia*, ed. James H. MarshHistorica Foundation of Canada, 2001) (accessed April 29, 2008).

⁸⁹ See Janet Cardiff and George Bures-Miller website at <http://www.cardiffmiller.com/artworks/inst/motet.html>

nearly two decades, ask participants to follow and to listen attentively to their environmental and architectural surroundings. Cardiff's "audio walks," however, are fundamentally different because the participant can become less aware of the sounds in the architectural environment. Instead, the audio in Cardiff's walks replaces the actual soundscape with a new soundtrack. And yet what makes her work similar to the acoustic ecologists' is that it can assist in comprehending the ever-changing relationship between people and the environment as it is mediated by sound.⁹⁰

By drawing on scholarship in architectural acoustics, and architecture theory, this chapter explores how architecture plays a role in mediating the voices and sounds we hear. But what is more interesting is how, in the case of Janet Cardiff's *Conspiracy Theory* (2002), sounds and voices create virtual architectures. This exploration draws from writings of physicist Wallace Clement Sabine, architect Peter Grueneisen, cultural theorist Brandon Labelle and architectural theorists Barry Blesser and Linda-Ruth Salter as well as architectural historian Emily Thompson.

Conspiracy Theory (2002)

The previous two cases have turned to works in which sound can be seen as a *parergon*, supplement to either an image or sculptural objects. However, Janet Cardiff's video-walk, *Conspiracy Theory* (2002), is not architecture. But it is a work of art that invites the participant to look at and "listen to" the architecture of the museum and beyond. The process of making a walk involves the artist's personal on-site examination of a particular place as well as research. Published photographs suggest that field recordings

⁹⁰ I thank Andra McCartney for sharing her thoughts on mobile sound practices and wish to acknowledge our discussions where Andra McCartney has clearly outlined for me the differences between the practices of Hildegard Westerkamp and Janet Cardiff.

are collected and used as source material, then reconstructed and edited into a sequence which ties them into a narrative journey.⁹¹ Sound is such an important factor in Cardiff's body of work and binaural sound recording is the tool that allows her to create aural architectures such as in *Conspiracy Theory* (2002). Binaural recordings use two small high fidelity microphones, usually set in the head of a dummy, to generate a hyper-realistic 360 degree sound effect when played back through headphones. Cardiff's use of voice in this video-walk exemplifies the idea of *la voix acousmatique*. It is a voice that seems come from nowhere, almost like the voice of our own conscience. The melding of audio, video obviously can be regarded in light of Chion's audio-visual contract. The introduction of real life chance events and architectural surroundings experienced by the participant, however, exponentially increase the effect of "added value." Sound and the voice's central position in the soundtrack still remains the keystone for establishing the narrative structure in the piece. For Chion, sound has a significant impact on the affective nature of images; in the soundtrack, the voice tends to take a central role in the mix. Chion describes how viewing Ingmar Bergman's film *Persona* (1966) without the sound the film images are merely abstract.⁹² Chion also puts forward that the voice always takes a primary role in a film.⁹³ He explains further,

⁹¹ See images from *Wanås Walk* (1998) and images from *Villa Medici Walk* (1998) Carolyn Christov-Bakargiev, Janet Cardiff and George Bures Miller, eds., *Janet Cardiff: A Survey of Works Including Collaborations with George Bures Miller* (Long Island City, N.Y.: P.S. 1 Contemporary Art Center, 2001), 29, 96-97.

⁹² "First, the shot of the nail impaling the hand: played silent, it turns out to have consisted of three separate shots where we had seen one, because they had been linked by sound. What more the nailed hand in silence is abstract, where as with sound it is terrifyingly real." Chion, *Audio-Vision: Sound on Screen*, 4.

⁹³ "the cinema is vococentric[...] In stating that sound in cinema is primarily vococentric, I mean that it almost always privileges the voice, highlighting and setting the latter off from other sounds. During filming it is the voice that is collected in sound recording—which therefore is almost always voice

In actual movies, for real spectators, there are not all the sounds including the human voice. There are voices, and then everything else. In other words, in every audio mix, the presence of a human voice instantly sets up a hierarchy of perception.⁹⁴

This is indeed the case in Cardiff's walks. Cardiff's walks ask the participant to put on a set of headphones and enter into a narrative that straddles the borders between fantasy and reality. By following Cardiff's instructions, the participant necessarily becomes both art viewer and art listener. As the large headphones gently press against the ears, Cardiff masks out much of the actual sounds we would hear along the path, and she replaces these sounds with ones that present us with an illusion that her story is actually taking place. As a result, uncanny events can happen each time one walks with Cardiff. For example, at a certain point in the walk, one receives instructions to follow a man down the stairs. On the video screen the man so described is descending the staircase. It was right at this point during my own experience of the walk that I saw a man in the real space with a satchel ascending the stairs. Then Cardiff says, "...I wonder what's in his brief case..."⁹⁵ For me this created a very confusing and disorienting feeling and stirred up a desire to follow the man who existed in real space and find out what was in his briefcase. This unwitting passerby suddenly became woven into the plot that Cardiff had ignited through my own imagination and chance events. It is through the process of submission to the artist's guidance that the participant can become implicated in the narrative and performs in such a way that he or she is propelled into a character role. Indeed, Cardiff engages her viewers in an "audio-visual contract" (to adopt Chion's term) where the viewer not only suspends disbelief that the audio and visual are two

recording—and it is the voice that is isolated in the sound mix like a solo instrument—for which the other sounds (music and noise) are merely the accompaniment." Ibid, 5-6.

⁹⁴ Chion, *The Voice in Cinema*, 5.

⁹⁵ Janet Cardiff, *Conspiracy Theory* (Montreal: Musée d'art contemporain de Montréal, 2002).

separate elements, but also where the viewer also relinquishes their agency to the artist's desires for a time. These walks demand that we listen and become part of a narrative or become lost in architectural environments. Without the artist's guiding voice, the experience of the work is not nearly as interesting.

Made in both French and English for the Musée d'art contemporain de Montréal, Cardiff's work maps out a trail that leads the viewer through unnoticed and unseen places in the museum, out into the arcade of Place-des-arts, further still into the underground parking and finally leading the viewer not far from the museum entrance again. In this work, the museum visitor puts on a set of ear phones through which they hear voices that guide and (dis)orient the visitor within the constructed narrative. In the English version, we hear Cardiff herself narrating the tour and it has been said that her voice is her brushstroke.⁹⁶ The participant also carries a small portable video camera with a display screen that plays back images that guide the viewer through the museum space and out into the arcade and underground parking, finally ending up just outside the museum again. The piece plays out a nightmarish story of a woman (the narrating voice) who says she dreamed that she killed a man.

While Cardiff's voice plays a significant role in all her walks, *Conspiracy Theory* uses environmental sounds as a device that (dis)orient the receiver. Aside from her own voice and the voice of Miller, Cardiff uses various sounds that help to construct architectures. Some of the sounds used in *Conspiracy Theory* include: the sound of the video camera as it zooms, footsteps, indistinct echoing sounds in the architecture, a cell phone ringing, a live jazz band and singer, the sound of a heavy metal door closing,

⁹⁶ Scott, *I Want You to Walk with Me*, 5.

squealing car tires, a gun shot, the sound of a video tape rewinding and a cassette being loaded into a video camera.

Conspiracy Theory was intended for a specific architectural context which begins in the Musée d'art contemporain de Montréal. Due to structural changes in the Place-des-arts atrium and gallery space that would diminish the impact of the work, it is no longer available to the public and, as such, we see that the architectural spaces that the work meanders through dictate its effectiveness and viability as a work. Cardiff's exploration of sound and space in *Conspiracy Theory* can be analysed and better understood with the introduction of some recent theorizations of sound, architecture and space.

Whispering Galleries

In his day Wallace Clement Sabine (1868-1919) was a professor of Mathematics and Natural Philosophy at Harvard University, but in today's terms he would be called an "applied physicist"⁹⁷. In 1895 as a young assistant professor, Sabine was given the challenge of improving the acoustics in Harvard's Fogg Art Museum Lecture Hall, a space where bad acoustics prevented people from being able to hear and understand a speaker. Sabine was able to show how the geometry and materials of the architecture were defeating the building's program. Sabine determined that despite architectural acoustics being a complex problem, the solutions were quantifiable. Through his first experiments which used only a stopwatch and his own ears, Sabine acquired the data necessary to comprehend the way sound waves undergo "a process of multiple

⁹⁷ Wallace Clement Sabine, *Collected Papers on Acoustics with a New Introduction by Frederick V. Hunt* (New York,: Dover Publications, 1964), v.

reflection from walls, from ceiling, and from floor, first from one and then from another, losing a little at each reflection until ultimately inaudible.”⁹⁸ These listening tests provided the foundation for a quantifiable understanding of the conditions that cause sound waves to be reflected and/or absorbed. From this he developed the well known reverberation equation as well as absorption coefficients for some of the most common building materials. Considered the father of modern architectural acoustics, Sabine has helped to establish the branch of physics which has given rise to further research and development in sound and architecture. Because of advancements in technology which rest upon Sabine’s foundational work, architects can now use computers to determine what the interior of a building will sound like before it is built. This gives architects the ability to design with sound in mind.

Sabine’s writing in the essays “Architectural Acoustics” and “Whispering Galleries” has shown that the geometry of architecture determines the way we hear sounds in a given space. The measurements made in Harvard’s Fogg Art Museum Lecture Hall (1895-1973) have given scientists a better understanding why certain spaces perpetuate a “whispering gallery effect.” Whispering galleries are buildings designed with an elliptical-shaped dome or vaulted ceiling. The geometric shape of the ellipse allows for a reflection of sound waves such that, if two people are located near each foci of the ellipse, even whispers can be heard quite clearly (Fig. 34). Sabine speculated that all whispering galleries were accidents, and if not, he determined that at least the six of the most famous ones were. He mentions the Dome of St. Paul’s Cathedral in London, the Hall of Statues in the U.S. Capitol Building in Washington, The Mormon Tabernacle in Salt Lake City, La Salle des Cariatides in the Louvre, Paris

⁹⁸ Ibid, 220.

and the Ear of Dionysius at Syracuse (on the island of Sicily⁹⁹, Italy). Of this last example Sabine notes that it is unique because “it is in no sense a focusing whispering gallery”¹⁰⁰ like the others. While whispering gallery design is quite particular, a whispering gallery can only be called such when it maintains its acoustic properties. Sabine points out that renovations made to the ceiling in the Hall of Statues (after a fire occurred) had a huge impact in diminishing the acoustic effect of the work. “Instead of being merely painted, the gallery had recessed panel with mouldings and ribs in relief [...] In consequence of this construction, the whispering gallery lost a large part of its unique quality.”¹⁰¹ Sabine then proceeds to explain how speech, which is made up of various kinds of sound waves, is a central aspect in the whispering gallery. He proceeds to explain that that the phenomenon of the whispering gallery was of so much interest to visitors that the architecture in the Hall of Statues was renovated again in order to “conform” to the geometry that might restore its whispering gallery effect. However Sabine concludes that even with these restorative changes, “the quality of the room which had long made it the best and the best known of whispering galleries was in large measure lost.”¹⁰²

Sabine’s discoveries illuminate *Conspiracy Theory* in at least two ways. First, the “whispering gallery effect” studied by Sabine can be seen as a play upon the act of following Cardiff’s calm and gentle voice through the gallery space of the museum in this video-walk. While Sabine would have us understand the whispering gallery effect as a phenomenon of physics, I would like to suggest that the whispering gallery effect

⁹⁹ The Whispering Wall of the Barossa Valley, a dam in Southern Australia, is another structure that exhibits similar properties to the whispering gallery.

¹⁰⁰ Ibid, 276.

¹⁰¹ Ibid, 257.

¹⁰² Ibid, 259.

alludes to an effect of space that is achieved through post-production sound editing that only the listener wearing the headphones can experience. What results is a quasi-architectural interior space in the listener's mind and body upon which Cardiff's voice seems to intrude. Second, Sabine's discovery that the sound of a space can change, even with minor changes to the architecture, is relevant to *Conspiracy Theory*. With recent changes to the arcade and gallery that have put the work out of commission, it shows how important the existing architecture is to the work. Like the Hall of Statues, *Conspiracy Theory* can no longer act as a true whispering gallery so long as it remains restricted from public access and silently laid to rest in the archive or collection storage.

Sound Spaces

Soundspace: Architecture for Sound and Vision edited by Peter Grueneisen (2003) is a publication that also seeks to explore the topic of sound and architecture. The collection of essays by several authors is divided into four main sections that include theoretical/creative writings on sound and architecture, a simplified overview of acoustics, examples of buildings and projects that serve as sites where sound is an important component in the intended program, and other design and engineering practices. The section of the book entitled "Basic Acoustics" begins with three important timelines: one that covers "Sound and architecture", one that lays out progression in acoustic science and the last one "Media Technology Milestones." The "Sound and Architecture" timeline might better be titled "Music and Architecture" because it draws heavily from music and comparatively locates the musical examples like Gregorian chant in the Middle Ages with Gothic cathedrals and Hip-Hop, Club

Music and World music of the twentieth-century in recording studios. Grueneisen begins his introduction by referring to Johan von Goethe's famous statement "I call architecture frozen music."¹⁰³ But this is not all; the entire book is laden with concrete examples of the use of architectural metaphor and virtual construction in sound. Examining several recording studios as specialized architecture, Grueneisen seems to want us to understand the music/audio recording studio as a site that is necessarily dependent on architecture and specialized materials in order to produce a kind of immaterial sound structure. One of the most interesting points on Grueneisen's timeline for "Media Technology Milestones" refers to pop music recording producer Phil Spector's trademark, the "Wall of Sound." The descriptive metaphor for the overall sonic effect of Spector's mixes is a very distinct sound that results from

reducing [...] four separately recorded instrumental tracks to one track, then adding that to three other tracks that had been similarly mixed down, then mixing the four new tracks down to one, and then layering that with vocal tracks that been put through the same process.¹⁰⁴

Spector's technique gave sound the architectural presence that has been recognized in some of the best known pop music recordings like "Be My Baby" (1963) by The Ronettes, "You've Lost That Lovin' Feelin'" (1964) by the Righteous Brothers, "River Deep Mountain High" (1966) by Ike and Tina Turner, "Let It Be" (1969) by The Beatles and "Rock'n'Roll High School" (1979) by The Ramones.¹⁰⁵ Like an architect, Spector's productions were constructed so densely that when the music plays, it gives the impression of a thick and dense acoustic materiality. Geometry of architecture in

¹⁰³ Peter Grueneisen, *Soundspace: Architecture for Sound and Vision* (Basel; Boston: Birkhäuser, 2003), 1.

¹⁰⁴ Jacqueline C. Warwick, *Girl Groups, Girl Culture: Popular Music and Identity in the 1960s* (New York: Routledge, 2007), 121.

¹⁰⁵ For Phil Spector's discography see Mark Ribowsky, *He's a Rebel : Phil Spector : Rock and Roll's Legendary Producer*, 1st Da Capo Press ed. (Cambridge, Mass. London: Da Capo ; Perseus Running [distributor], 2006).

large measure determines the limitations of what sound engineers can do with recorded sound. The application of tacit knowledge that sound/music recording professionals have acquired of room acoustics provide them with the ability to generate certain illusions of space. This special relationship that sound recording has had in architectural spaces is, perhaps, one reason why it provides sound recording engineers and artists with metaphors that rely on architecture.

When engaged in walking through Conspiracy Theory, having agreed to a sort of “audio-visual contract,” the viewer will not likely be thinking of one of the most crucial parts of the artist’s process, the audio editing studio. And yet, post-production editing also seems to be a very important step in her artistic process. While the binaural recording techniques create a hyper-realistic and stimulating effect, the final audio artefact is produced through multi-track recording using audio editing software.¹⁰⁶ This use of this software is so essential to the process that Cardiff says, “if I didn’t have audio editing software, I wouldn’t be doing my walking pieces.”¹⁰⁷ The specialized site of sound production and the techniques performed in that space through the use of a computer are what can generate the sense of architectural presence that is suggested as one walks and listens to Cardiff. Just as Spector could create a “Wall of Sound,” Cardiff can create geometries, spaces, and, at one point, the spatial illusion that someone invisible (not Cardiff) is walking behind you and standing next you before they lean over and whisper in your ear.

¹⁰⁶ “Cardiff uses multitrack recording to create layers of sound that run at the same time; footsteps, street sounds, her voice and artificial sound effects or music might all play at the same time.” Toby Butler, “Memoryscape: How Audio Walks can Deepen our Sense of Place by Integrating Art, Oral History and Cultural Geography,” *Geography Compass* 1, no. 3 (May, 2007), 364.

¹⁰⁷ Christov-Bakargiev, Cardiff and Miller, *Janet Cardiff: A Survey of Works Including Collaborations with George Bures Miller*, 28.

Sound in Modern Architecture

Brandon Labelle, a sound artist and writer who has published quite extensively on aspects of sound in art, teamed up with another Los Angeles-based sound artist, Steve Roden, to edit a compilation of creative essays that attempts to address the question of sound and architecture. In the introduction to the book, *Site of Sound: Of Architecture & the Ear* (1999), the authors assert that “Sound exists as a phenomenal presence involved in and determining the shape of the world.”¹⁰⁸ They claim—in both the collection of essays and the sound art on the accompanying CD—that when it comes to sound art, site is a primary concern. Some of the artists/writers included in the compilation are: Alison Knowles (who was very active in the Fluxus movement), Hildegard Westerkamp (known for her sound walks and association with the World Soundscape Project), and Christof Migone (radio artist, curator and professor of art). Of these, Brandon LaBelle’s interesting essay “Architecture of Noise” looks at the problems of modern architecture in relationship to sound. This article lays out the way that volumes in modern architecture sprawl through the interior and exterior, such as in the example of Frank Lloyd Wright’s *Fallingwater* (1934) in Bear Run, Pennsylvania (Fig. 35). LaBelle points out that while modern architecture was dependent on an open visual flow between interior spaces and exterior forms. LaBelle insists however that the street is an important part of modern architecture and a building like Wright’s, while it may be provide the aural flow across the boundaries of the structure, is distanced from the street. Much of urban modern architecture tends to have more windows than pre-

¹⁰⁸ Steve Roden and Brandon LaBelle, eds., *Site of Sound : Of Architecture and the Ear* (Los Angeles, CA: Errant Bodies Press, 1999), 2.

modern architecture. While this gives the impression of the open flow between inside and outside, closed panes permit only limited aural flow between interior and exterior. One pertinent example of this is the New Music Building at McGill University. Saucier + Perrotte's very modern designed building is located on the very busy and noisy downtown street of Sherbrooke West in Montreal. It gives the impression of a modern glass cube and the building's sound is very controlled. The flow of sound from outside is regulated by the structure. Its interior, used to house the University's music library and provide spaces for music performance and practice, remains sealed off from street noise. This structure does not appear embrace the kind of chance encounters between sound and music that Cage experimented with. Here, the visual flow remains in tact while the aural flow is limited.¹⁰⁹

LaBelle suggests urban modern architecture's ideal space was threatened by exterior sounds. This becomes more apparent as LaBelle explains how urban architecture is "haunted" by its exterior, the street.

the street in itself arises as a vital space of interaction and exchange [...] Its emptiness makes it an unpredictable space, one which comes into being according to its own laws, laws inherently unstable and potentially criminal [...] Through movements of bodies and automobiles it expresses itself; from banal exchanges to polite greetings, random wanderings to homelessness, it is a contradictory space—a kind of no man's land where one form of control replaces the next, where the chaotic overlapping of individuals form a momentary order.¹¹⁰

¹⁰⁹ Not only is the aural flow limited to the inside of this building, but its front doors seem to remain perpetually locked. Interior access to the building is gained by passing through the adjacent Strathcona Music Building. The path to get from the Strathcona Music Building into the New Music Building is a maze-like set of hallways that finally leads to a pedway that extends into the more modern structure.

¹¹⁰ Ibid, 48.

While urban modern architecture seems to be striving for perfect harmony and order between interior and exterior it is perturbed by the noise of street. This introduction of sound's place in modern architecture questions the possibility of modern urban architecture truly embracing exteriors if it does not allow outdoor sound to permeate the inside. LaBelle goes on to examine the Situationist International (SI) group who, by basing their architecture on "a theory of noise, dissonance, [...] which is inherent to the *natural* condition of urban life," were more successful in making architecture a more sensorial experience.¹¹¹

Although *Conspiracy Theory* doesn't actually direct the participant onto the street, it guides the listener-*flâneur* in a flow from the interior to exterior of the Museum. At certain points during the walk, Cardiff uses outside sounds in her soundtrack, but these are not necessarily sounds recorded in that space. For example, when the video shows the struggle of a man being drowned, we hear sloshing of water. In this way, the sound in *Conspiracy Theory* creates an aural flow between interior and exterior spaces and the ear surmounts the conspiracy of modern architecture as suggested by LaBelle: to keep exterior sounds outside the space of modern architecture. Cardiff's process also suggests a flow between exterior and interior spaces by taking field recordings (from the outside) and then collaging them in the multitrack recording studio and bringing this new soundtrack into the spaces of architecture. The binaural recording technique, which gives the impression of Cardiff's voice echoing between the ears and the passive sounds in the work, can also make one more aware of the body as an architectural structure where the skin is that thin and liminal layer dividing interiority and the exteriority, and how sounds inhabit both these realms. But now, in the Museum

¹¹¹ Ibid, 50-51.

a solid wall stands where a door once was, making it impossible for the work to function the way it should; to draw the listener outside and into liminal spaces.

Altered Perception of the City

Attempts to address the question of sound and architecture have been directly addressed in recent years under the umbrella of “sensory studies”. *Sense of the City: An Alternate Approach to Urbanism* was published in 2005 by the Canadian Centre for Architecture (CCA) complimenting the exhibition *Sense of the City*. The book’s editor, Mirko Zardini, explores architecture sensorially by considering how seasonal changes, the presence or absence of light, sounds and smells are key factors in our experiences of urban life. An essay “Noise and Noise Abatement in the Modern City” by Emily Thompson, addresses sound and architectural environments by outlining the changing noises of New York City since the early 1900s and demonstrates the changing attitudes toward sound. While sound was seen by some as a sign of economic progress or production, such as during the “roaring” twenties, many found the noise of industry very bothersome. Thompson explains that the main challenge regarding noise lies in the problem of its definition, which is necessarily bound to personal tastes. She shows how various noise abatement groups found little success until it could be proven that certain sounds contributed to poor physical and mental health. The shift to focussing on noise as pollution in the 1970s became a solution that originated from grass-roots organizations rather than engineers. But engineering research had provided the evidence necessary to propel sonic reform that would serve this acoustic ecology movement. In the conclusion to the essay, Thompson points out how currents in noise abatement have

once again shifted and she suggests that because cities today have become sites of consumption rather than production, so too have their sounds and noises changed. Thompson suggests that noise abatement has become less of an issue in recent years because technology affords people the power to alter their perception of sound in space, by composing their own sound environments. She states, "As consumers in search of a quality soundscape, we are each left to take matters into our own hands, and in those hands one finds a gleaming iPod."¹¹² This suggests to us the way that individuals use music to construct a kind of soundtrack for life. Instead of changing the sounds in the environment a set of earphones acts as an aural window to a personalized soundscape fantasy.

Conspiracy Theory includes a prefabricated soundtrack that viewers can choose to incorporate into their museum experience. But unlike a didactic audioguide, *Conspiracy Theory* creates a space where the architecture's acoustics are also selectively curated into a psychologically-charged thriller. The audio-viewer relinquishes their agency by following the sound of Cardiff's footsteps in *Conspiracy Theory*, at which point Cardiff then controls what is seen and what is heard, since the cushiony headphones mask out nearly all sounds that may be echoing in the space. While the viewer remains free at anytime to disregard Cardiff's directions or to ignore the storyline and to create one of his or her own, if the viewer refuses to listen, they may become lost. Cardiff's piece acts a personal exhibition that works independently of the noise (auditory or visual) happening in the real space, thus creating a kind of sensory abatement of the art experience inside and outside the gallery space. *Conspiracy Theory*

¹¹² Emily Thompson, "Noise and Noise Abatement in the Modern City" In *Sense of the City : An Alternate Approach to Urbanism*, eds. Mirko Zardini and Wolfgang Schivelbusch (Montréal, QC: Canadian Centre for Architecture = Centre canadien d'architecture, 2005), 198.

suggests that there is something that should be heard within the confines of the architecture that goes unnoticed or that is lacking.

Aural Architecture

Barry Blesser and Ruth Salter's recently published book, *Spaces Speak, Are You Listening?* (2007) is a theoretical text that expresses some current ideas on sound and architecture. The book includes sections on auditory spatial awareness, a history of architectural spaces where sound is a key feature, and it also examines musical/architectural places. One interesting notion the authors present is that of "aural architecture," which refers to the complex spatial environments we perceive through listening and how these are constructed through "the composite of numerous surfaces, objects and geometries."¹¹³ Blesser and Salter believe that most people think of hearing as a means of perceiving "active sound sources [such] as speech, sirens, or snapping twigs." But hearing architecture means being aware of the "passive acoustics" in enclosed spaces and they assert that the design of a building will inevitably construct an immaterial environment built of sound waves that changes the "personality" of a place and our state of mind in that place. Another important point that Blesser and Salter present is that aural architecture eludes the notion of an aural architect.

"The aural architect often cannot be identified because the design, selection, or creation of an aural space is distributed among a wide variety of individuals—including those who are actually using the space—who are not aware of their contributions, and because the acoustic attributes of the space are often an accidental by-product of impersonal, socioeconomic forces."¹¹⁴

¹¹³ Barry Blesser and Linda-Ruth Salter, eds., *Spaces Speak, are You Listening? : Experiencing Aural Architecture* (Cambridge, Mass.: MIT Press, 2007), 2.

¹¹⁴ *Ibid*, 361-362.

In other words, aural architecture relies on chance encounters, the presence and/or absence, of things and bodies in an enclosed space. Perhaps the most fascinating chapter of this book is “Auditory Spatial Awareness” where the authors align each aspect of aural architecture (social, navigational, aesthetic and musical spatiality) with four manifestations of auditory spatial awareness. These manifestations are (1) an influence on behaviour, (2) achieving a sense of orientation — this can be with or without the aid of vision, (3) an affect on our aesthetic sense of space, and (4) an enhanced experience of music and voice.¹¹⁵ Finally, Blesser and Salter draw the conclusion that people who are raised in dense and noisy acoustic environments, like city apartments, are conditioned to shut out aural architecture, whereas those who grow up in the rural soundscape do not suffer from this “auditory overload” and seem to have a heightened awareness of aural architectures. They also point out that heavy use of television, videogames and Walkman or iPod type devices conditions the ear to ignore the passive acoustics of space.

Like the aural architecture described by Blesser and Salter, in *Conspiracy Theory* many people are involved in the successful relay of its dramatic devices. Cardiff draws from various sources that implicate and involve numerous people in the creation of her work. She uses music, her own voice and the voice of George Bures-Miller as well as on-site field recordings and other sound effects. The act of putting on the headphones instantly implicates a person as an integral part of *Conspiracy Theory* because without his or her physical participation, the work simply does not produce the same level of dramatic irony and suspense. The mobile audio-viewer is an integral part of this work. But the Museum’s staff is involved too. In my experience of the piece, at a

¹¹⁵ Ibid, 11-12.

certain point during the video walk, a security guard in the real space saw me coming with the camera held up and headphones on. He knew what was going on and silently opened a door by the security office for me as I continued following Cardiff's footsteps and whispered guidance. In this way, the work maintains one of the key elements of aural architecture; there is no one aural architect. Even to say Cardiff's work is her own is not completely true, since George Bures-Miller has been a significant contributor. In an interview by Peter Traub with Cardiff and Bures-Miller, Bures-Miller said: "We often joke that the first major piece we co-authored was a result of us not being able to remember whose idea it was in the first place."¹¹⁶ But Cardiff and Miller can never take full credit for the results of a work like this, because without the collaborative involvement of the spectator, the museum staff and even the ignorant passersby, who in effect transform the way sound moves in the spaces (this includes those who may have been present during the field recordings), the work "would more or less cease to exist, analogous to the proverbial sound of one hand clapping."¹¹⁷

While each of the authors cited in this chapter seeks to understand sound in real architectural space, they all describe phenomena that occur in Cardiff's *Conspiracy Theory* (2002). By taking the viewer outside of the museum, the work forces the participant to weave their way through a public arcade that, like the street, presents the museum visitor with a much broader view of the world than the interior white cube spaces of the Musée d'art contemporain. It is a place where chance becomes an influential factor, where the viewer becomes the Other, a spectacle. In the arcade and

¹¹⁶ Peter Traub, "Interview: Cardiff + Miller," *Networked Music Review* (2007), http://transition.turbulence.org/networked_music_review/2007/09/20/interview-janet-cardiff-and-george-bures-miller/.

¹¹⁷ Gregory Williams, "The Voice of Author/ity," *PAJ: A Journal of Performance and Art* 20, no. 2 (1998), 66.

underground parking the uncanny sense that art occurring inside the safety of the white cube walls dissipates. In *The Architectural Uncanny*, Anthony Vidler explains how the anxiety of such an experience arises because it happens so suddenly.¹¹⁸ In *Conspiracy Theory*, the participant is simply following Cardiff's instructions and then all at once realizes that by going outside of the gallery they have become a spectacle. People may avoid the participants or look at them strangely because, unlike the museum staff and security guards who are used to the procedure of the work, they introduce additional narratives into the *mise en scène*. Perhaps the people in the non-museum spaces think you are recording them with that camera in your hand. But this is not all, at one point Cardiff leads the viewer-listener right in front of the security offices of Place-des-arts, where one soon realizes that not only are the people they see around them watching them but they are being watched, even recorded, with video surveillance at all times.

The sense of the uncanny is achieved in another way in Cardiff's work because of the obedient behaviour of the viewer/listener. Clearly, as Salter and Blesser have suggested, our auditory spatial awareness can affect us and cause us to behave differently. If the viewer/listener were to refuse to wear the headphones, the multiple narrative drama would be completely eliminated because the viewer might remain stationary, never accepting Cardiff's invitation to "point the camera where I point it" or "walk where I walk so we can stay together." Because *Conspiracy Theory's* viewers are also listeners, their behaviour in the gallery space is vastly different from others.

While this piece requires us to look as well as listen, I would argue that Cardiff is able to construct virtual spaces in our minds primarily through her use of audio.

¹¹⁸ Vidler, Anthony. *The Architectural Uncanny: Essays in the Modern Unhomely*. (Cambridge: MIT Press, 1992.), 224.

However, the video is important in the work providing navigational affirmation that the voices and sounds one hears are somehow associated with that precise spot. It is this visual information that refers to location that would have this work address architecture in an auditory way. Because the headphones block out much of the actual sound along the path, our sense of auditory awareness is skewed. Instead, Cardiff has constructed an aural architecture, a new set of active and passive acoustics that inform our understandings and transform places into renewed environments. And while Cardiff's work may be only considered a virtual construction, it can underline the interdependent relationship between sound and architecture and how both the sound and architecture have a profound effect upon each other. But more importantly, *Conspiracy Theory* can show us that aural architecture has a deeper impact on our behaviour than even visual architecture. The very fact that it is no longer available to the public because of changes in the architecture suggests that Cardiff's aural architecture just won't work in these spaces where construction has changed the geometric environment. Site-specific walks like *Conspiracy Theory* demand a certain commitment by the institution to preserve the architectural space in a certain condition in order for the work to function properly. When the building structure is significantly altered, so is the walk. If the architecture is not preserved, the art work is essentially altered and in the case of *Conspiracy Theory* become defunct – just like the man in Cardiff's dream.

While *Conspiracy Theory* may not have been intended to become documentation in the same way that acoustic ecologists document environments, the work is now an inaccessible archive. Ironically, there is one part of the video walk

where Cardiff guides the participant towards Christian Boltanski's *Les archives* (1992).

The dialogue in the video walk goes as follows:

There's a door with a screen over it on the left. Go over to it. Look inside. I like this piece of art but it's a bit spooky; people's photos and objects locked in these boxes forever.¹¹⁹

It seems that the conspiracy may very well have been that Cardiff's work would one day become part of "Les archives," locked in a box forever. This work is evidence that as architecture changes, so too does the geometry of space, the sounds around us and the possibility of whispering galleries. While *Conspiracy Theory* may have been created a permanent part of the Musée's collection, now that it is no longer available to the public can we regard this work as an archive of aural architecture? The work exhibits some of the traits that Blesser and Salter have put forward; the involvement of many people, objects and forces that makes it a complex sound environment that is perceived through listening. *Conspiracy Theory* may be fated to become a remnant of the aural history of the Musée and the Place-des-Arts arcade. This suggests that, as Cardiff says in *Conspiracy Theory*, "things are changing, happening right before our eyes but we just don't notice."¹²⁰ While the work demonstrates how very *vococentric* our audio faculties can be, burying this work means the silencing not only of Cardiff's voice but the voice of the architecture too. The very existence of the work as being associated with the Museum and its contents suggests that there is a need to re-examine the importance of what is heard in architectural containers for art and where that container begins and ends. The archiving of this work underlines the need for acoustic ecology to examine and re-examine soundscapes of architecture and art. Internal

¹¹⁹ Cardiff, *Conspiracy Theory*

¹²⁰ Ibid.

dialogues are highly constructed and inseparably connected to architecture and are worthy of preservation. The viewer's bodily movement in the space commit him or her to living the fantasy that Cardiff has prepared. *Conspiracy Theory* functions as a prefabricated narrative in which we choose to become involved and which goes beyond the agency of noise abatement through the use of iPod-type devices that Thompson has described. The disappearing sounds of the ever-changing architectural world may be worthy of preservation at the price of eliminating an intriguing example of aural architecture that rejects the established circumambulating path set out by the Museum and their curators. By putting Cardiff's voice in the archive, there seems to be a very deliberate act of forgetting. In other words, while it might bring this aural architecture of the museum to the forefront, by unmasking the actual architectural acoustics happening in the space, the listener's attention is no longer averted from the sound waves that are reverberating in the physical environment beyond the headphones.

CONCLUSION

This thesis has examined three contemporary art works focussing on ways that sound is represented symbolically or is actually present. By examining these works in light of the relationship that exists between sound and the particular art form (be it image, sculpture, or architecture), several common themes arise. Perhaps one of the most important is that Geneviève Cadieux's *La voie lactée* (1992), Myriam Laplante's *Elixir* (2004) and Cardiff's *Conspiracy Theory* (2002) all deal with the idea of the voice in different ways. While the voice is crucial in all of these works, certain spatial issues encompassing site, site-specificity, the audio environment and acoustic space emerge as equally significant and should be considered in dialectical tension with the idea of voice. Site-specificity is of particular concern in *La voie lactée* and *Conspiracy Theory*. The special relationship that both of these works hold the location of to the Musée d'art contemporain's building demonstrates that as sounds changes over time, so too does the art. Site-specificity, as it relates to the immediate environment of a work, necessarily includes the auditory and this makes sound crucial to an art work no matter what form it takes on. This is especially true when the work visually signifies sound and the voice, Like in *La voie lactée*. Cadieux's cropped photograph blown up to billboard size contains a picture of lips that hovers over the Musée d'art contemporain. While this work does not have an audio component, considering this picture to be an iconographic representation of the voice and listening to sounds near to the work shows ways that the voice might be "speaking" and that the local soundscape is crucial to a thorough examination of this image. Cadieux's cropped photographic image in a site-specific

location alludes to a voice embedded in the soundscape of the city. Montreal's tourism logo, which also incorporates an image of lips, acts as a signifier for the hum of the city's soundscape. The image of the lips in this location alludes to the portrayal of Montreal as a sexy city, a "buzzing" cultural metropolis. Laplante's installation incorporates sculptural objects and sound together. By coupling the reconfigured mutant figures made from old plush toy parts, dolls, and modelling-clay with a non-stop looped soundtrack of a voice (or voices) whistling the popular American tune "Happy Trails," the artist animates these already bizarre objects. In *Elixir*, the hidden sound source gives the viewer-listener an acousmatic experience which allows one to project life into the objects and insinuates the viewer's perpetual state of subjectivity. Cardiff uses her own voice in her video walk as a gesture that offers the viewer another way of experiencing art and architecture, and it is a key element in her work—a gestural course-plotting performance that is played by the gallery-goer—that implicates everyone else in the constantly changing soundspace. As she guides the viewer through the Musée d'art contemporain with images on a video camera display screen and spoken directions, the viewer-listener becomes wrapped up in a narrative that is dependent on actual happenings, chance encounters and fantasy.

One of the major challenges to a study on sound in multi-media works is that "the examination of sound begins with a phenomenology," as pointed out by Don Ihde.¹²¹ The experience of listening to art happens so naturally as part of sensorial observation that is easy to forget it is happening at all. Sound is always there in the

¹²¹ Ihde, Don. *Listening and Voice: A Phenomenology of Sound* (Athens: Ohio University Press, 1976), 17.

background, framing the event. It is precisely this casual awareness that can cause one to overlook sound. Ihde says,

the very familiarity of our experience [of sound] makes it hide itself from us. Like glasses for our eyes, our experience remains silently unseeingly presupposed, unthematized. It contains within itself the uninterrogated and overlooked beliefs and actions which we daily live through but do not critically examine.¹²²

Despite the fact that sound has an impact upon our experiences, Ihde wants to emphasize that this profound effect that sound has upon the subject can be easily dismissed if we don't make a conscious effort to remember that it is a variable in every observer's experience. It is when sound is addressed as a focal point that a radical shift in perception occurs and awareness of the observer's experience can be heightened. Studies such as this are essential to prompting sound's emergence from out of the background of art.

All three of the works attempt to formalize, and thus acknowledge, the experience of listening as part of a larger sensorial experience. Laplante's *Elixir* interjects a whistling voice into experience of viewing objects. While this sound can be disconcerting and perplexing to the overall display, proper observation of this piece cannot ignore the presence of sound; it is there in your face. When the observer leaves the gallery space, the voice continues to repeat in the mind the like a record skipping in the memory. In *Conspiracy Theory* Cardiff also inserts sound into architectural spaces, but the use of headphones also eliminates certain sounds. Cardiff's voice is central to the narrative presented and the work demonstrates how things can change in a space when sounds are added or removed. Cadieux's *La voie lactée*, whose title is play on words that is suggestive of voice, neither creates sound nor silences it. But there are

¹²² Ibid, 17.

several semiotic clues that suggest there is more to this work than meets the eye. For those eager to listen, the image suggests that a voice is present. *La voie lactée* acts as a sign that can draw attention to the sounds that are already occurring in that place. While the disembodied mouth suggests an isolated voice, there is also an allusion to a metaphoric noise of cultural events. But more importantly, the work acts as a literal starting point from which one can listen to a very interesting sample of Montreal's ever-changing voice, its soundscape. By looking at ways that sound is a part of these three art works, it can be noted all of them achieve interesting results that advocate listening as essential to art experiences. While sound enhances the works by Cadieux, Laplante and Cardiff, the experience of art is significantly altered by the combination of media that each exhibits. In Cadieux's image, Laplante's installation and Cardiff's video-walk, sound's affective results might be overlooked if image, sculpture and architecture are not scrutinized in terms of the sound that frames these encounters. This is why Chion's idea of the *audiovisual contract* is so essential to this thesis. Chion writing suggests that the combination of visual and audio media produces a synergistic affect upon the spectator. Without isolating the audio from the visual it becomes difficult, if not impossible, to reveal how audio impacts the overall art experience.

Although *La voie lactée*, *Elixir* and *Conspiracy Theory* are interesting works when observed only by looking, sound proves to be crucial to the links that exists between each piece and the respective category of image, sculpture and architecture. Art's borders are enlarged when sound takes a central position in the observation of these art works. When one seeks out the voice of *La voie lactée*, the edge of the image is no longer the limit of the art. Instead, a combination of visual and auditory

observation expands the work into the periphery. This proliferation of art out into the space of the city alters the meaning of the work and suggests that the presence of cultural activity and the sounds that come from it become a voice for the city, a symbol for cultural identity, or even the production of art “happening”. *La voie lactée* and *Conspiracy Theory* both imply that personal involvement and the noise of the city streets are important to art reception. Without listening to this work the connection between voice, identity and actual sounds would remain latent in the work. *Elixir*'s installation objects are quite interesting to look at, but their juxtaposition with sound alters the dolls so that they seem to take on a life of their own. It is only the viewer's willingness to connect sound to the object that can give this result. The whistled voice embeds itself in memory and can be carried out of the gallery space, which acts as a reminder of this projection of life into tortured and formerly beloved toys. The structure of the work, which combines sound and sculptural elements, results in the launching of another dimension into this work: time. The looping tune is recurring without end and acts as a device for constant recollection and commemoration. This ties the work back to Krauss' logic of sculpture. Sound with objects then expands the possibilities that sculpture can take on and raises the question of the importance of materiality, consumption and desire. Time becomes important to *La voie lactée*, when sound is considered because it is always changing and never-ending. Where *Conspiracy Theory* is already a time-based piece, after participating in such a piece, the work can cause one to become more aware of time and the decay of sound in architectural spaces. Sound in *Cardiff's Conspiracy* theory, like in the other two works, impacts the space of art. While the video portion of this work helps the participant mingle fantasy and reality in a

disorienting experience, once the sound of this work has been considered, it becomes extremely difficult to separate the sound of *Conspiracy Theory* from the museum architecture. Standing in the atrium of the gallery is never quite the same once one has imagined a jazz singer and band in that space. The sound in effect becomes part of memory and is recalled when that space is encountered again. Absence of these recalled sounds then make one more aware of how architectural acoustics play a role in the perception of art housed inside or outside the museum.

In each case study, when sound is considered, space and time become more important factors. The three case studies in this thesis have examined ways that sound is being used in contemporary art works. All three artists focused on in the case studies, Genevieve Cadieux, Myriam Laplante and Janet Cardiff, have used various media in their work. Sound as an art medium is important to these contemporary examples because, in them, sound facilitates additional ways of examining art and enlivens our senses. By seeking out sound, the voice can emerge as an auditory experience that is linked to oral language and communication in time and space, rather than merely a visual text. Sound in these art case studies draw out the interchange that occurs between the senses when sound is the focus of the interpretation in audio-visual works. A better understanding of art in general can be achieved by seeking to locate sound in art media, observing its purpose in art, and seeking to interpret the message it carries or the dimension that it adds. Marshall McLuhan was particularly concerned with media and his insights into media and sensorial experience has given scholars much food for thought. His well known statement, “the medium is the message,” places high priority

on the method of communication rather than the content.¹²³ Indeed, this thesis is concerned with content and it suggests that when sound is considered in combination with the art forms of image, sculpture and architecture it alters the respective art form and thus both the form and content of art. But what McLuhan's idea offers is important because it implies that sound, as an art medium, carries its own message and when combined with other visual media, expands the possibilities of the messages that art carries.

Sound is a potential energy in all objects and thus acts as a latent or hidden idea that can suggest possible ideological problems in art. While sound in art may seem to present uncertainties to a definition of art, I suggest that when obsessively repetitive sound is present, like in the case of *Elixir*, this is ideologically significant. We can consider this kind of sound like a "support for totalitarian enjoyment", even a symptom of "our obsession with idiotic enjoyment" of things.¹²⁴ This is important to recognize because sound (as *sinthome*) with the sculptural object (fragment of material reality) can effectively produce an estrangement from these fetish things. Žižek explains that,

This kind of 'estrangement' is perhaps even more radical than is Brechtian *Verfremdung*: the former produces a distance not by locating the phenomenon in its historical totality, but by making us experience the utter nullity of its immediate reality; of its stupid, material presence that escapes 'historical mediation'...It simply dissolves totalitarianism as an effective social bond by isolating the heinous kernel of its idiotic enjoyment.¹²⁵

This raises some very important questions about art and material obsession that require further investigation. A study that examines whether sound can effectively force us to

¹²³ McLuhan, Marshall. *Understanding Media: The Extensions of Man* (Cambridge: MIT Press, 1994).

¹²⁴ Žižek, *The Ideological Sinthome*, 129.

¹²⁵ *Ibid*, 129.

confront art as fetish object or to find answers about the way sound may transform into a fetish object itself could prove valuable to art history.

Sound in art can animate a work, by suggesting a lively body, rather than an inert mass; transforming images, objects and buildings into characters and caricatures and drawing us into a narrative structure that mimics reality. Life is breathed into all three works when we explore ways that the voice is symbolically implied, used concretely and/or treated as a navigational tool. Susan Ferleger Brades emphasizes that there is an important relationship between sound and vision where “the ‘voice’ [is] the primary transmitter of artistic meaning” and that “the ‘voice’ [is] understood not so much as the meaning of a work of art, but as the means through which it is conveyed.”¹²⁶ Focussing on sound helps to make the voice heard in the three works and this is particularly true in the case of *La voie lactée*. Without the consideration of sound in *La voie lactée*, the audio frame that surrounds the work and alters the way we look at this complex piece remains buried in the background. As such many layers of interpretation and complexity are lost when sound is not considered as vital to the work. The voice is also a chief transmitter of meaning in *Elixir*, because with without which the process of *déacousmatisation* would be impossible and the illusion of presence that is created by the acousmatic whistling could not take place. For these reasons this thesis’ examination of sound, which in all three case studies focuses on the voice, is so important to the interpretation of art generally. While Cardiff is particularly known for the use of her voice in her walks, Conspiracy Theory shows us that there are other voices that we can hear in architectural spaces which can edify the viewer-listener. In

¹²⁶ Michael Archer and Greg Hilty, eds., *Voice Over: Sound and Vision in Current Art* (London Manchester: South Bank Centre; distributed by Cornerhouse Pub., 1998), 6.

particular the acoustics of the architecture that frames the gallery goer as they wander their way through the exhibitions.

Even there are many forms in art and sound's relationship to them is a fascinating topic because it challenges the viewer to both look and listen beyond the frame, beyond the material object, beyond the construction of a building, and beyond the categories of image, sculpture and architecture. Sound and silence each hold a highly ideological relationship to art that is suggestive of the voice. This relationship comes to the foreground when voice is expressed. Chion explains that in film, silence is often expressed with background noises like the ticking of a clock that typically go unnoticed "unless other sounds (of traffic, conversation, the workplace) cease."¹²⁷ My research and field recordings suggest that these "other sounds" never do cease. There seems to be constant sound activity within the limits of the art experience. A rich soundscape can be mapped out regardless of what form an art work takes. In this way sound holds a substantial relationship even to the silent art work. More fields of art are emerging and may continue to emerge with the incorporation of sound into multi-media practices. Schaeffer's idea of the sonorous object challenges the very materiality of sculpture and may give rise to artists approaching sound as they have other materials of art that can be manipulated, moulded, or perhaps even "sculpted". While sound endows art with illusion of an auditory sense of things in depth by filling the volume of space, it brings into question the importance of material to form. This is where Derrida's notion of the *parergon* becomes useful, since for Derrida, this term describes something that is absolutely crucial to the meaning and definition of art, while by certain definitions it does not appear to be essential to it. This is precisely the liminal status that sound holds

¹²⁷ Ibid, 57.

in *La voie lactée*, *Elixir* and *Conspiracy Theory*. An investigation as to whether sound can maintain this liminality in other art works would be worthwhile.

In addition to being the sensory device that allows us hear, the human ear is known to help the body to achieve a sense of equilibrium. I suggest this also works metaphorically when we use our ears to examine works of art. By listening to art and thinking of ways that the idea of sound can be manifest in art, a more balanced observation can be achieved between the visual and the auditory. The result of examining each case study in terms of its art form and sound offers an additional perspective on the works. It supports the idea that image, sculpture and architecture remain relevant categories in contemporary art practices that are being expanded by the auditory sphere. As sound becomes more prevalent in contemporary art practices, there is room for more study on sound and for expansion in the ways we observe, analyse and document the arts. By examining art in terms of the voice we can more critically examine sound as an important dimension of art that invites us to discover more of the liminal spaces where art and life merge.

FIGURES



Fig. 1 John Cage performing *Water Walk* (1959) on the CBS game show "I've Got A Secret" in 1960.

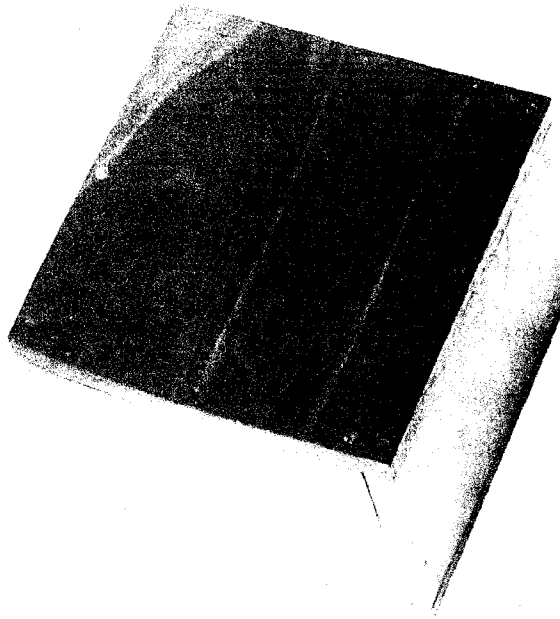


Fig. 2 Robert Morris, *Box with the sound of its own making* (1961), Walnut box, speaker, and three-and-one-half-hour recorded tape, 22.9 x 22.9 x 22.9 cm, Collection of Mr. & Mrs. Bagley Wright.

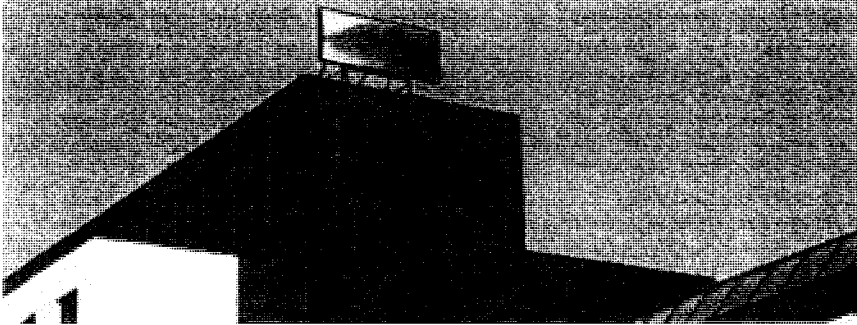


Fig. 3 Geneviève Cadieux, *La voie lactée* (1992), inkjet on translucent canvas, 183 x 457 cm, Musée d'art contemporain de Montréal, permanent collection.

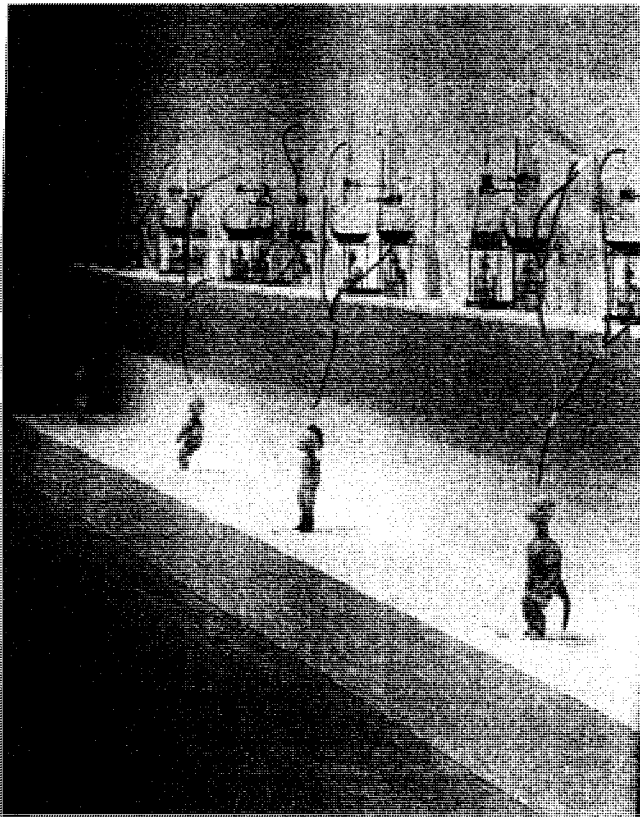


Fig. 4 Myriam Laplante, *Elixir* (2004), mixed media, variable dimensions, installation view at the Leonard and Ellen Bina Gallery 2007, Collection of the Gallery Apart, Rome.



Fig. 5 Myriam Laplante, *Elixir* (2004) mixed media, variable dimensions, installation detail, Collection of the Gallery Apart, Rome

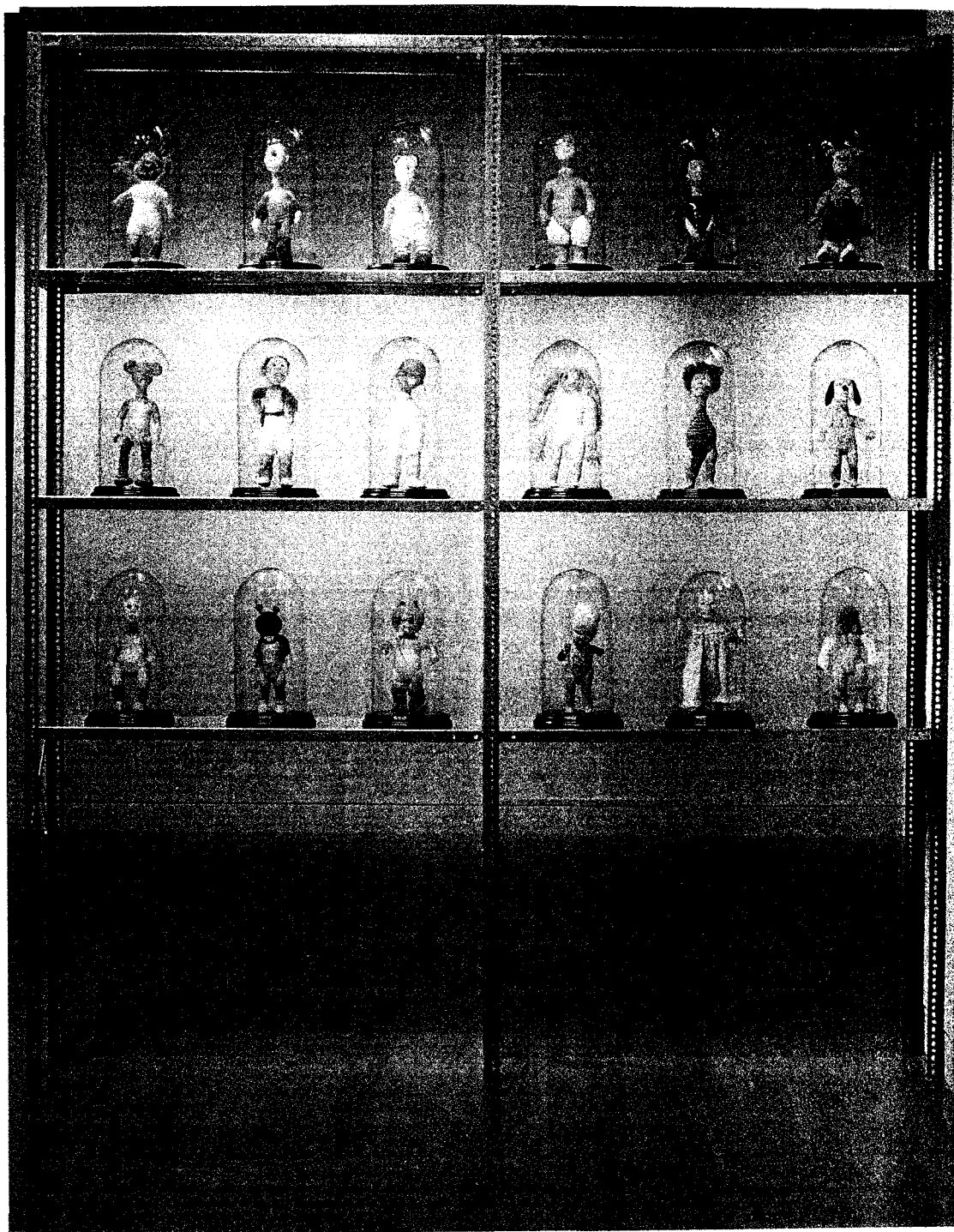


Fig. 6 Myriam Laplante, *Elixir* (2004), mixed media, variable dimensions, installation view at the Leonard and Ellen Bina Gallery 2007, Collection of The Gallery Apart , Rome.



Fig. 7 Myriam Myriam Laplante, *Elixir* (2004), mixed media, variable dimensions, installation detail at the Leonard and Ellen Bina Gallery 2007, Collection of The Gallery Apart , Rome.



Fig. 8 Janet Cardiff, *Conspiracy Theory* (2002), video still in video walk, Musée d'art contemporain, permanent collection.



Fig. 9 Janet Cardiff, *Conspiracy Theory* (2002), participant operating camera, showing video still from Fig. 9, Musée d'art contemporain, permanent collection.

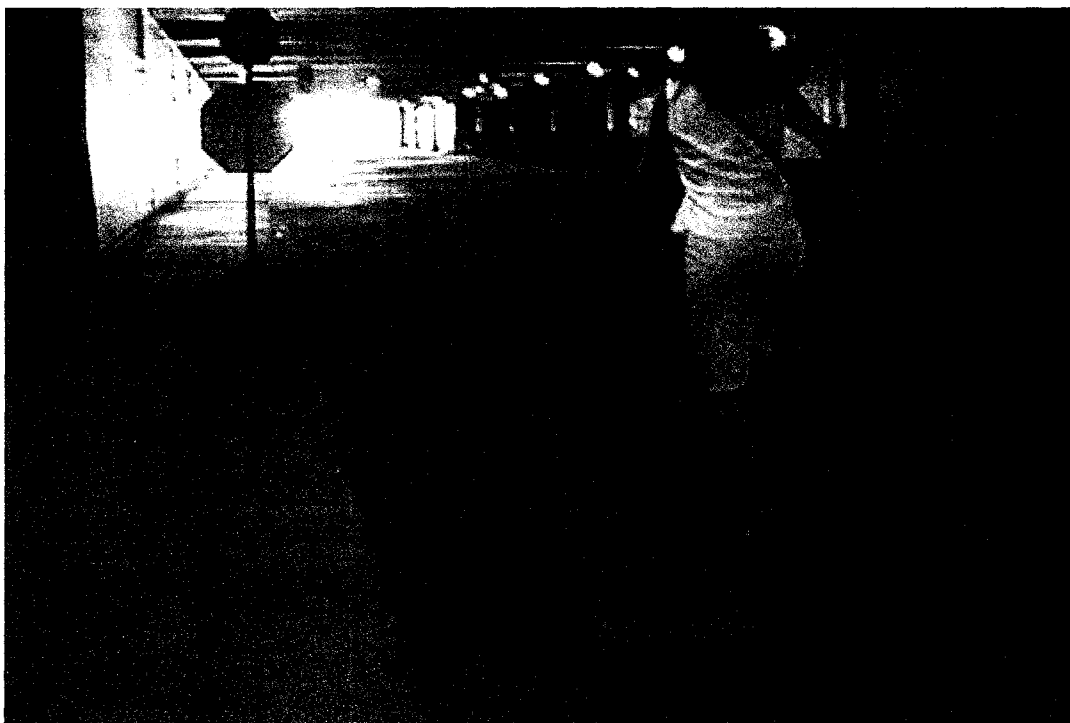


Fig. 10 Janet Cardiff, *Conspiracy Theory* (2002), video still in video walk, Musée d'art contemporain, permanent collection.



Fig. 11 Geneviève Cadieux, *Hear Me With Your Eyes* (1989), Cibachrome, silver-gelatin prints, 249 x 310 cm, Collection of the Montreal Museum of Fine Arts (1/2), owned by the Fondacio Caxia, Barcelona, Spain (2/2) and collection of the National Museum of Modern Art, Kyoto, Japan (A/P).

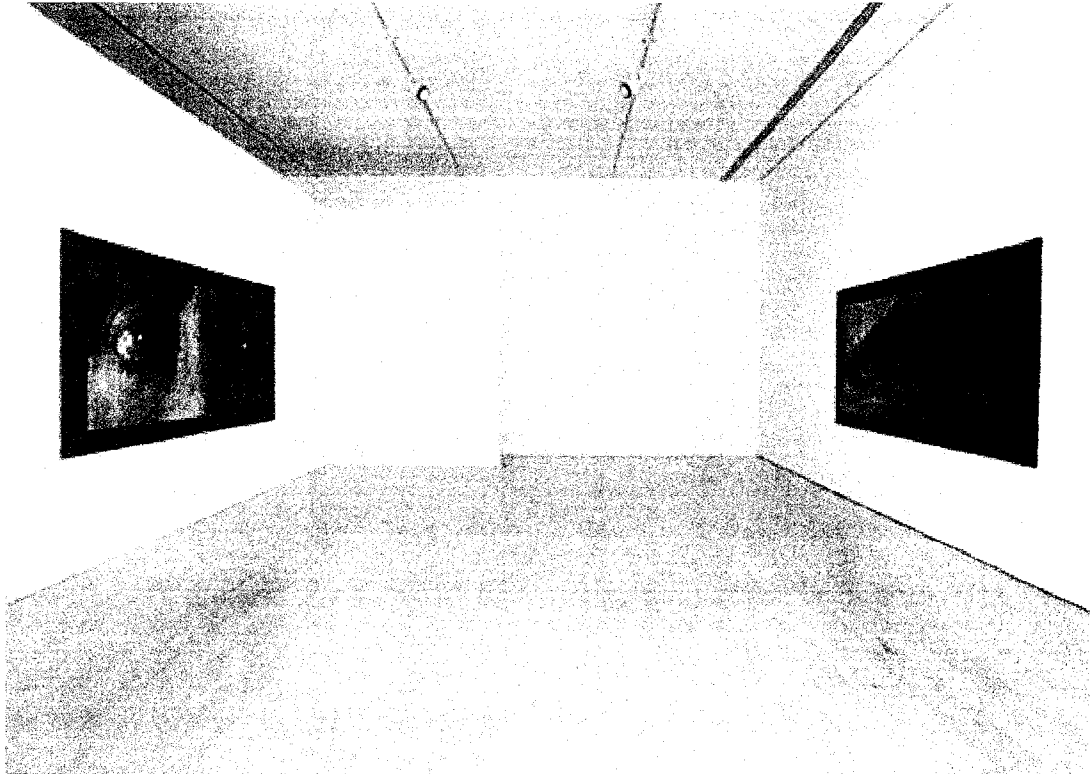


Fig. 12 Geneviève Cadieux, *Amour aveugle* (1992), Cibachromes, 155 x 360 cm each, Collection of Frac Languedoc-Roussillon, France.



Fig. 13 Geneviève Cadieux, *Portrait de famille* (1991) installation view, cibachromes, double-sided boxes, 230 x 230 x 30.5 cm each. Collection of the National Gallery of Canada, Ottawa.

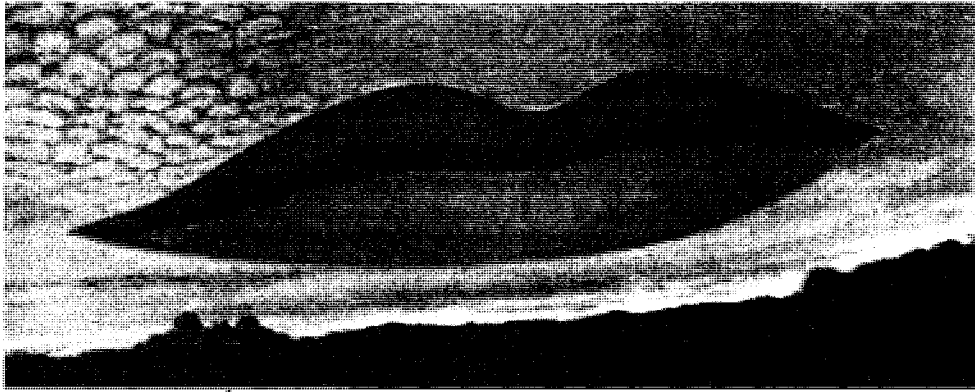


Fig. 14 Man Ray, *À l'heure d'obervatoire, Les amoureux* (1932-34), 9 cm x 21.5 cm, private collection.

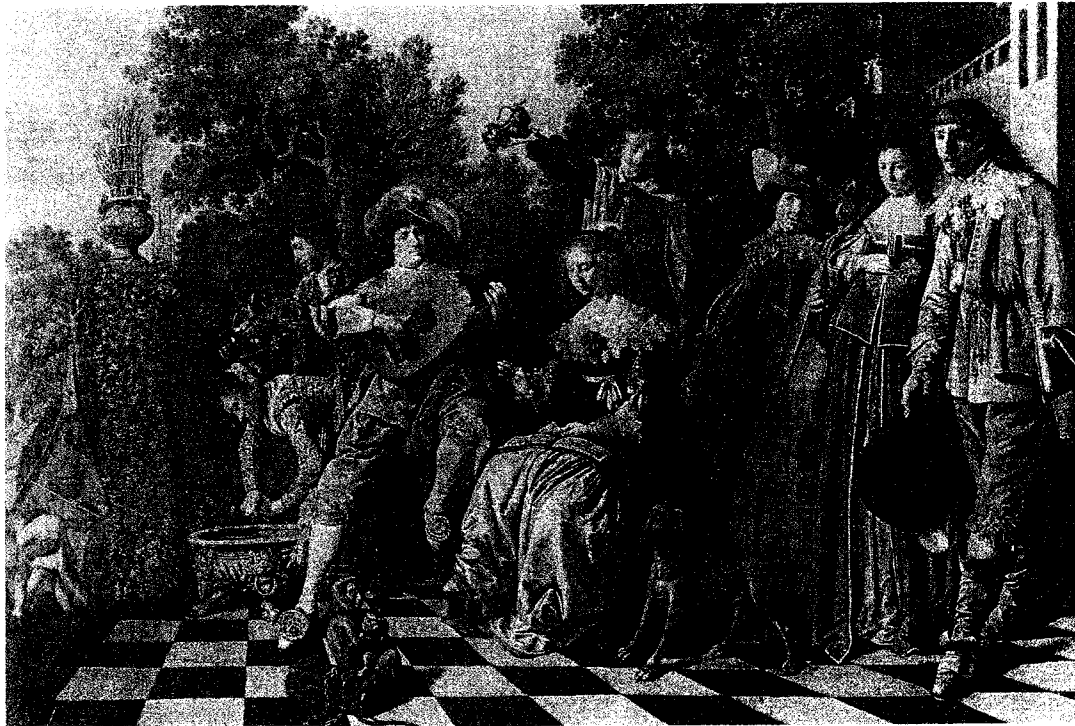


Fig. 15 Jan Miense Molenaer, *A Musical Party (Allegory of Fidelity in Marriage)*(1633), oil on canvas, 99 x 140.9 cm, Richmond, Virginia Museum of Fine Arts, inv. no 2542, the Adolphe D. and Wilkins C. Williams Collection.



Fig. 16 Gerhard Rühm, *Sheet from the Cycle "Duo"* (1930), pencil on music paper, 34 x 54 cm, private collection.

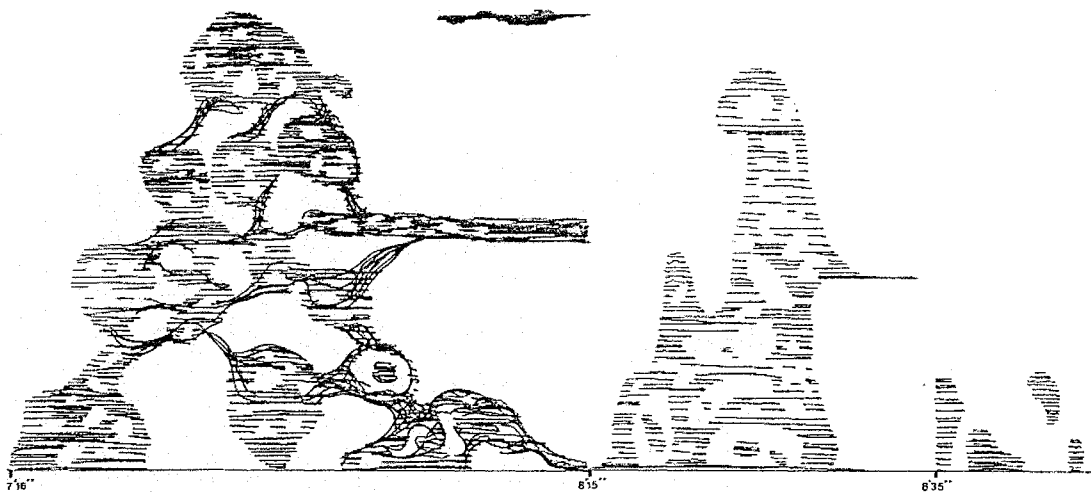


Fig. 17 Iannis Xenakis, *Mycenae-Alpha* (1978) detail, source image for music composed on the UPIC graphic/computer system.



Fig. 18 Richard D. James, spectrogram image in Track 2 on *Windowlicker* (1999) CD

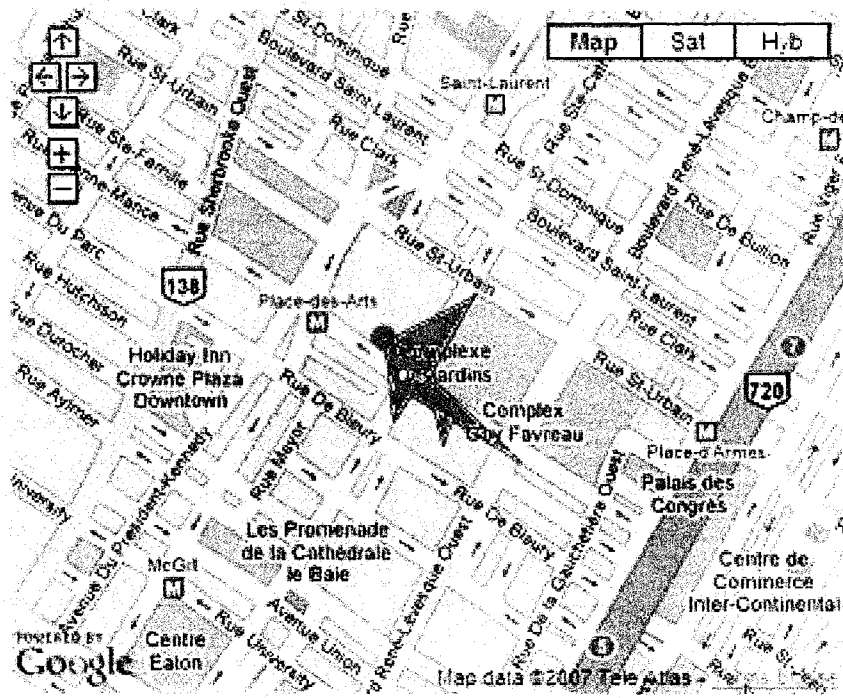


Fig. 19 The geographical definitions of *La voie lactée's* "audio-frame." The red dot represents the location of the work and the green section delimits the listening area from which the work may remain fully visible.

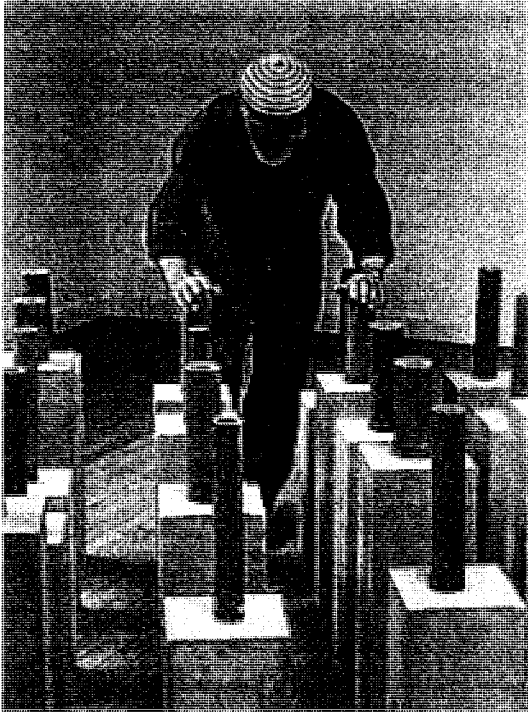


Fig. 20 Akio Suzuki, *From One Bamboo* (2004), photograph of the artist performing on his sculpture.

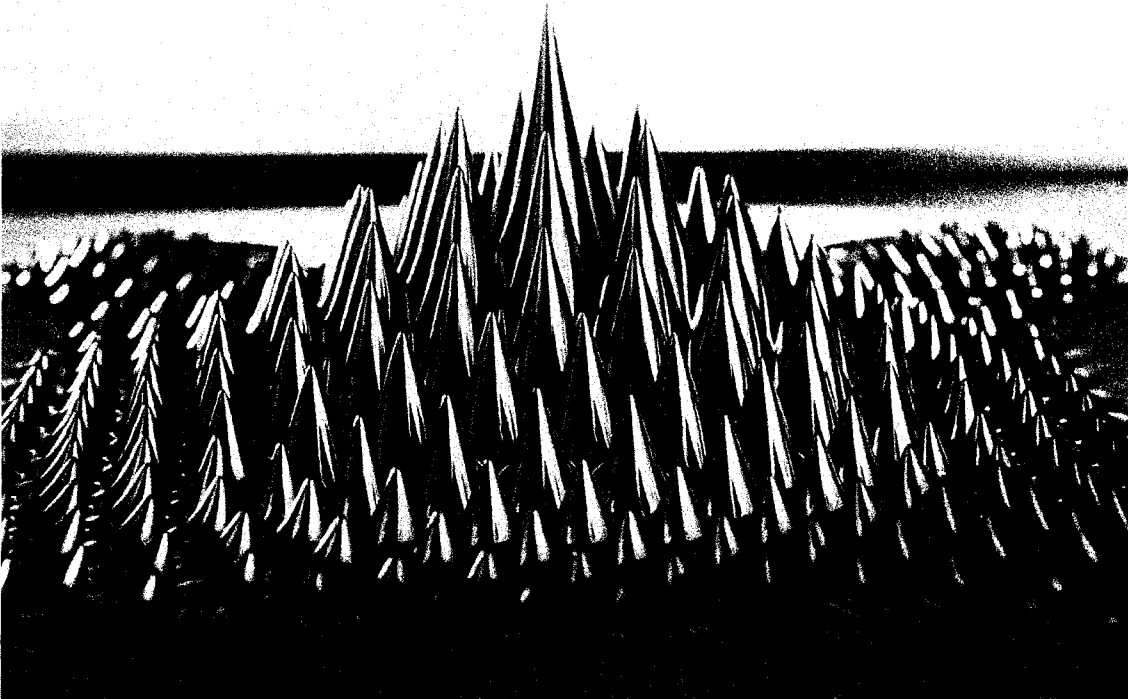


Fig. 21 Sachiko Kodama and Minako Takeno, *Protrude, flow* (2001), magnetic fluid, electro magnets, iron, copper, acrylic, fluorescent lamp, sound level meter, microphone, microcomputer and power sources, PC, Stereo Speakers, image projector, screen, video camera 83 x 80 x 45 cm, Museo Nacional Centro de Arte Reina Sofia.



Fig. 22 Tony Oursler, *Keep Going* (1995) cloth, stand, LCD video projector, VCR, Tripod, videotape (performer: Tony Conrad) 78 x 20 x35 in. Williams College Museum of Art, Kathryn Hurd Fund, 99.4.

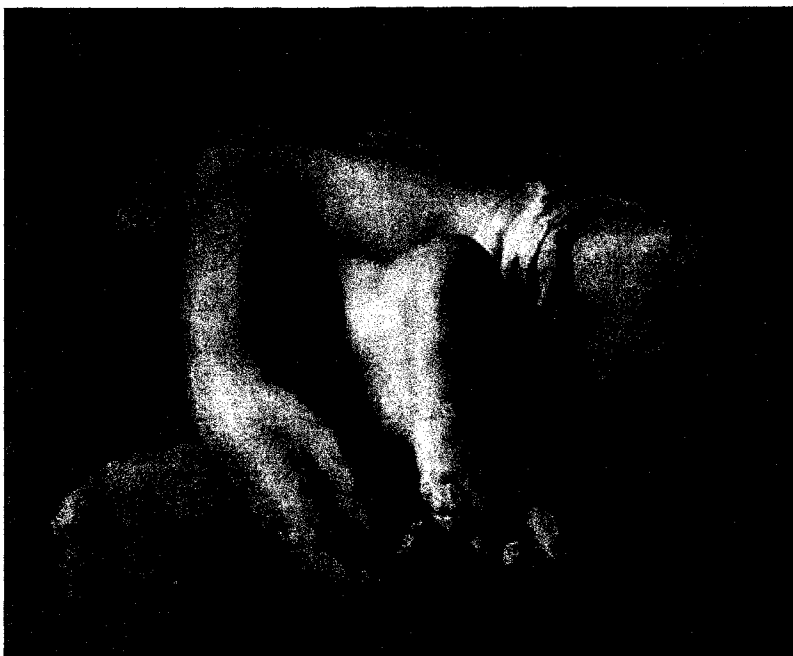


Fig. 23 Théodore Géricault, *Severed Limbs* (1818), oil on canvas, The Fabre Museum, Montpellier

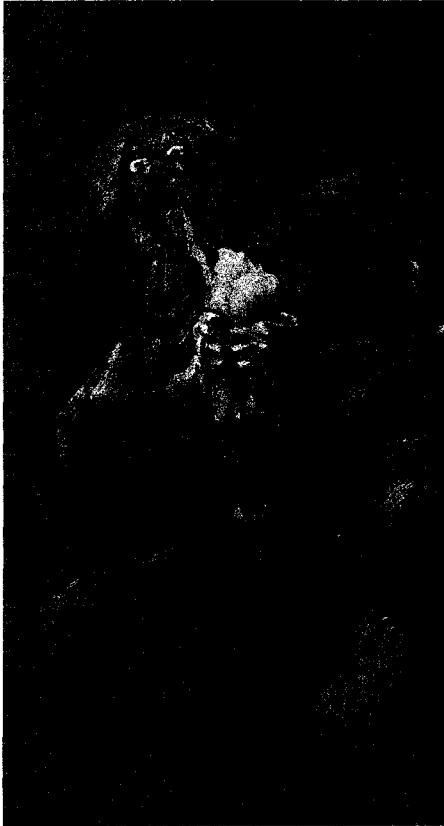


Fig. 24 Francisco Goya, *Saturn Devouring his Children* (c. 1820), oil on canvas, 146 × 83 cm, Museo del Prado, Madrid



Fig. 25 *Winged Victory of Samothrace* (c. 220-199), marble, 32.5 x 16 x 20 cm, the Louvre, Paris.



Fig. 26 Auguste Rodin, *Hand of God* (1907), marble, 73.7 cm (height), the Metropolitan Museum of Art, New York.



Fig. 27 Hans Bellmer, *Doll* (1936), painted aluminum (48.5 x 26.9 x 37.6 cm), on bronze base (19 x 20.3 x 20.3 cm) the Museum of Modern Art, New York, the Sidney and Harriet Janis Collection.

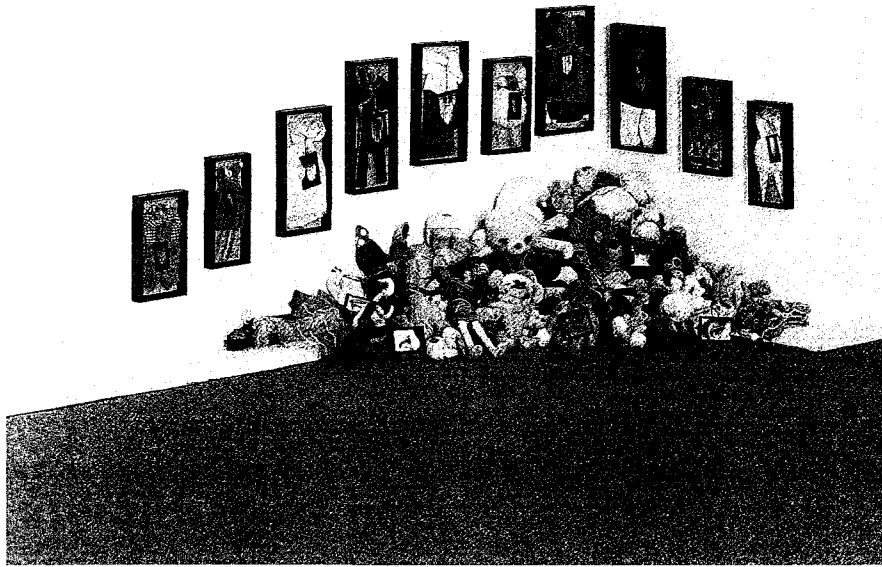


Fig. 28 Annette Messenger, *Story of Little Effigies* (1990), plush toys and ten framed collages each with doll clothing and charcoal on gelatine-silver print under glass. The Norton Family Foundation.



Fig. 29 Paul McCarthy, *PROPO (Dark doll)* (1991), cibachrome, photograph detail taken from published photos series in artist's book *PROPO*.

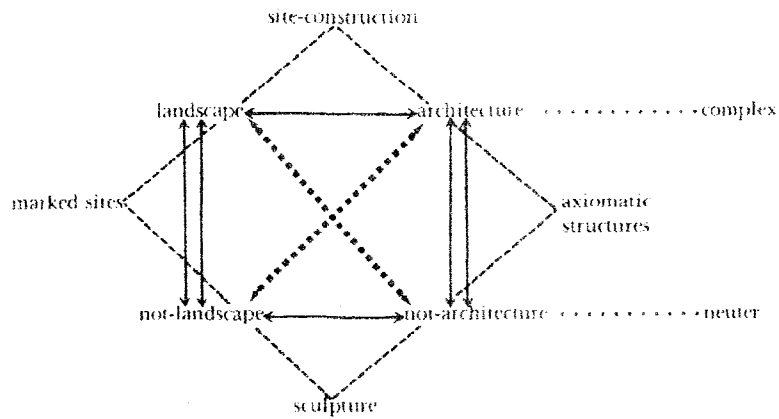


Fig. 30 Krauss' diagram (semiotic square) from Krauss, Rosalind. "Sculpture in the Expanded Field." *October 8*, (Spring, 1979): 38.

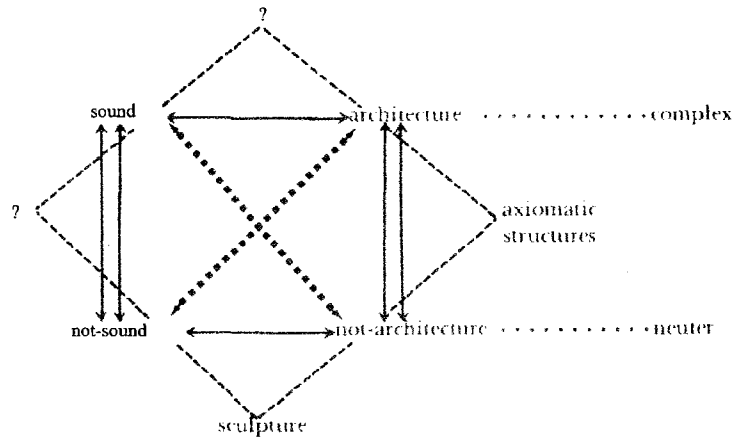


Fig. 31 Adapted version of Krauss' diagram (semiotic square) introducing sound/not-sound into the complex and neuter.

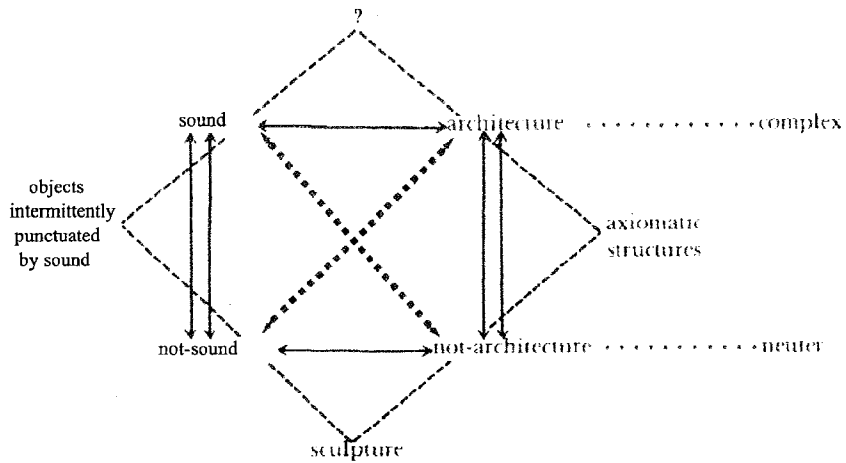


Fig. 32 Adapted version of Krauss' diagram (semiotic square) introducing sound/not-sound into the complex and neuter, showing the expanded field of *objects intermittently punctuated by sound*.

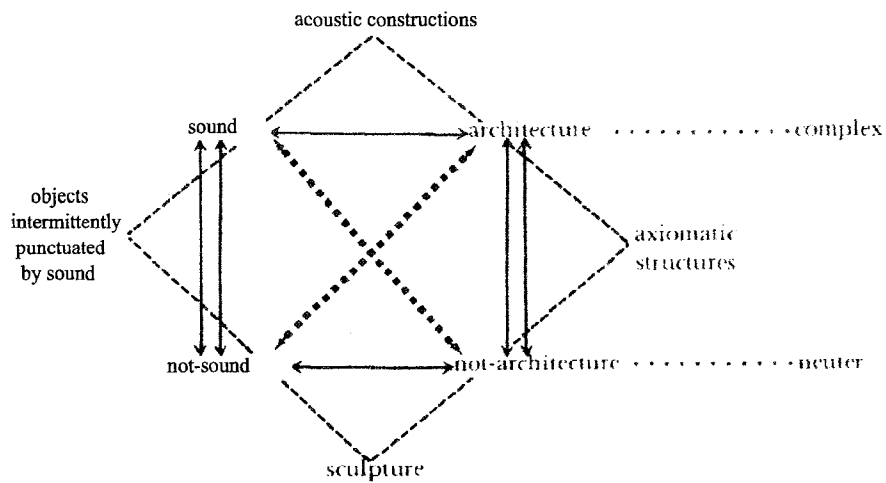


Fig. 33 Adapted version of Krauss' diagram (semiotic square) introducing sound/not-sound into the complex and neuter, showing the expanded field of *objects intermittently punctuated by sound and acoustic constructions*

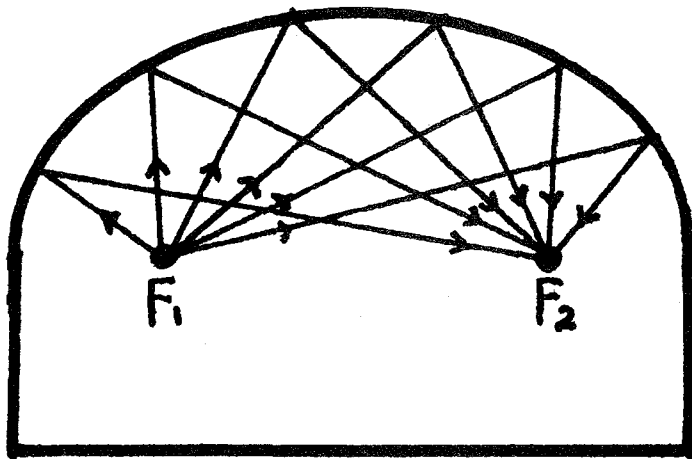


Fig. 34 Diagram of the “whispering gallery effect” as discussed by Wallace Clement Sabine



Fig. 35 Frank Lloyd Wright, *Fallingwater* (1934) Bear Run, Pennsylvania

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