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MAKING SEX SOUND
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ABSTRACT

This dissertation examines electronic and electroacoustic music written after 1950 with a focus on works composers attribute with erotic connotations. It explores the ways in which music presents eroticism, how composers envision a musically erotic subject as well as what listeners find aurally stimulating or provocative about music.

Compositions by Pierre Schaeffer, Luc Ferrari, Robert Normandeau, Annea Lockwood, Alice Shields, Barry Truax, Pauline Oliveros, Juliana Hodkinson, and Niels Rønsholdt, exhibit common musical idioms, such as the drive to climax, use of the female voice, and visual or textual imagery. But beyond these commonalities, the dissertation's framing theoretical, critical, and philosophical analyses prove each work exhibits erotic qualities particular to its social, historical, and music-compositional climate. Early works aspire toward a Husserlian essence of the erotic, paralleling the scientific objectivity of the 1950s; in the 1980s and '90s, many erotic works deemphasize male sexual pleasure to mirror second-wave feminist critiques of pornography; and, on the heels of this corrective, composers at the turn of the twenty-first century use digital processing to reorient gender and sexual markers. Reacting to electronic music's historical disregard for gender and sexual difference, this dissertation exposes the philosophical, psychological, socio-cultural, and historical relevance of eroticism in electronic and electroacoustic works.

Preface

Erotic experience will commit us to silence.[1]
- Georges Bataille

To have lost one's voice is not to keep silence:
one keeps silence only when one can speak.[2]
- Maurice Merleau-Ponty

Some musical qualities have always been erotically connotive, though it is only in the last 10-15 years, after the revolution of "new" musicology, that music disciplines have turned to studying a plurality of sexual possibilities within the musical context. In this recent turn, not only were music scholars granted greater freedom to explore topics that were once inconceivable under the musicological disciplinary umbrella, such topics as gender, sexuality, and eroticism, but these issues have even come to be common practice in many circles, as is evinced by the American Musicological Society's LGBTQ (formerly the Gay and Lesbian) Study Group, the Society for Music Theory's Queer Resource Group, and the Centers for Gender Studies at many of Europe's Universities for Music and Performing Arts. Today one can hardly imagine a text treating music that does not contextualize its subject within historical, but also social and cultural, circumstances. And yet, although eroticism and sexuality studies abound in the literature, the terms "sexuality" and "eroticism" remain somewhat vague, somehow invoked in universal terms. The words eroticism and sexuality are taken generally as interchangeable, and this exchange is usually made on the back of gender. Whether in discourses of music and eroticism[3] or in texts that

[1] Georges Bataille, *Death and Sensuality: A Study of Eroticism and the Taboo*, trans. Mary Dalwood (New York: Walker & Co., 1962), 252.
[2] Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Colin Smith (New York: Routledge, 2005), 187.
[3] See for example, Jeffrey Kallberg, *Chopin at the Boundaries: Sex, History, and Musical Genre* (Cambridge, Mass.: Harvard University Press, 1998), Stephen Downes, *The Music As Eros: Music, Erotic Fantasy and Male Creativity in the Romantic and Modern Imagination* (Surrey, U.K.: Ashgate, 2006), and Laurence Dreyfus, *Wagner and the Erotic Impulse* (Cambridge, Mass.: Harvard University Press, 2010).

explicitly treat sexuality,[4] gender, and most commonly the traditional male/female binary, remains a central premise from which "sexuality" and "eroticism" extend. Having been defined only as extensions of existing structures, the concepts "sexuality" and "eroticism" skirt the boundaries of musicology's gendered entanglements, remaining always auxiliary to music and to history at large. Though often examined as secondary factors, the circumstances that lead eroticism and sexuality to fall to the margins of musicological inquiry are of course telling of our societal understanding of what it means for something to be erotic and of our disciplinary relationship to sexuality.

Central to musical ontology is a question of what a musical work even is. Philosopher David Davies claims that our definition of a work of art is premised on a social consensus of what constitutes a work.[5] As a "pragmatic constraint" (PC), writes Davies, a musical work "has a normative dimension, in that it does not require that ontology conform to our practice per se, but to those features of our practice that we deem acceptable on reflection."[6] If, according to Davies, the context of the musical artwork determines its appropriation, then what we hear as a piece of music is surely determined through a musical consensus, however broadly understood. Theories of musical listening are therefore taught in tension between the one and the many, between individual listeners and the hearing community.

However generously we may wish to interpret Davies' explanation, the reality is that, when it comes to music, among the other arts, dance, and theater, and the plastic arts, it is the least open to a discussion of sexuality. As a result, when sexuality is not explicitly identified as a musical theme, either in text, lyrics, or through a composer's admission, the topic is usually consigned to the sidelines, as marginal to the normative properties understood to constitute a musical work, even if multiple listeners acknowledge sex as a work's apparent theme thus yielding potentially to communal consensus. Avoidance of sexual topics is built into the Western notion of what it means for something to be erotic. According to George Bataille, "erotic experience will commit us to silence," one of the

[4] Representative examples are, Susan McClary's *Feminine Endings: Music, Gender, and Sexuality* (1991; Minneapolis: University of Minnesota Press, 2002); Philip Brett, Elizabeth Wood, and Gary C. Thomas, eds., *Queering the Pitch: The New Gay and Lesbian Musicology* (New York: Routledge, 1994).

[5] David Davies, *Art as Performance* (Chichester, West Sussex, U.K.: Wiley-Blackwell, 2004), 18.

[6] David Davies, "The Primacy of Practice in the Ontology of Art," *The Journal of Aesthetics and Art Criticism* 62/2 (2009): 162.

quality's many pragmatic constraints.[7] Under the weight of Judeo-Christian morality, Western thought levied sexual acts with transgression, a heavy burden from which music theory, music ontology, and even more progressive musicological investigations are not exempt. In determining what Joseph Kerman once deemed "the coherence of individual pieces of music," music analysts may attempt to relegate all deviations from the norm to the periphery, thereby reducing music to its supposed fundamental constituting elements while also collapsing listeners into unmarked idealities.[8] The rift between specialist and non-specialist is marked especially in the context of eroticism, where academic investigations of (serious) Western art music have long pushed questions of sexually enticing sounds out of sight and out of mind. This is not the case in studies of popular music, where it features as a central topic. Is popular music more erotically inducing? No, but eroticism is certainly deemed more appropriate for discussion in that context, be that on account of the tradition's base reputation (if we read Adorno) or on account of the greater flexibility of its practitioners, of those who study and perform popular music.[9]

What is so transgressive about eroticism? And how can we theorists remedy the systematic marginalization/universalization of erotic music? In focusing on electroacoustic music, with no accompanying visual representations and limited instances of textual intimation, the analyses in the following chapters situate eroticism centrally by focusing first and foremost only on works deemed erotic by their composers. While eroticism may be heard in music that a composer has not deemed with such qualities, I have chosen this demographic of works so to ask two mutually dependent questions: first, which compositional qualities do composers of electroacoustic music recognize as sexually alluring? And second, which of these qualities do composers expect their listeners to hear as sexually alluring? Answers to these questions will provide an avenue towards understanding my title "Making Sex Sound." In this title "sound" can be taken literally, as in sounding out allusions to or representations of sexual acts, but untangling the title's figurative meaning, to be of "sound moral values," "of substantial or enduring character,"

[7] Bataille, *Death and Sensuality*, 259.
[8] Joseph Kerman, "How We Got into Analysis, and How to Get out," *Critical Inquiry* 7/2 (1980): 322.
[9] Richard Middleton, "'It's all over now.' Popular music and mass culture – Adorno's theory," in *Studying Popular Music*, 34-63 (Philadelphia: Open University Press, 1990).

"competent…or valid," if we include some dictionary definitions of sound, will take a little more effort.

In order to investigate the intricacies of erotic sound I will require a preliminary definition of "eroticism."

1. What Is Eroticism, Anyway?

Toward a definition of eroticism, I turn to Georges Bataille. In a momentous volume on the "study of eroticism and the taboo," *L'Erotisme* (1957), translated *Death and Sensuality* and later published under the title, *Eroticism: Death and Sensuality*, Bataille figures eroticism as inseparable from human experience. Whereas sexuality is conceived historically as a biological impulse or sexual drive (though this definition is met with increasing resistance), eroticism is characterized by internal desire. Despite being, on the one hand, an individual and very personal desire, Bataille accedes that eroticism's inherent intimacy is universal among humanity.[10] While morality is not constituted alike among all of humanity, morals are instituted and inscribed by way of a consensus among willing participants, there are pockets of morality that overlap globally in interesting ways. Whereas eroticism is a feeling aroused, sexuality is an expression. The generalizable aspect of sexuality led Freud to his constitution of "taboo" as a prioritization of man distinctly from animal—sexual expression among humans comes with repercussions. But Bataille does not privilege human sexuality, rather he locates the erotic at the boundary between man and animal, "Eroticism is the sexual activity of man to the extent that it differs from the sexual activity of animals," where neither man nor animal is better equipped or better fulfilled.[11] Although humans, like animals, are not inherently shy of sexual conduct, eroticism emerged with man's epistemological understanding of himself, "with man's slow shaking-off of his original animal nature…by moving imperceptibly from unashamed sexuality to sexuality with shame."[12] And because eroticism rests at the core of epistemic thinking, an inclination toward erotic allure requires considerably more effort to prohibit than to admit. However,

[10] Sigmund Freud, *Totem and Taboo: Some Points of Agreement between the Mental Lives of Savages and Neurotics*, trans. James Strachey (London: Routledge, 2001).
[11] Bataille, *Death and* Sensuality, 29.
[12] Ibid, 31.

given the rational imposition of logic, eroticism, as a mere feeling, is more easily cast aside.[13]

Bataille and Freud pronounce eroticism as a taboo resulting from the same primal fear common to both religion and sex.[14] Eroticism's branding as transgression arises in estimation of the boundary between indiscretion and appropriate human behavior. For Freud, the fear of sex is not rational; it is prior to rationality. Sexual taboo surfaces prior to religion and morality through "prohibitions of primeval antiquity…at some time externally imposed upon a generation of primitive men"—the source of this imposition remaining speculatively open, but in this restricted as a stilted and atemporal point of contempt.[15] Eroticism's taboo is a totem, a fixed symbol passed unmarred from one generation to the next, always unwieldy and immanently abstract. While Freud relegates erotic impulses to taboo's unknown origins, it is precisely in these beginnings that Bataille dwells.[16]

"The word 'eroticism' is ambiguously suggestive," writes Bataille, it is "a matter difficult to discuss."[17] Modern philosophy's exaltation of the subject therefore prevents the discipline from reaching the limits of subjectivity taut at the boundary of public and private. Tracing eroticism to the sacred, where even to talk of eroticism is transgressive, Bataille elevates eroticism to "something beyond our present set of experiences," to a mythology "defined by secrecy," but not confined necessarily to subjectivity, the erotic experience being subjective but the taboo against sharing such experience as collective.[18] Though man's "erotic urges terrify him," the taboo against eroticism does not descend from an unknown external force: the fear of eroticism begins and ends with humanity, whose terrifying and debilitating taboos establish and maintain the power structures of human sexuality.[19] In order to broach the silence surrounding eroticism we must find a manner of

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[13] Andreas Dorschel, "Gefühl als Argument," in *Transzendentalpragmatik. Ein Symposium für Karl-Otto Apel*, eds. Andreas Dorschel, Matthias Kettner, Wolfgang Kuhlmann & Marcel Niquet, 167-86 (Berlin: Suhrkamp, 1993).

[14] Bataille, *Death and* Sensuality, 222ff.

[15] Freud, *Totem and Taboo*, 36.

[16] Ibid, 22; Bataille, *Eroticism*, 71. Bataille questions Freud's conclusions "because of his superficial knowledge of ethnographical data, nowadays much less vague." Bataille, *Eroticism*, 47.

[17] Bataille, *Death and* Sensuality, 252.

[18] Ibid.

[19] Bataille, *Death and* Sensuality, 7. This point is reprised also by Foucault, in an estimation of power and "the logic of censorship," "One must not talk about what is forbidden until it is annulled in reality; what is inexistent has no right to show itself, even in the order of speech where its inexistence is declared; and that which one must keep silent about is banished from reality as the thing that is tabooed above all else." Michel Foucault, *The History of Sexuality*, trans. Robert Hurley (New York:

moving from silent contemplation toward the language of eroticism, a way of bridging individual experience with a collective intentionality of the erotic.

2. Making Sex Sound

This dissertation investigates erotic currents in music with electronic components—a relatively recent musical phenomenon. I invoke sound in the title of this dissertation in all of its various meanings, in the sense of *sounding out* but also in the sense of being appropriate or of *sound condition*. As a concept, "eroticism" is hardly strictly defined; its multivalence is largely contextual, requiring weighty consideration of how, when, and where sexuality is expressed. In electroacoustic music, where generally no physical performer is present, erotic sensations, whether emotional, affective, or physical felt, are connoted through a relationship between composer and listener, and this collaboration is informed by the experiential history of each of these individuals. Who then makes music erotic, the composer or the listener? If we agree with Bataille, the answer is neither…and both.

Weaving together snippets of electronic music from the mid-twentieth century onward—where I understand electronic music as shorthand for music containing *any* electronic components—this dissertation reconstructs an epistemology of listening through the purview of erotic sound. With attention to music's increasing cultural agency, I explore how eroticism, gender, sound production, science, and technology—areas conceived until recently as disparate fields of study—became in the twentieth century informative of one another and intertwined as causation for erotic *phonopoiesis*, for making music sound erotically. When combined, the terms *phono* (voice or sound) and *poiesis* (to make) trouble current debates on the construal of musical meaning, and when coupled with erotic nuance, such negotiations broaden music-aesthetical inquiry beyond the perspective of a single skilled listener. Though the project inevitably construes a history of listeners and listening practices, history is not the heart of the matter, since the historicist's process of making certain voices present often reinforces the sustained absence of others.[20]

Pantheon Books, 1978), 84.

[20] Carl Dahlhaus, *Foundations of Music History*, trans. J. B. Robinson (Cambridge, UK: Cambridge

At the cornerstone of our disciplinary introduction to *Musicology and Difference*, Ruth Solie confronted the difficulty of bridging the individual with collective opinion. Pointing to Martha Minow's definition of "essentialism" as a manner of *assuming* "any trait in common for a group of people,"[21] Solie explains,

> On the one hand we confront the familiar danger of labeling some person or group as outside or inferior, or Other; but on the other hand we take the risk of demanding similarity or adherence to a norm whose valuation may be tacit… a certain amount of power accrues to whoever is in the position to decide what is 'same' and what is 'different'.[22]

Biography can be an important factor of aesthetic and art-historical considerations, such that investigating topics such as electronic music or controversial topics such as eroticism, both of which are relatively marginal to musicological inquiry, we are confronted with a familiar contradiction of whether or not to include canonical (i.e. established and, hence, trustworthy) composers over other, lesser-known contributors. Though the absent lineage of women composers results partly from a historical male bias, we may wish to include works by women composers in this debate of how eroticism is made diversely to sound. And yet, as proposed by Pirkko Moisala, the indiscernibility of a female canon in music history is as attributable to misogynist exclusion as it is to women composers themselves, who have collectively aspired toward gender "neutral" representation, so as to prevent being branded first and foremost as women and only then as composers.[23] Given women's historic characterization as sensual and bodily beings, defined in contrast to the rational male authority, women may be reluctant to feature in a discussion of carnal pleasure, which could be foreseen as debasely adolescent in comparison to more "serious" or "absolute" music. This is one reason Adriana Cavarero's philosophical investigation of the voice

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University Press, 1983).

[21] Martha Minow, *Making All the Difference: Inclusion, Exclusion, and American Law* (Ithaca, N.Y.: Cornell University, 1990), 3, quoted in Ruth Solie, "Introduction," in *Musicology and Difference: Music, Gender, and Sexuality in Music Scholarship* (Berkeley: University of California Press, 1993), 16.

[22] Solie, "Introduction," in *Musicology and Difference*, 2-3.

[23] Pirkko Moisala, "Gender Negotiation of the composer Kaija Saariaho in Finland: The woman composer as nomadic subject," in *Music and Gender*, eds. Moisala, Pirkko and Beverley Diamond (Urbana, IL: University of Illinois Press, 2000).

recognizes the priority of speech: "It is not by chance that the tradition of thought that runs from Aristotle to Habermas, while it insists on the political valence of language, obstinately leaves the vocalic out of consideration."[24] It is also no coincidence that the voice—and, as we will see, especially the female voice—plays such a central role in erotic electronic music. Beyond gender partiality, similar struggles abound when integrating sexual orientation into historical recollections through personal biography. Echoing Sherrie Tucker, I ask, what do we do "When Subjects Don't Come Out"?[25] Is the personal biography of a composer or listener indicative of erotic inclinations, and if not, is it the music "itself" that is indicative of eroticism?

Challenging David Davies's contextual argument of music's ontology, that a musical work acquires status through consensus and hence special(ist) attention, Julian Dodd proposes the Platonic argument that untrained listeners distinguish between musical works equally as well as specialists, and that the determination of a musical work—that it is indeed "a work"—is therefore heard intuitively, deduced prior to gaining any information on the circumstances in which the work was composed.[26] Dodd's position is an attractive avenue from which to pursue an investigation of erotic sound, since the notion that music is somehow felt intuitively dispels any hierarchical conflation of the primacy of certain listeners, dissolving herein also the gap between listener and composer. However, the assumption that all listeners are equipped with the same physical capacity for hearing, what Dodd terms, a "moderate musical empiricism" is contingent upon yet another absence. The autonomy of sound reinforces the myth that, even prior to aesthetic determinations, the physical capacity to hear is neutral from birth, which of course, given the recent influx of disabilities studies in musical inquiry, is not the case.[27] Philosophers investigating musical ontology, both "sonicists" such as Dodd and "contextualists" like David Davies, avoid this sticky ground by treading lightly around the idea of "appropriate" listeners.[28] Suddenly, those listeners who do not hear in the manner advocated by either, those whose physical

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[24] Adriana Cavarero, *For More than One Voice: Toward a Philosophy of Vocal Expression*, trans. Paul A. Kottman (Stanford: Stanford University Press, 2005), 208.
[25] Sherrie Tucker, "When Subjects Don't Come Out," in *Queer Episodes*, eds. Fuller and Whitesell, 293-310.
[26] Julian Dodd, *Works of Music* (Ithaca, N.Y.: Cornell University, 2007), 205.
[27] For a short introduction to music and disability see, Blake Howe, "Music & Disability Studies: An Introduction," *Musicology Now*, 9 February, 2014. Accessed 21 April, 2014. http://musicologynow.ams-net.org/2014/02/music-disability-studies-introduction.html.
[28] Davies, "The Primacy of Practice in the Ontology of Art," 169.

biology deviates from the norm, become once again marginalized as "inappropriate/d others," to borrow a phrase from Donna Haraway.[29] So, taking into account differing physical characteristics (hearing status at birth and subsequent environmental factors, i.e. nutrition, training, and social conditioning), variances among hearing individuals remain an important factor of musical listening, even prior to the sonicist's intuition. How then do we speak of listeners or composers collectively without rendering individuals as abstract entities?

Outside of music, Sara Ahmed's "Orientations" introduces some new ways of exploring experiential deviation at moments when philosophy shifts focus between the one and the many.[30] Orientations are about directions, about which way an individual is facing. Like a path, one orientation points us toward the future, but we can always look back to see from whence we came. A traveled path extends before us with new possibilities, but rarely are we the first to tread upon it. "A path well trodden" emerges after many have passed over it; this is the straight path.[31] But looking toward the future we are able to forge newly deviating paths, replacing conventional routes with queer deviations grooved by the footsteps of those who have wandered astray. With queering ease, the straight path can be repeatedly, yet variously, abandoned.

Following Ahmed's example, phenomenological methods guide my inquiry of erotic *phonopoiesis*, where a slippery slope of independent divergences often leads many paths to converge, yielding to something of a disorienting effect. Depending on the inquirer's particular orientation, the music in this book might, at first, seem heavily distorted. Music does not appear to us all at once; its temporal reliance coerces listeners to pursue it necessarily from an angle, and even then, given localizing variances, this angle will still remain unfixed. Like Andrea Pozzo's anamorphic fresco painting on the ceiling of the Church of Saint Ignazio in Rome: the clearest image only appears when approached from a particular angle. Theorizing the possibilities of his novel electronic sound world, Pierre

[29] "The phrase, 'inappropriate/d others', is borrowed from the Vietnamese film-maker and feminist theorist, Trinh T. Minh-ha. She used the term to suggest the historical positioning of those who refuse to adopt the mask of either 'self' or 'other' offered by dominant narratives of identity and politics." Donna Haraway, *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), 2-3.

[30] Sara Ahmed, *Queer Phenomenology: Orientations, Objects, Others* (Durham, N.C.: Duke University Press, 2006); Ahmed, "Orientations: Toward a Queer Phenomenology," *GLQ: A Journal of Lesbian and Gay Studies* 12/4 (2006): 543-574.

[31] Ahmed, "Orientation," 554.

Schaeffer suggested that acousmatic music occupied a space beyond intelligence or resemblance, outside any accumulation of referential associations. As such, situated in a realm between physiological hearing and the psychological aspects of listening, the acousmatic is necessarily the cause for some friction, and I provoke this point further in my first chapter.[32] Likewise, when approached from the conventional path of how music *should* sound in the contextual hearing, the sexually explicit content of the works collected here may sound muddled and disorienting to listeners. Eroticism is as much an *expression* of sexuality in music, as it is a device through which to hear music. When gauged through an erotic lens the works explored here both complicate and illuminate the central questions of cotemporaneous philosophy, particularly as these questions concern an ontology of music-making. By changing the listener's vantage point, and thus challenging the norms of musical hearing, this dissertation reorients erotic sound from its prior (ap)perception as a perverse distortion of music, showing instead that, when approached from another, perhaps even queer angle, eroticism can brilliantly transform music by opening up new listening possibilities both within and outwith a given area of specialization.

[32] Michel Chion, *Guide des Objets Sonores: Pierre Schaeffer et la recherche musicale*, trans. John Dack and Christine North (Paris: Editions Buchet/Chastel, 1983), 18.

Introduction

The last 60 years of innovation in music are marked especially by the possibilities granted by technology. Since the advent of sound recording, the technology of reproduction has fuelled some of the most pressing and prescient discussions in recent music history. Already in 1934, Adorno described "The Form of the Phonograph Record" as the object that resembles nothing, least of all the sound of that which it reproduces.[33] Fifty years later, the replication of "real" sound caused an even greater severance of source from effect in what Michel Chion recognized as the "double meaning" of recorded sound, its referential potential continuously marred by contextual significance.[34] Composers have tools that *could* change a sound to such an extent that it would no longer be associated with its originating source or cause, and yet, composers—and particularly composers of erotic music—often do maintain "transcontextual" connections.[35] This discrepancy between sound, as effect, and its given or perceived source and cause has created a rippling divide across compositional philosophies. One problem stemming from this divide being that, although a composer may intend either to retain or to sever the connection between cause and effect, an electronically-produced sound's identity can be neither fully disclosed nor forever and completely veiled.

Composers of electronic music—understood today as shorthand for any music that incorporates electronic elements—have long tempted the limits of reproduction. Equally to the technology-to-music direction of fit, to take philosopher John Searle's metaphor, is also a music-to-technology reciprocity, where many inventions made in service of music radiate outward to inspire and provoke new technological but also cultural, social, psychological, philosophical and ideological developments. Indeed, technology has contributed to a surge of investigations into and definitions and reformulations of what exactly is meant by repetition, of how, why, and where repetition occurs and functions. Automated repetition of a single sample, i.e. looping, brings mechanical reproduction from exact replication to an

[33] Theodor W. Adorno, "The Form of the Phonograph Record," trans. Thomas Y. Levin, *October* 55 (1990): 56-61.

[34] Michel Chion, *Guide To Sound Objects. Pierre Schaeffer and Musical Research* , trans. John Dack and Christine North (London: 2009), 39, last accessed 16 April, 2015 http://monoskop.org/images/0/01/Chion_Michel_Guide_To_Sound_Objects_Pierre_Schaeffer_and_Musical_Research.pdf.

[35] Denis Smalley, "Defining Transformations," *Interface* 22 (1993): 285.

incessant reiteration that gradually alters the originating sound. Repetition forces sound to loose its connection with source and cause, and opens sound up to listener inference. Repetition of this sort triggers and troubles its reciprocal correlate—difference, and this belabored relationship surfaces as often in philosophy, psychoanalysis, and critical theory as it does in musicology and music theory.

"8 Songs that Parallel the Rhythmic Path to Orgasm" is a blog that exemplifies how the pulsating *telos* of repetition became a common cliché of contemporary listening practices.[36] Blogger Waylon Lewis assembles a list of musically unrelated clips, ranging from Aram Khachaturian's *Sabre Dance* to "The Battle" from the soundtrack to the film *Gladiator*—works that in and of themselves are hardly explicitly erotic—to provide an explanation of what he thinks they have in common:

> They start gently, methodically, but steadily, sweetly…they wander to and fro, but build all the while…they gather heat and form and storm and retreat and regather and build until! And then! And… yet… yes… and until. And until they finally crescendo, and collapse, and relax.[37]

Lewis's examples were not composed with the intention to parallel a broadly conceived path to sexual climax, but nevertheless, in our current time and our contemporary hearing, a consensus of what is erotic in music seemingly abounds.

Thirty years ago musicologist Susan McClary extrapolated a theory on the orgasmic teleology in a particularly conspicuous analysis of the first movement of Beethoven's Ninth Symphony. McClary found the closing of the movement exemplary of the characteristic phallic intentionality that typifies not only Western music but which also encapsulates some broadly expressed mechanisms of Western society. Illuminating the pervasiveness of the climax mechanism, McClary coyly refers to the orgasmic teleology as the erected

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[36] Waylon Lewis, "Beautiful Agony: 8 Songs that Parallel the Rhythmic Path to Orgasm." *Elephant,* last accessed 19 September, 2013, http://www.elephantjournal.com/2013/04/beautiful-agony-8-songs-that-parallel-the-rhythmic-path-to-orgasm/

[37] The works Lewis mentions are, Karl Jenkins, Allegretto from *Palladio*; Carl Orff, "O Fortuna" from *Carmina Burana*; Richard Wagner's "Flight of the Valkyries" (the orchestral prelude from *Die Walküre*, the second opera in the monumental *Der Ring des Nibelungen*); Aram Khachaturian, "The Sabre Dance" from the ballet *Gayane*; Hans Zimmer and Lisa Gerrard, "The Battle" from the film *The Gladiator*; Georges Bizet, "Habanera" from *Carmen*; Diana Ross, "Love Hangover"; and DJ Paul Van Dyk, "Sensation White 2004."

"beanstalk" of musical signification supplanted with oedipal symbolism. Derivative of the male orgasm and a teleological expression of a masculine aggression, McClary's symbolic beanstalk "marks the heroic climax of many a tonal composition" simultaneously on account of how music is composed and how music is heard.[38] She summarizes this prevalence as follows:

> There is, to be sure, much more to classical music than the simulation of sexual desire and fulfillment. Still, once one learns how to recognize the beanstalk, one begins to realize how pervasive it is, how regularly it serves as a hook for getting listeners libidinally invested in the narratives of compositions. And when it turns violent (as it does more often and more devastatingly in nineteenth-century symphonies than in heavy metal), it becomes a model of cultural authority that cannot be exempted from social criticism.[39]

McClary's perseverance proved crucial in shaping the field of musicology. There is no question of her instrumentality in instigating a necessary feminist intervention into musicology as a discipline. However, her beanstalk seems to perpetuate three problematic generalities regarding sexuality in music: 1) that an ever-present erotic signification exists in music, 2) that erotic signification in music is necessarily metaphorical, and 3) that gender is the primary motivation for sexual difference, i.e. that universalizing differences exist between the sexual experiences of men and women. Music sociologist Tia DeNora reacts to this final point, writing, "To claim for example, that Beethoven's music is 'masculine' because it is 'powerful' (i.e. loud, emphatic *tutti* finales) not only skips a logical step, it simultaneously grounds itself on unwarranted assumptions about the 'nature' of the feminine."[40] McClary's missed step is an indication of a long-standing critical conflation of gender with sexuality, confusion that arises equally at the hand of the patriarchal conservatism as it does from opposing separatist feminists.[41] Although the second-wave

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[38] Susan McClary, *Feminine Endings: Music, Gender, and Sexuality* (1991; Minneapolis: University of Minnesota Press, 2002), 112.
[39] Ibid, 130.
[40] Tia DeNora, "Music and Erotic Agency," *Body and Society* 3/2 (1997): 55.
[41] McClary subscribes to the feminist separatist agenda, precluding that the "simulation of sexual desire and fulfillment," which she finds pervasive in Western music, is evocative only of a violent and sexual

feminism of the 1980s and '90s thoroughly ruined the conventional representation of the phallogocentric male lineage, this dissolution, as we will see in Chapters 2 and 3, came also with the affirmation of an opposing but equally biased alternative.

The conflation of sex with gender presupposes essential biological differences between male and female attitudes. To extend these attitudes to an assessment of sexual behaviors is not merely solipsistic, but also reinforcing of a larger social stigma against sex, a stigma that brands sexual expression—especially certain kinds of expressions—as marginal and relentlessly transgressive. As cultural anthropologist Gayle Rubin explains, "Although sex and gender are related, they are not the same thing, and they form the basis of two distinct arenas of social practice."[42] Though lesbians must overcome the hurdles of women's oppression, these women also face "the same social penalties as have gay men, sadomasochists, transvestites, and prostitutes," thereby situating sexuality in a separate category from gender.[43] Where sexuality has been defined in distinction from gender, so too must eroticism, as an affective and emotional expression of human experience, be investigated through plurality, reexamined through categories that are not always-already delimited by gender.

In the introduction to the collection *Musicology and Difference*, editor Ruth Solie praises the plethora of existing individual identities, yet is careful to also caution against the essentialism that threatens to delimit individuals according to singular identity categories. Moving to correct the insistence on difference, she writes, "Essential difference…fails to take into account the ways in which identity categories inflect one another."[44] Though the music explored in this dissertation no doubt elicits many expressive variances among listeners, we can also find in this repertoire some experiential coincidences. This overlap, however, is not easily understood under the same logical deductions yielding to the "beanstalk" teleology. As frequently as the climax mechanism is heard and composed into music, works employing this device to elicit erotic expression differ dramatically. The drive

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aggression that is inherent to the *male* orgasm. McClary, *Feminine Endings*, 126ff. On the feminist separatist agenda see, Jill Johnston, *Lesbian Nation: The Feminist Solution* (New York: Simon and Schuster, 1973).

[42] Gayle Rubin, "Thinking Sex: Notes for a Radical Theory of the Politics of Sexuality," in *Deviations: A Gayle Rubin Reader* (Durham, N.C.: Duke University Press, 2011), 170.

[43] Ibid.

[44] Ruth Solie, "Introduction," in *Musicology and Difference: Music, Gender, and Sexuality in Music Scholarship* (Berkeley: University of California Press, 1993), 17.

to climax, as a common and simplistic representation of erotic impulses, fails to account for the variable minutiae of emotional expressivity. Several (if not all) of the works explored in this dissertation could be distilled through analysis into a formal representation of the rhythmic path to orgasm, and yet, beyond this feature, the musical works are characterized by wide variety, whether "sonic" (within the music "itself") or "contextual" (arising from the circumstances extrinsic to the formal constraints of the composition). In fact, already over seventy years ago Georges Bataille launched a critique against investigations, such as the experiments conducted by sexologist Alfred Kinsey, that delimit erotic expression only to orgasmic release.[45] Put simply, this project begins from the premise that erotic expression in music resounds similarly in the ears of most if not all listeners, and yet this expressive content is not necessarily experienced in the same manner across all listeners. How one differentiates between the erotic expressions of each work is not only a question of individual psychology, but also an issue of philosophy. Distinguishing between music's erotic qualities requires an investigation of the ways in which music presents sexuality, of how the composer envisions the subject musically as well as how listeners understand and react to music.

1. Erotic Representation

The majority of musicological queries into eroticism premise their investigations on the assumption that music is, first, a representation of real, lived experience, and second, that eroticism is only evoked in music through imitation. In his chapter on "Erotic Representation" in music, musicologist Derek Scott asks three questions to get at "how gender difference is constructed in music":

1. How does a composer represent sexuality?
2. How does a performer convey sexuality?

[45] Georges Bataille, "Kinsey, the Underworld and Work," in *Death and Sensuality: A Study of Eroticism and the Taboo*, trans. Mary Dalwood (New York: Walker & Co., 1962), 160. For an illuminating exploration of Bataille's resistance to Kinseyan methods, see also, James Mark Shields, "Eros and Transgression in an Age of Immanence: George Bataille's (Religious) Critique of Kinsey" *Journal of Religion & Culture* 13 (2000): 175-186.

3. How does a listener interpret sexuality?[46]

Scott's crucial use of the word "represent" presumes that erotic inference, what he sometimes terms "sexuality," exists in somewhere outside of "the music" proper, being therefore only *re*-presented in the music. This much resonates with feminist philosopher Alice Jardine's definition of representation, which states, "Representation is the condition that confirms the possibility of an imitation (mimesis) based on the dichotomy of presence and absence and, more generally, on the dichotomies of dialectical thinking (negativity)."[47] She further extrapolates that, "The process of representation, the sorting out of identity and difference is the process of analysis: naming, controlling, remembering, understanding."[48] Scott's three questions assume not only that eroticism is imitable, meaning identifiable and thus replicable, but, since music seems "itself" incapable of eliciting its own sexual criteria, erotic music is therefore limited *only* to imitation. His questions therefore imply that sexuality is secondary to music, as if intentions were at the heart of the matter and eroticism were necessarily absent from music unmarred by any one person's erotic intentions.

Given Jardine's definition of "representation," I would argue that listeners likely *do not* experience music *merely* as representation, because sexual stimulation would be difficult if not utterly impossible to identify or qualify under such definitive terms. In fact, the main philosophical problem, as I see it, of studying eroticism through the eyes of a theory that music expresses emotion is to assume that eroticism, or really any feeling, is readily identified by finite and universal traits. Eroticism is not identifiable in discrete terms and, for this reason, is not adequately "represented." Eroticism arouses complex physical sensations and emotions that arise as an affective response to certain sensed qualities, and although listeners may agree that some music sounds erotic, what makes eroticism sound is neither uniquely individual nor entirely universal. That listeners *may* hear music differently, even from the composers whose music they are responding to, does not account for the many moments when expression is similarly experienced by both a composer *and* her various listeners. Such consensus confirms some expressive qualities of music as

[46] Derek Scott, *From the Erotic to the Demonic: On Critical Musicology* (New York: Oxford University Press, 2003), 19.
[47] Alice A. Jardine, *Gynesis: Configurations of Woman and Modernity* (Ithaca, N.Y.: Cornell University Press, 1985), 119.
[48] Ibid, 118.

recognizable and describable, but these are not necessarily discrete emotions that can be "named by an emotion word" such as sad or calm.[49] If eroticism arises through a consensus of multiple listeners, what then qualifies some works as erotic and not others?

Without regard to medium, it would difficult to consign all erotic artworks to a single category. If we recognize erotic artworks on the basis of subject matter, take for example a painting of a nude body,[50] then such content separates the painted medium from the musical one. One cannot know from sound alone whether or not the performer is clothed—that there is even a body is up for some debate. In short, whereas symbols may be shared among the arts, the form and content of representing those symbols in music differs from that of the other arts.

In music absent text, identity and representation—both functions of association—are complex matters. Associations may abound, but how can we determine if listeners share the same associations? In terms of associations, the source of sound would likely matter less in music organized by certain rules or systems that functions independently from instrumentation. In this case, we would be forced to consult either the work's creator, to find out the intentions behind the work, or the spectator to confirm their response. Here we arrive again at categorization, this time within music as a medium. We may accordingly wish to divide up tonal works that rely upon the same syntax, from non-tonal works that may rely on a system devised specifically for each work. Instrumental works absent text are considered by most to be abstract or at most ambiguously referential[51] and should on this account be distinguished from electronic works, which may employ concrete samples of sounds recorded from the real world. Whereas instrumental works merely allude to the subject, a concrete work uses actual utterances (bird calls, or sirens) in order to present the subject it depicts. And yet, this is not entirely true across the board with electronic works. We can further divide electronic compositions into works that use sampled sound and works with sounds synthesized by either analogue or digital generators. But even between these two categories, there are many crossovers. Erotic musical works therefore do not easily categorize into a single genre. The method of composition seems to affect the

[49] This opinion is summarized in the "hearing-as" theory of expression in music, advanced primarily by Alan Tormey, *The Concept of Expression: A Study in Philosophical Psychology and Aesthetics* (Princeton: Princeton University Press, 1971).
[50] Roger Scruton, *Beauty: A Very Short Introduction* (Oxford: Oxford University Press, 2011), 125.
[51] Roger Scruton, "Representation in Music," *Philosophy* 51/197 (1976): 273-287.

relevance and significance of certain symbols within the music as well as the music's connection to external associations. Each chapter of this dissertation places in focus a particular compositional attitude, beginning with the phonograph samples used in *musique concrète*, and progressing more or less chronologically through analogue tape realizations, the Musical Instrument Digital Interface (MIDI), digital granular synthesis, and digital audio workstations (DAWs). Such points of focus provide each work its own conceptual framework, but taken together these works shed light on the broader category of the erotic in electronic music.

2. The Prevalence of the Erotic Soundscape

In 1948 Japan, Toru Takemitsu had the idea of using electronic technology to create music, and within a couple of years he helped found the *Jikken Kōbō* (experimental workshop). Among the electronic compositions created at the workshop were a few erotic works, such as Kuniharu Akiyama's "Imprisoned Woman" and Takemitsu's own "Ai" ("Love"), both from 1951.[52] Takemitsu viewed it as a happy coincidence that Pierre Schaeffer had come up with the idea of *musique concrète* in France also in 1948.[53] Schaeffer's collaboration with Pierre Henry on *Symphonie pour un homme seul* (1950-1) may very well have been the first, and was certainly one of the earliest, erotic electroacoustic musical compositions. Foreshadowing the sexual liberation movement by almost two decades, this piece, which I explore in detail in Chapter 1, signals the abating constraints around erotic artworks. The topic of sexual expression would become an artistic convention in the 1960s and 1970s in the feminist artworks of Judy Chicago and in Charlotte Moorman's collaborations with Nam June Paik during those years. In the United States, this was of course the time of the hippy counterculture movement, which prided itself on a campaign of "free love" to combat military efforts in Vietnam.[54] Insisting on sexual action as the drive of counterculture in the 1960s and 70s, in many cases the movement appeared to coerce women into acceding to sexual acts, at risk of counter-revolutionary accusations. Women were often thrust into

[52] For a list of electronic and electroacoustic compositions with erotic elements, see Appendix A.
[53] Koichi Fujii, "Chronology of early electroacoustic music in Japan: What types of source materials are available?" *Organised Sound* 9/1 (2004): 66.
[54] Gregory Carleton, *Sexual Revolution in Bolshevik Russia* (Pittsburg: University of Pittsburg Press, 2005).

sexually liberatory efforts as iconic representations of what such expressions were supposed to look like. Although an asexual attitude may very well have represented an expression of sexuality, women were rather expected to take the opposite stance, to allow—indeed to welcome—sexual advances. Outside the US, lewd content plastered the pages of *OZ*, a notable publication of the counterculture movement in Australia, and later in the UK, garnering a string of lawsuits for the magazine under the heading of "obscenity trials" in 1964 (Sydney) and 1971 (London).[55] One finds a response to the tension between liberation and objectification in songs like Donna Summer's "Love to Love You Baby" (1975), in which the singer performs her insatiable sexual pleasure, and "She Works Hard for the Money" (1983), detailing the trials and tribulations of a hardworking streetwalker.[56] In short, the colorful history of erotic electronic music parallels a general cultural thrust toward sexual liberation in the twentieth century.

Although there has not as of yet been an investigation dedicated solely to the study of erotic electronic musical works, the prevalence of electronic musical works with erotic elements deems the subject worthy of study within the history of electronic works. Moreover, as eroticism pertains to sexual subject matter, such an investigation promises to contribute new insight into the ongoing debate on the distinction between erotic artworks and pornography. Inclusion of electronic musical works among erotic art necessarily changes the tone of the argument on the moral integrity, use case, and subject matter of the represented content, to consider whether pornography is even necessarily visual. A brief summary of the comparison of erotic art with pornography will allow me to further explain why erotic musical works are deserving of their own separate investigation within this debate.

As described by Bernard Williams in a report to the Committee on Obscenity and Film Censorship in the 1970s, pornography features the explicit depiction sexual material,

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[55] Geoffrey Robertson, "The Trials of *OZ*," *The Justice Game* (London: Vintage, 1999), 21-48.

[56] Robert Fink, "Do It ('til You're Satisfied): Repetitive Musics and Recombinant Desires," in *Repeating Ourselves: American Minimal Music as Cultural Practice* (Berkeley: University of California Press, 2005), 25-61; Alice Echols, "Ladies' Night: Women and Disco," in *Hot Stuff: Disco and the Remaking of American Culture* (New York: W. W. Norton & Company, 2010), 71-120. Danielle Sofer, "'Love to Love You Baby': Donna Summer and the Ambiguous Labor of Disco Queens," paper delivered at the 2013 Feminist Theory and Music conference, "FTM 20-21: New Voices in the New Millennium," 31 July - 4 August, 2013, Hamilton College, Clinton, New York.

i.e. "organs, postures, activity, etc."[57] Any argument, however, that pornography concerns explicit depictions of sexual acts while erotic artworks convey only sensations either by allusion or association, depends very much on what one considers sexually explicit representational content. Arguably the plastic arts, film, and narrative prose all allow for express representation, but music does not. The distinction between content and medium then requires one first to ask what the characterizing elements of each artistic medium are to then extrapolate on the specific manner of representing content in each. Yet one can find exceptions to even the most fundamental distinction between the visual and sonic arts when it comes to the issue of representation.

On the subject of representation, philosopher Susanne Langer argues that it is easy to attain organic unity (*Gestalt*) in artworks that represent the human form (visibly). She writes in *Philosophy in a New Key*: "even when we would experiment with pure forms we are apt to find ourselves interpreting the results as human figures, faces, flowers, or familiar intimate things."[58] However, unlike the visual arts, whose forms—line, color, and shape—correspond historically to the object they depict, music's forms—pitch, rhythm, contour and timbre are not generally representative of some other object of reality. Music, argues Langer, is not directly representational, though specific artworks may elicit the conception of a symbolized subject.[59] For the most part, Langer does not attribute art with expressive or arousing properties, as summarized by Stephen Davies, "she emphasizes the idea that music symbolizes not occurrences of feeling but the concept of them."[60] It is perhaps for this reason she raises the possibility, "that erotic emotions are most readily formulated in musical terms."[61] That she identifies "erotic emotions" with the forms brought about in musical terms shows not only that Langer imbues music with properties that distinguish it from the other arts, but the isolation of this "emotion," as opposed to others, points also to eroticism's uniqueness. The term emotion here requires some qualification, since for Langer music is not *e*-motive, but by emotion Langer means simply that music conveys

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[57] Bernard Williams, ed. *Obscenity and Film Censorship: An Abridgement of the Williams Report* (Cambridge: Cambridge University Press, 1982), 8.2, quoted in Maes, "Why Can't Pornography Be Art?" 31-2.

[58] Susanne K. Langer, *Philosophy in a New Key: A Study in the Symbolism of Reason, Rite, and Art* (Cambridge, Mass.: Harvard University Press, 1942), 202.

[59] Stephen Davies, *Musical Meaning and Expression* (Ithaca, N.Y.: Cornell University Press, 1994), 125.

[60] Ibid, 125-6.

[61] Langer, 209.

some semblance of eroticism—an erotic essence, to foreshadow my first chapter. For many composers of erotic works, music need not arouse the audience sexually, nor ought music express erotic sentiments, rather a musical work itself is the erotic object, a "presentational" symbol, to invoke Langer's term for the symbols of art as opposed to the discursive symbols of language. Eroticism is alluring without representing anything that might be alluring. However, this position, which Langer proposed in the 1940s, no longer serves to oppose music from the visual arts.

In the twentieth-century, the plastic arts drew increasingly toward abstract forms; conversely, electronic technology has brought to music the sound samples of real life. Changing technologies of the last six and a half decades have altered the face of musical composition, such that what was once referred to, in strict division, either as electronic or electroacoustic music has since blossomed into a rich soundscape of artistic possibilities, the sounds of which extend even beyond the previously delineated borders of music.[62] Technology has changed the very material of music, the manner in which music is preserved and shared, and its execution in performance. Technology has compromised *phonopoiesis*, both as it affects the quality of sound and in the manner of accessing sound, whether as creators or receivers. It is on account of these new developments that I have chosen to isolate music with electronic components from "purely" instrumental or vocal music. Although music at one time could have been opposed to painting or drawing on the basis of how subjects are presented in each, we can no longer separate music from the other arts on these grounds. Similarly to photography, electronic possibilities grant music the capacity toward some semblance of representation, though the represented object, both in art and music, is necessarily mediated. Mediation changes the constituting elements of a represented object, transforming the object into a symbol with constituting elements that may differ from some originary model. As I discuss in Chapter 3, it is only on account of heavy processing of the voices of male and female speakers that Barry Truax is able to overcome the implicit heteronormativity of the biblical "Song of Songs" narrative to arrive

[62] A number of recent publications address music's current intersectionality with sound. As Georgina Born describes her edited collection, *Music, Sound, and Space*, "The subject matter of the present collection congeals at the intersection of a series of related terms: music, sound, space, and how these phenomena have been employed to create, mark, or transform the nature of public and private experience." Georgina Born, ed., *Music, Sound and Space* (Cambridge, UK: Cambridge University Press, 2013), 2-3.

at a more sexually ambiguous musical setting of this text. And even in those works that feature elements of live performance, Alice Shields's electronic opera *Apocalypse* discussed in Chapter 2 and *Fish & Fowl* by Juliana Hodkinson and Niels Rønsholdt discussed in Chapter 4, the electronic media affect the resulting relationship of the sonic and the visible. Sound and vision mediate one another such that neither is entirely determinable by the other nor is one separable from the other. Here we require the stipulation that *how* something is presented relies as much on the manner in which it comes to be, that is, the creator's craft, as it does on the views of those who encounter the work. I will first address the latter concern.

In answer to the question, "What is Pornography?" Michael Rea responds, "*x* is pornography if and only if it is reasonable to believe that *x* will be used (or treated) as pornography."[63] The determination of the work's quality is therefore beholden entirely unto the observer. Yet, what is arousing for one person could be entirely off-putting for another. Inquiry into the aesthetic of pornography returns us once more to the question of whether it is even appropriate to examine "objects" as the content of sexual media. Although art is capable of eliciting such recognizable forms as human beings and flowers, Susanne Langer warns us that we should be wary of reducing the value and import of an artwork to merely its recognizable models. The model's "interest as an object" to the artist, says Langer, "may conflict with its pictorial interest and confuse the purpose of his [the artist's] work."[64] Whereas the composition of the artwork determines its form(s), it is not the representational content of the work that determines its purpose or use.

Take for example a composer who writes for a soprano, choosing to notate pulsating, untexted syllables that repeat with increasing frequency and intensifying dynamics. One such piece as Erwin Schulhoff's *Sonata Erotica* for solo female voice from 1919. The moaning woman resembles and therefore recalls a woman experiencing sexual pleasure. According to Linda Williams, men's sexual pleasure is often visual—men's satisfaction graphically conveyed with the crowning "money shot"—while women's satisfaction is equated, according to John Corbett and Terri Kapsalis with the "quality and volume of the

[63] Michael C. Rea, "What is Pornography?" *Noûs* 35/1 (2001): 120, quoted in Maes, "Why Can't Pornography Be Art?" 30.
[64] Langer, 202-3.

female vocalizations."[65] This semblance does not evince the presence of a *real* woman. Rather, mediated by technology, this new formulation serves as a referent, as mere representation. The work's originary (or its intended) scenario delimits neither how the work will be used nor its purpose. While an erotic artwork may very well represent the human figure, its intended purpose does not lie solely in such allusion. The composition may invoke certain formal or idiomatic expressions independently of the perceived woman's sexual pleasure—and this is as true of art as pornography.

The Oxford English Dictionary defines pornography as "the explicit description or exhibition of sexual subjects or activity in literature, painting, films, etc., in a manner intended to stimulate erotic rather than aesthetic feelings…"[66] By this definition, the moment that art treads into the realm of sexual arousal it risks being ousted from its lofty seat among the artworks of the world. In his article "Why Can't Pornography Be Art?" Hans Maes finds such definitions, which he summarizes in two points, the criteria most commonly raised in objection to pornographic content: "One could say that a pornographic representation is (1) made with the intention to arouse its audience sexually, (2) by prescribing attention to its sexually explicit representational content."[67] The example of the moaning woman, above, only satisfies the second stipulation for the censorship of obscenity. The woman's vocal "organ" exhibits the quintessential lewd posturing of the sexual act, which is meant to arouse the audience, but while she may *sound* arousing she may not actually arouse any or even the majority of listeners—think of straight women or gay men, if one can appeal to generalities—and this argument extends equally to pornographic works in which sex is not the quintessentially arousing act. Take another example, the case of sexual fetish. Listeners may find themselves aroused by some action other than "the" quintessential sexual act—examples include the clicking of high-heel stiletto shoes, which draw attention to the feet, or the plucked string, recalling the tactility of the plectra whether material or flesh. These examples may satisfy the first criterion, that they arouse listeners, but are not bound to the second, that sexual arousal in pornography is

[65] Linda Williams, *Hard Core: Power, Pleasure, and the "Frenzy of the Visible"* (Berkeley: University of California Press, 1989), 95; John Corbett and Terri Kapsalis, "Aural Sex: The Female Orgasm in Popular Sound," in "Experimental Sound & Radio," special issue, *TDR (1988-)* 40/3 (1996): 103.

[66] "Pornography," OED Online. March 2016. Oxford University Press. http://www.oed.com/viewdictionaryentry/Entry/148012 (accessed 5 May, 2015).

[67] Hans Maes, "Why Can't Pornography Be Art?" in *Art and Pornography*, eds. Hans Maes and Jerrold Levinson, 17-47 (Oxford: Oxford University Press, 2012), 32.

bound to sexually explicit representations. It is not sufficient to deny the label pornography solely on the basis of content, since it is the work's use that ultimately determines its satisfaction of both criteria, and as Langer proposes, it is neither the content nor the use but the *purpose* of the artwork that deems it as art. As will become clear in the course of this dissertation, the *raison d'être* of sexual media is not beholden solely unto a creator, the object itself, or to its reception: eroticism's intentionality lingers in a consensus of its various constituents.

It is inevitable that whatever their intended use case, erotic artworks are prone to mishandling by users, meaning artworks appeal equally to pornographic censure. It will therefore be important in this dissertation to consider the threats of representation, namely exploitation and objectification, issues I take up more thoroughly in Chapter 1, but briefly introduce here. Beginning in the 1960s, feminism's second wave witnessed a surge of resistance to the pornographic film industry of the previous decades for its lewd and disrespectful portrayal of women's sexuality. It was sais that women in such films perform graphic and explicit sexual acts without recourse to the development of a particular identity or character, they are typically insatiable, and, at the same time, their pleasure is made present only in the service of men. Mainstream pornography features extreme close-ups to women's genitals or other erogenous zones, women appear in situations with multiple partners and often as the *objects* rather than participants of sexual activity, as the recipients rather than the instigators of sexual situations.

In the 1970s, Andrea Dworkin helped shine a light on the industry's habitual mistreatment of women, who, in many cases, were coerced into performing in pornographic films or were filmed and publicized without their consent. A few years later, scholar and lawyer, Catherine MacKinnon became active among the Women Against Pornography movement in the U. S., arguing, along Marxist lines, that women's sexuality was a form of commerce that did little to benefit its primary laborers.[68] In this regard, women were made into objects construed for the pleasure of a class to which they did not belong and indeed were presented in spaces from which they were habitually excluded.[69] Together with

[68] Catherine MacKinnon, "Feminism, Marxism, Method, and the State: An Agenda for Theory," *Signs* 7/3 "Feminist Theory" (1982): 515-544.

[69] Andrea Dworkin, Catherine A. MacKinnon, and Women Against Pornography, *The Reasons Why: Essays on the new civil rights laws recognizing pornography as sex discrimination* (New York: Women Against Pornography, 1985).

Dworkin, Mackinnon launched and defended several law suits against the pornography industry, on allegations of distributing films that were captured without prior consent of the participants, not least of these were filmed acts of rape caught on tape and distributed for profit. Consequently, the Women Against Pornography group became motivated to dismantle the pornography industry with the estimation that its films were inherently violent toward, and biased against, women.

Despite important work to secure legal measures against women's mistreatment in the industry, many subsequently criticized MacKinnon and Dworkin for claiming that all pornography necessarily incited violence. Many women were concerned that a complete and total rejection of pornography would be a disservice to women who may find that they derive pleasure or profit from it. Excluding a female audience would therefore be as equally dismissive of women, once again discounting them solely on account of gender while also undermining their ability to assert their own subjectivity. In other words, the Women Against Pornography fell victim to the very argument MacKinnon launched against the pornography industry.

Questions of moral integrity in pornography eventually attracted academics to the debate. In the early 1980s a conference on the theme of sexuality was held at the Barnard Center for Research on Women at Barnard College in New York City. Organized by Carol Vance, along with Ellen Dubois, Ellen Willis, and Gayle Rubin, the event was meant to broach the topic of sexuality as an issue central to feminist concerns rather than a marginal or transgressive topic. The conference highlighted an array of issues concerning women's sexuality, as Carol Vance outlined in her Invitation Letter, the conference was to address sex as "a social construction which articulates at many points with the economic, social, and political structure of the material world."[70] But despite its wide reaching aims, antipornography groups identified the conference solely with issues of pornography, S/M, and the butch/femme dichotomy, which they viewed as profoundly violent and particularly objectifying of women. The groups pleaded with the university to cancel the conference and when the university did not heed their requests a small group rushed the venue in protest.

[70] Hannah Alderfer, Beth Jaker, and Marybeth Nelson, eds. *Diary of a Conference on Sexuality* (New York: Faculty Press, 1982).

The conference, a cornerstone event in the "feminist sex wars," saw, among other important scholarly contributions, the birth of Gayle Rubin's essay "Thinking Sex," which she presented there as a workshop entitled "Concepts for a Radical Politics of Sex."[71] As is typical of her work, Rubin was not content with the simplified antagonism of women and men common to much literature on the subject of pornography. In attempting to codify a succinct definition of pornography that would relegate it as a cruel and improper industry, antipornography campaigns ultimately came to vilify all sexual acts that did not align with a severely limited and conservative idea of sex. Troubling the complexity of human sexuality, Rubin raised a question of actions versus desires—an issue that would prove important later in feminism's third wave. Indeed, in her recollection of the conference, Rubin quotes the description of the workshop on pornography, which declares "that pornography cannot be isolated from a larger critique of the existing symbolic order, or from such seemingly diverse structures as the family or the church."[72] Thus, a moral assessment of pornography necessitates investigation into the quality of content, use, and purpose of said media within a constellation of intermediating socio-cultural structures. The distinction between art and pornography pertains to the work's provenance, to whether the piece was composed with either erotic or pornographic intent, but also to the processes by which works were created and received.

I have chosen to restrict the selection of works in this dissertation to those deemed erotic by their composers. I, therefore, begin from the assumption that the works collected here were intended to arouse either erotic sensations or, more plausibly, elicit allusions to sexual scenarios. This stipulation does not, however, exclude the possibility that these works were intended as both erotic artworks *and* pornography. As I explain in Chapter 1, to avoid the lofty connotations of high-art, Luc Ferrari's self-proclaimed pornographic framing in his various "anecdotal" works aimed to present situations as they actually happened, with negligible processing and hence minimal interference from the composer. This intention does not, however, preclude Luc Ferrari—notable assistant to *musique concrète* inventor Pierre Schaeffer—from being classified among notable "art" composers of the time. Similarly to John Cage, it was precisely on account of his appeal and resistance

[71] Gayle Rubin, "Blood under the Bridge: Reflections on 'Thinking Sex,'" in *Deviations: A Gayle Rubin Reader*, 194-223 (Durham, N.C.: Duke University Press, 2011).
[72] Alderfer, Jaker, and Nelson, 47, quoted in Rubin, "Blood under the Bridge," 201.

to art as an institution that Ferrari's works gained prestige as art. And, again, I reiterate that the intended purpose does not dictate use.

On this point Hans Maes makes one further observation on the opposition of art and pornography stating that whether a piece has been situated in one or the other camp has consequences for how the work is treated. Maes accepts that a creator's intentions may situate the work on one or the other side of the divide, but he insists that creative intentionality does not prohibit a work from being determined by its creator as both erotic and pornographic. A composer may choose to label a work as erotic, rather than pornographic in order to maintain integrity or status, and authors—myself included—may likewise choose to categorize the work as they see fit. Whereas artworks gain institutional and academic recognition, such institutions generally avoid pornography or ban it outright, which certainly seems to attest to general avoidance of this discussion among electronic music practitioners and those who study it.[73] Maes goes on to tell of the many artworks that suffered such fates, J. M. W. Turner's pornographic drawings that were burnt by John Ruskin and "several of the explicit frescoes of Pompeii and Herculaneum" that were destroyed or banished to the storerooms of the Naples Archeological Museum.[74] But I would point on the contrary also to notable works that were not transported, destroyed, or censored, for example, to the plethora of erotic sculptures lining the outer walls of the Lakshmana Temple (Khajuharo, India) and decorating the Javenese-Hindu Candi Sukuh or to the writings in Vatsayana's *Kamasutra*, to emphasize that the criteria for praise or persecution are culturally determined. As I show in Chapter 2, any determination of either art or pornography rests at the controlling hands of those with deciding power in the geographical region and historical time period in which the work is assessed. Where certain practices of Hindu art, dance, and music were at one time accepted simultaneously as art and pornography—sexual education being an intrinsic facet of art—the British occupation of India raised some question as to the merit of certain traditions, and subsequently these practices took on new, and often damaging, significance. The conflict between sex as either pornography or education crops up again in the edu-porn of pornographic actress, sex educator, and former prostitute Annie Sprinkle, which I discuss Chapter 4.

[73] Maes, 38-9.
[74] Ibid, 39.

As I've already said, although many examples of erotic electronic musical works exist, external pressures likely prohibited the discussion of such works within institutional and academic settings. Given the difficulty (impossibility) of separating erotic works from pornography, scholars may have been compelled simply to avoid the topic altogether. Indeed, while Pierre's Schaeffer's *Symphonie pour un homme seul* (1950-1) enjoyed remarkable exposure, meriting its composer a great deal of prestige as the earliest example of *musique concrète* in Paris (and arguably in Europe), the work's fourth movement, which boasts the title "Erotica," is rarely if ever mentioned among the work's other movements. Furthermore, if, as philosopher Jerrold Levinson has argued, pornography's primary purpose is to achieve sexual release, and art is said to give rise to deeper aesthetic engagement, the opposition of the two categories reduces pornography pejoratively to the triviality espoused historically by "popular" as opposed to "serious" music in comparative musicological discourses.[75] I surmise that it was just such an opposition that caused scholars to overlook composer Alice Shields's output among her colleagues at the Columbia-Princeton Electronic Music Center, one of the earliest of such centers to receive acclaim in the United States. Although she has been an active figure at the center since the 1960s, her music did not easily compare to the serialist compositional techniques of colleagues like Milton Babbitt nor did she remain faithful to the strict delineation of electronic and acoustic sound worlds common at that institution. What's more, Shields's music often broached the boundary between "serious" and "popular" styles by including electric guitars, triadic harmonies, and blues and jazz rhythmic devices, ensconcing these within formal structures typical to Western "art" music.

In this dissertation we see how erotic sound has persisted throughout the twentieth century, as a taboo that subsided with the resistance of mid-century liberal counterculture only to return later in full force at the draw of the twentieth century, after a series of political maneuvers, public moral campaigns, and new anti-promiscuity legislation following the outbreak of the AIDS epidemic. Throughout this history, I find the prominent puritanical resistance to pornography confronted by a no-less-prevalent creative fascination with the erotic. The tension between the erotic and pornographic arouses the observer's intrigue on account of composer intention but not necessarily in the manner intended.

[75] Jerrold Levinson, "Erotic Art and Pornographic Pictures," *Philosophy and Literature* 29 (2005): 229.

Given that a handful of the twentieth century's most celebrated composers concerned themselves with erotic electronic works, Berio, Schaeffer, Takemitsu, and Lockwood, to name a few, it is a wonder that erotic electroacoustic works feature so rarely in literature dealing with electronic music. This absence is so pronounced that it seems to have enforced an irreconcilable rift between such music and its reception, though the divide likely has as numerous origins as it does consequences.

Whether mere sound recording or a fully realized digital musical work, new technologies have innovatively opened the door to erotic encounters in music. Because electroacoustic sound is not motivated by visual "evidence" of a body responsible for producing these sounds, erotic nuance in this music takes on distinctive meaning for its listeners. The composers discussed in this dissertation have all sought to evoke eroticism through overt use of its sonic envelope, by appealing to and manipulating accepted norms of how human sexuality sounds. This dissertation explores philosophical, cultural, social, and scientific technologies of eroticism through a musical lens to challenge Canadian electroacoustic composer Robert Normandeau's comment "that music, unlike other contemporary art forms — literature, painting, cinema — has hardly dealt with eroticism as a genre."[76] In the space of this dissertation I could not possibly hope to explore every expression of eroticism in electronic music, let alone in music as a broader category. In devising a theory of musical listening that hones in on the erotic, I frame music within social, sexual, religious, historical, and philosophical beliefs that construct music erotically at different places and times. It is my hope that readers will then make their own inferences beyond the pages of this dissertation.

Situating sexual response in the first chapter as a symptom of disorder, I present the dominant attitude toward eroticism, and particularly its aural dimension, and emphasize how this attitude grew into a prevalent acoustic curiosity by the time electroacoustic music reached the apex of its popularity in the second half of the twentieth century. This dissertation draws together a diverse assortment of erotic musical works, from works deemed expressively by their composers as pornographic, to works that merely mimic the gate of the sexual act, and even some pieces that include actual recorded instances of sexual acts. Composers' motivations for writing erotic works are equally vast, stemming perhaps

[76] Robert Normandeau, program notes to *Jeu de langues* (2009).

from a desire to capture something essential about eroticism, or perhaps seeking to simulate a sexual experience in which the observer or listener can imaginatively place her or himself. Composers aspire to create a sonic world that reflects the diversity of their sexual desires, whether or not their desires depart from the heteronormative majority, and still others are more musically than erotically invested.

Are the qualities of emotions aroused in listeners shaped by the musical context? And if so, is eroticism expressed only in music that sexually arouses the listener? If a composer uses certain sonic conventions, such as female breathing and moaning, to rouse erotic associations, are listeners who are not attracted to women prohibited from hearing this music as erotic? If, as I suspect, the answer to this last question is no, and music can convey erotic connotations regardless of a listener's sexual orientation, then music does in fact emote erotic connotations, but not by way of representation and not by coercing listeners to identify the body of a physical performer within what they hear. Music therefore does not require an object of affection, and hence desire in this music is not object-oriented. This dissertation resists the traditional psychoanalytic definition of desire as lack, as the desire and irrepressible longing for an unattainable goal. Releasing eroticism from the possessive stronghold brings the concept onto the level of form such that, rather than an object of desire, it is the relation of music's various structuring parts and elements that unite to elicit erotic desire. Questioning the moral edifices of musical hearing, I find that erotic explorations in music deserve more detailed attention than given thus far, and conclude that hearing eroticism in music is neither transgressive nor peripheral to more allegedly dominant aspects of musical listening or hearing in general.[77] A listener's phenomenological orientation necessarily shapes the sounding "object" one hears, arousing listeners variously and independently from one another, but such responses are as contextually dependent as they are associative.

[77] Rose Rosengard Subotnik, "Toward a Deconstruction of Structural Listening: A Critique of Schoenberg, Adorno, and Stravinsky," in *Deconstructive Variations: Music and Reason in Western Society* (Minneapolis, MN: University of Minnesota, 1995), 148-176.

3. Dissertation Outline

My first chapter revisits a familiar evolution of musical repetition in electronic music. Beginning with the vinyl record player as used in the "Erotica" movement of staunch *musique concrète*-ist Pierre Schaeffer's (1910-1995) *Symphonie pour un homme seul* (1950), I trace this evolution through developing twentieth-century technologies but in an alternative telling by way of an erotically oriented history. I proceed from Schaeffer's philosophical attitude to the music of his assistant, Luc Ferrari (1929-2005), whose textbook persona adopts a philosophically Cagean attitude to music composition, which he termed "anecdotal music." Ferrari's passive insistence raises conflicting ethical concerns when considered through the lens of his proclaimed pornographic musical works—not always recorded with the knowledge or consent of his presented subjects. Raising questions of composer motivation and authorship, I turn to Annea Lockwood's (b. 1939) *Tiger Balm* (1970), an experimental performance tape piece often attributed as a realization of the composer's own masturbatory enterprise. I branch off from here to conclude with a series of works in the vein of Ferrari's anecdotal erotica, music by electroacoustic composer Robert Normandeau (b. 1955) to show the prevalence of what I identify generously and ethically suspect erotic currents in music.

In *Jeu de langues*, Normandeau sculpts eroticism through a collage of sounds made "unintentionally" in musical performance; sounds that were collected and extracted by the composer from performances of his own previously recorded works. Removing pitched sounds from his previously recorded works, Normandeau's *Jeu de Langues* leaves only "the sounds of whispers and breaths as well as the mechanical noises of the instruments." Using sampled sounds of un-intending—even unsuspecting—performers in this way, Normandeau, like many composers of electroacoustic music, assumes control over his performers, rebranding their aesthetic expression, without consultation, toward his own erotic ends. Though the sexual soundscape need not necessarily assume gendered implications, Normandeau's conception of eroticism in *Jeu de langues* is entrenched within a gendered dichotomy, first and foremost because he only sets the sounds of exhalations from female performers.

In *Jeu de Langue*, the heavy breathing and moaning aims to solicit a sexual response in listeners. This ambition is realized on the basis of three loose assumptions, (1) that breathing and moaning can only elicit one type of emotional response, namely erotic sensation; (2) that if deemed erotically expressive, breathing and moaning will always remain erotic regardless of context; and (3) that only breathing and moaning in conjunction with the climax mechanism—and no other sounds or music's other formal or structural elements—are capable of eliciting an erotic emotional response. Though the performers Normandeau samples in *Jeu de langues* were not breathing heavily as a response to sexual stimulation, but as a reflex for technical reasons relating to vocal and instrumental performance, Normandeau digitally resculpts these sounds to imply such an emotional response, leaving only the sounds of the breath and massaging the tracks in a choice moment about three-quarters of the duration of the piece—in order to coerce the sonic climax mechanism. Whereas Normandeau has the freedom and indeed power to manipulate sound at his discretion, a work constructed of unintentional "blemishes"—especially a piece that intentionally connotes erotic intonation—does in some way infringe on a performer's agency, and when grounded in a tension between noise and silence the emerging soundscape becomes gendered inherently.[78] Film theorist and art historian Kaja Silverman recognized the prevalence of female breathing in film soundtracks and music when women supposedly experience extreme emotions, either intense pain or immense pleasure. She writes, "Discursive bodies lean upon and mold real bodies in complex and manifold ways, of which gender is only one consequence."[79] Silverman's critique is motivated by Luce Irigaray's insistence, explored in Chapter 2, that female sexuality is only the distillation of a concept, a social insignia having little to do with actual women's pleasure.

My second chapter follows the influential career of composer Alice Shields, an instrumental figure in the development of the Columbia-Princeton Electronic Music Center, where she was affiliated professionally for more than three decades, from the late 1960s through the 1990s. The electronic compositions of Alice Shields combine musical elements

[78] Susan McClary, afterword to *Noise: The Political Economy of Music*, by Jacques Attali (Minneapolis: University of Minnesota Press, 2009), 149-160.

[79] Kaja Silverman, *The Acoustic Mirror: The Female Voice in Psychoanalysis and Cinema* (Bloomington, IN: Indiana University Press, 1988), 146.

from several musical sources, and frequently draw on dance and theater practices from the sacred Hindu dance-drama (bharatanatyam) and Noh Theater. Recurring themes of spiritual, ritual, religious, and sexual transformation are musically resituated in Shields's dramatic works, in *Transformation of Ani* (1970), *Shaman* (1987), and again in *Vegetable Karma* (1999), and take their inspiration from various spiritual backgrounds, including Hinduism, Tibetan Buddhism, Christianity, Native American shaman traditions, and Ancient Egyptian traditions. This chapter focuses on Shields's electronic opera *Apocalypse* (1993).

Apocalypse takes its form from a long operatic tradition, structured similarly to Western opera with four acts, four primary vocal roles, and a Greek-style chorus. Credited as one of the first electronic operas composed in America, *Apocalypse* laid the foundation for electronic expansions of the operatic form.[80] The opera was inspired by another female composer of electronic music, Shields's friend Daria Semegen, and the stage directions combine movement patterns of the bharatanatyam Hindu dance-drama with gestures inspired by kamasutric poses, Greek statues, and Gilbert Austin's *Chironomia*. Based loosely on Hindu mythology and inspired by the philosophical texts of The Bhagavad Gita and the ancient Gnostic Gospels, the opera also incorporates narrative elements novel to Western opera. Bharatanatyam is one of South India's oldest dance traditions, and a dance form Shields had, at the time of composing *Apocalypse*, been studying already for over ten years. Inspired by this genre, and taking advantage also of the electronic medium, Shields merges her creative authority with her performing presence, herself singing the roles of three of the four central characters in the opera and also the voices of the "chorus." As is uniquely possible only in an electronic work, Shields's light-hearted spirit emerges through a complex palette of original sounds, some electronically synthesized, various vocal manipulations (such as reverberation and frequency modulation), and in several passages we hear unique sounds that fall outside the tradition of Western opera—or even music. For instance, one notable scene is devoted to the sounds of chewing and belching.

As with each of the pieces explored in this dissertation, Alice Shields's treatment of eroticism is no simple manner. Unlike the representation in *Jeu de Langue*, *Apocalypse* presents the audience with a very real sexual experience. Particularly vivid is the recurring

[80] alcides lanza, review of "Alice Shields, *Apocalypse: An Electronic Opera*" *eContact!* 8.1 (1994): par. 10, http://cec.sonus.ca/contact/contact8106.html (accessed 15 September, 2013).

phallus imagery—the visibly erect two-foot penis—which features centrally during a chanting ritual and sexual union in the final scene "Organ Screaming." The work's explicit sexual imagery draws on the rich history of the *Sringara rasa*, a traditional bharatanatyam dance banned in India following British occupation in the 1940s for its celebration of carnal desire. However hospitable, Shields's portrayal of women in Indian society as pristine sexually free beings remains a fabricated image calling back on the postcolonial consciousness. After the British there could no longer be simply *Sringara rasa*, and this history is also immanently present in the opera. Not unlike pornography in the West, there is always a question of good or bad and Shields's motivations are fueled further by the complicated history of her contemporary American sexual politics. Whereas the Western divide between the body and mind is seemingly always present, even through its reinforced negation, Shields's reliance on non-Western traditions prioritizes the sensual, thereby redefining the contours of previously drawn lines, placing emphasis on the old paths of spiritual cosmologies while reorienting these tendencies toward a new musical interpretation. Shields says her compositional attitude parallels her psychoanalytic approach—her second profession—in what she identifies as a common reliance on repetition in both music and psychoanalysis.

Apocalypse uses performance as a means to confront real socio-cultural issues, such as phallic symbolism, female sexuality, and the dominant colonialist narrative in art history. Seeking to change the traditional roles held by women and to challenge the social mores surrounding common sexual symbols, signs, and codes, Shields presents dominant beliefs and presumed definitions only to re-present and thus transform normative beliefs by her own novel means. Though the opera has never been staged for live performance, the soundtrack to Shields's opera can be studied and enjoyed as a self-standing composition.[81] Shields's Bakhtinian polyphony of sounding personas marks her as the soloist. Thus embodying the role of bharatanatyam's devadasi dancer, she takes responsibility for conveying the subtlety of her inner moods to her audience, such a prospect presenting its own challenges when expressed as erotic sentiment.

[81] "NewMusicBox Asks: Can Music For Dance Stand Along? Alice Shields," 1 July 2002. http://www.newmusicbox.org/articles/NewMusicBox-asks-Can-music-for-dance-stand-alone-Alice-Shields/ (Accessed 1 September, 2013).

My third chapter continues to provoke the concept of "transformation" in electronic music through a reappraisal of gender and sexual norms as (re)constituted in the context of Barry Truax's *Song of Songs* (1992). Truax (b. 1947) is known for inventing digital software for real-time granular synthesis, and this work uses granular techniques to transform the perceived identity and orientation of the speakers in the piece. This chapter dismantles and complicates acoustic "conventions" of the gendered voice and, subsequently, alters also perceptions of sexual orientations among speakers, asking where these conventions are established and how, outside of solicited associations, music can arouse gendered and sexual categories. Barry Truax laments electroacoustic music's poverty of homoerotic sensibilities, acknowledging an exclusionary gap in the electroacoustic community and the need to musically represent alternatives to the masculine heritage from which electronic music originated. Composing conscientiously with these voices in mind, Truax sees it as the composer's duty to represent non-normative characters in music in order to "[progress] from being an artist who happens to be a woman, gay, lesbian, transgendered, of colour, and so on, to one for whom any and all of those qualities become integral parts of their work."[82] Truax's *Song of Songs* employs a biblical text with well-known erotic overtones. Though its textual allusions are often confined to interpretations of either the covenant between God and the Israeli people or to heterosexual relations among human characters, Solomon and Shulamith, Truax employs various "blurring" effects to expand the meaning of "love" through metaphor. As Old Testament scholar David Carr writes, typical to ancient love poetry, the Song of Songs text "involves an intricate interweaving of human and divine elements, the sexual and the spiritual."[83] Truax evokes and provokes these entwining traditions with timbral transformations, gendered textual re-pairings, and by blending melodic settings of the "Song of Songs" from both Jewish and Christian traditions. Through these various couplings, Truax moves music's erotic sensibilities away from the confines of conventional heterosexual representations.

[82] Barry Truax, "Homoeroticism and Electroacoustic Music: Absence and Personal Voice," *Organised Sound* 8/1 (2003): 119.

[83] David M. Carr, *The Erotic Word: Sexuality, Spirituality, and the Bible* (Oxford: Oxford University Press, 2002), 92.

Returning to the debate between Kaja Silverman and Luce Irigaray, Chapter 4 revisits the problematic politics of representation, further challenging a traditional feminist insistence that distinguishes the actual from the discursive body. Expanding on "difference" as the philosophical "ruin of representation,"[84] my analysis of *Fish & Fowl*, a collaborative electroacoustic composition by British composer Juliana Hodkinson (b. 1971) and Danish composer Niels Rønsholdt (b. 1978), reflects a plurality of erotic hearings in order to disavow the emotional obstruction caused by the amassing conventions of musical expression.

Fish & Fowl is a work that, like *Jeu de langues*, draws on the back-catalogue of its respective composers, and this chapter, therefore, continues to provoke "the work concept," introduced in the first chapter. *Fish & Fowl* once again samples breath and moaning, shaping these to build repeatedly in a sexually provocative manner. "The voice," comprised of a composite of previous recordings with a timbral quality that is conventionally female (see Chapter 3), is quite variable, swaying from hushed whispers to bellowed operatic thrusts and extending a diverse vocal palette that is at once musically rich according to traditional conventions. Differently from acoustic musical works both *Fish & Fowl* and *Jeu de langue* gain an increased associative depth through their agglomeration of previously recorded works.

Philosopher of science and technology Don Ihde recognizes this agglomeration of disparate sources as the archetypal model for electronic musical composition: "[The] growing aggregation of parts from which music is produced, is largely a 20th century phenomenon.

> …This development signals a final break from the implicit 'copy' or 're-produce' model of sound production and shifts to synthesized, generated sound which is no longer necessarily based upon copied or recorded sounds—digital-computerized music does not need an 'original,' but is itself an 'original.'[85]

[84] Dorothea Olkowski, *Gilles Deleuze and the Ruin of Representation* (Berkeley: University of California Press, 1999).
[85] Don Ihde, "Technologies—Musics—Embodiments," *Janus Head* 10/1 (2007): 22.

As an original, Ihde might agree that listeners can appreciate *Fish & Fowl* as a synthesized work (both aesthetically and musically) even with no prior experience with the other works it samples. Interpolated through ProTools, a digital audio workstation, the eight reconfigured works that form *Fish & Fowl* give shape to a new piece and even a new concept of the performer, to what composer Rønsholdt identifies as a "protagonist" responsible for expressing the erotically suggestive intimations. Taken at face value, the notion of a protagonist parallels philosophical investigations summarized under the category of "persona theory."[86]

Beyond associative emotional reactions, many theories of in music rely on representation as a form of listening empathy, claiming that emotion is conveyed only when a sensation aroused in listeners can be attributed to some "persona" or thing in the music. According to Natasha Barrett, a composer primarily of ambisonic works, part of the challenge and pleasure in composing music featuring voice and percussion are aspects of timbral overlapping between these two groups.[87] Slight modifications to recorded percussion can alter sounds to the point that these are no longer even associatively percussive. The voice, however, maintains Barrett, because of its universality is always recognized by listeners in relation to a human body. If one imagines the voice in *Fish & Fowl* as belonging to a protagonist, then it is not a far leap to suggest that the sexualized breathing forms an implicit bodily relationship to the audible clicking heels and cracking whip. But, like the amassed samples interpolated and manipulated in a digital composition, emotion is complicated.

Fish & Fowl's "protagonist" could surely be heard as an independent persona within the context of this particular work, however, the compilation of several *real and living* performers agglomerated in this piece is nevertheless notable *and audible*. The "Technologies of Embodiment" that delimit the digital-computerized musical work as a newly conceived work grant the digital composition independence from its sampled sources, but Ihde does not consider the consequences of a composition that can still be aurally traced back to its sounding predecessors. This link between source and effect

[86] Jerrold Levinson, *Contemplating Art: Essays in Aesthetics* (Oxford: Oxford University Press, 2006), 193; Robinson, "Expression Theory," 204.

[87] Natasha Barrett speaking at a composition workshop held 11 December, 2013 at the Institute for Electronic Music and Acoustics at the University for Music and Performing Arts Graz.

continues implicitly to redefine each of these works—now nine in total. The wealth of sounds in *Fish & Fowl* is not therefore representative of distinguishable identities, but rather they become sonically interchangeable in several moments, not unlike the timbral fluidity Barrett describes. Toying with such exchanges, *Fish & Fowl* works within a wide timbral spectrum thereby confusing boundaries between what from the ontological purist's perspective would be identifiable as traditionally distinguishable musical instruments, but from the posthuman perspective take on a life independent of these.[88]

As explored in *Fish & Fowl*, though listeners can identify erotic connotations in this music, the listener's recognition of erotic expression need not necessarily evoke erotic sensations, and furthermore, where there is consensus that some music is erotically arousing, erotic feelings are widely variable. Taking the "convention" path, one could argue that, because listeners have a pre-existing familiarity with the context in which they hear sound organized in this manner, listeners will obviously hear certain sounds as explicitly sexual, even without knowing the piece's compositional history or the composer's intentions. If all listeners recognize eroticism in the same musical works then there must be some consensus as to how eroticism sounds, but deviating orientations will yield to variable states of arousal independently from the erotically expressive musical "object," but nevertheless contingent upon the listener's own sexual proclivity. My analysis of *Fish & Fowl* expounds on the late-twentieth-century conception of non-object-oriented desire as one possible expression of eroticism in music.

As detailed in Chapters 1 and 2, the late-1980s postmodern theoretical turn in cultural studies, women's studies, sexuality studies, and also in musicology and music theory can perhaps be characterized by a *de*-specification, as an escape from essentialism. Further advancing the critique against object-oriented desire, Chapter 3 shows how slippery the divide between individual and communal can be. Chapter 4 then expands this interhuman vulnerability to provoke a transhuman bargaining chip to explore the twenty-first century's impending decentering of the human subject. Proposing a definition that resonates more with the queer theory of Sue-Ellen Case than the definition upheld by French

[88] Ontological investigations in music tend to delimit explorations to "pure" instrumental works of the Western classical tradition, thus privileging this music over texted and/or non-Western music. See the useful summary of positions in Stephen Davies, *Musical Meaning and Expression* (Ithaca, N.Y.: Cornell University Press, 1994), 117.

poststructuralists, Grosz writes, "desire can…be seen as what produces, what connects, what makes machinic alliances."[89] Though both Grosz and philosopher Rosi Braidotti, champion of "Deleuzian feminism," build on the ideas of Luce Irigaray to theorize a philosophy of sexual difference. Departing from Irigaray's separatist agenda, the Deleuzian notion of desire, as interpreted by Grosz and Braidotti, preempts the duality of gender, and it is through this understanding of refracted sexuality that I locate my hearing of *Fish & Fowl*.

The themes of this dissertation are complemented well by Deleuze's philosophy, beginning with *Difference and Repetition* (1968) and continuing through his collaborations with Félix Guattari. Deleuze's notion of erotic desire finds intellectual precedence in turn-of-the-century psychoanalytic investigations from the better-known representatives, Sigmund Freud and Jacques Lacan, to lesser-known types like Pierre Janet (1859-1957), an important student of Jean-Martin Charcot (1825-1893) from whom Janet gained an interest in hysteria and the ecstatic female subject. But Deleuze invigorates melancholic psychoanalytic definitions of desire with a more inclusive and hopeful outlook. I begin my exploration in the first chapter with Janet's investigation of erotic *jouissance* by way of his case study of Madeleine Lebouc (1863-1918), an ecstatic whose symptoms consisted largely of auditory hallucinations. As a precursor to a general philosophical understanding of perceptual experience slightly different from classical phenomenology, Janet's psychoanalytic observations of his patients' erotic sensations resound in philosophical writings throughout the twentieth century, in the writing of Jean-Paul Sartre, Merleau-Ponty, and Gilles Deleuze, though Janet's particular attention to *audible* stimulation did not carry into the writing of these thinkers. While I do not provide any concise deductions from Janet's case study, his observations from the early part of the twentieth century resound importantly throughout that century.

Theories of how emotion is conveyed in music that choose to delimit investigations by either music's ability to express or the listener's ability to become aroused are ceased by constraints that I find to be unfaithful to the way music is actually experienced. There can be no cut-and-dry definition of eroticism, because emotion is continuously in flux, always contingent upon a negotiation of both individual experience and the broader consensus. But

[89] Elizabeth Grosz, *Volatile Bodies: Toward a Corporeal Feminism* (Bloomington: Indiana University Press, 1994), 165.

such negotiations are difficult to reconcile, because, historically, speaking in generalities has enforced an illusion of a united (bleached and ideal) listening front inherited from and inherent to the Western classical music tradition.

Though musicologists have long intervened against the proclamation of autonomous music, many philosophers and music theorists continue to deflect gender and sexual proclivity, as categories contingent only on people, favoring instead formalist analytical approaches pertaining only to music. As I hope is by now clear, eroticism is elusive, but more than a mental or theoretical construct, it is also an affectation of *something*. When ascertaining what makes music erotic, we must ask ourselves whether and how music elicits emotion or even if emotion can be aroused by music. When asking *what* is erotic, our attention inevitably turns to a question of *who* makes erotic sound. If we accept that music arouses emotions, either by association, representation, or expression, then some aspects of making sound erotic are shared, regardless of who is responsible for erotic constructions, whether composers, listeners, performers, or any overlapping therein. Establishing a non-ideational definition of desire opens up new avenues for exploring music's erotic potentialities. Once denoted neither by subjective predisposition nor by object of desire, investigations of erotic currents in electronic music can sound freely and thus become sounder.

Chapter 1: The Object of Desire in Electroacoustic Music

In 1926, Pierre Janet set out to document *L'Angoisse à l'Extase*, the anguish of ecstasy. The symptoms Janet attributed to his patient Madeleine, while not prevalent enough to merit a lasting diagnosis of pathology (his tentative outline of hysteria did not stand the test of time), recall the symptoms of those suffering from what today is diagnosed as schizophrenia.[1] Given that these symptoms present themselves as erotic stimulation to sensory experience, visual and auditory,[2] this chapter proposes that such maladies may, in fact, have more similarities with normative experience of sight and sound than has been as yet acknowledged.

Janet's Madeleine heard voices, was plagued by mystic and deistic hallucinations, and, perhaps most notable for our purposes here, she exhibited hypersensitivity to external, haptic, visual, and audible, stimuli: Madeleine's physical symptoms would become increasingly pronounced from sight, sound, and touch (real or hallucinated). In her sessions Madeleine recalled the "ineffable joy" of hearing [*entendre*] bells or the voice of a child.[3] Her appetite would became aroused when breathing in the air's sweetness, her skin burned from its caresses, and even the smallest physical movements set her bone marrow ablaze.[4] She was frequently overcome by irrepressible physical excitations when confronted with

[1] Today hysteria has been all but written into medical history, as, even at the height of its diagnostic prevalence, the illness rarely exhibited recurring and transposable symptoms consistently. "Within a few years the concept of hysteria will belong to history ... there is no such disease and there never has been. What Charcot called hysteria is a tissue woven of a thousand threads, a cohort of the most varied diseases, with nothing in common but the so-called stigmata, which in fact may accompany any disease." A. Steyerthal, *Was ist Hysterie?*, 1908, Halle a S., Marhold. Quoted by Aubrey Lewis, "The Survival of Hysteria" in *Hysteria*, ed. Alec Roy (Hoboken, NJ: Wiley, 1982), 22.

[2] Clara Latham has posited that in the cure for hysteria, after the talking cure replaced somatic manipulation of the female body, talking replaced touch. Sander Gilman attributed Freud's shift from physical to verbal stimulation to his belief in the hysterical illness as psychological as opposed to biological in nature, but Latham argues rather that the shift was merely substitutive: talking was a form of touch. Where many symptoms of hysteria and what Janet called ecstasy overlap, the comparison is apt. Clara Hunter Latham, "Rethinking the Intimacy of Voice and Ear," *Women and Music: A Journal of Gender and Culture* 19 (2015): 127; Sander Gilman, "Sigmund Freud and Electrotherapy," in *The Jewish World of Sigmund Freud: Essays on Cultural Roots and the Problem of Religious Identity*, ed. Arnold D. Richards (Jefferson, NC: McFarland, 2010), 66-77.

[3] Pierre Janet, *De l'Angoisse à l'extase: Étude sur les croyances et les sentiments* (Paris: la Société Pierre Janet et le Laboratoire de psychologie pathologique de la Sorbonne avec le concours du CNRS, 1975), 96. Unless otherwise noted, all translations of *L'Angoisse à l'Extase* are from the author. I would like to thank Marie Larent for her assistance with the French to English translations appearing throughout this dissertation.

[4] Ibid.

objects most would consider inanimate, and during such episodes Madeleine would ultimately become excited to the point of pleasurable convulsions. More than mere joyful ecstasy, Janet ultimately determined that, "*Jouissance* is really a sexual phenomenon."[5]

As Janet observes of Madeleine,

> When we consider the higher senses, hearing [*ouïr*] and sight, jouissance presents a complex character. We cannot say with precision that it is a purely sensory jouissance, the joy is not bound only to the senses as such, it depends on the awakened senses and on an aesthetic appreciation. We need in effect to note that jouissance of ecstasy appears not only at the more inferior sensory level [*l'occasion des operations inférieures*], but in all the psychological functions when they are in particular conditions such as in the spiritual form, the purely internal, without expending energy on external actions.[6]

Like a religious conviction, psychic phenomena, emotions, feelings, and overall, *memory*, become open to inquiry only through the fragile means of subjective reflection. A subject takes hold of objects through thought, and reflection grants the subject the necessary concentration to make objects tenable, to "stabilize" objects in thought and, hence, also in memory. Subjective reflection held great weight for Janet, not merely as it provided a glimpse into the patient's mind, but also, crucially, because his own means of investigation relied precisely on the psychologist's own observable impressions.

In Janet's theory, reality is observed upon (conscious) reflection, but ultimately confirmed by the practitioner's generalized conclusions.[7] Without the patient's confession of her thoughts, feelings, and sensations, the object—the source of her physical symptoms—would never emerge, "the sentiment deeply concerns the observer, which often results in profound interpretations."[8] In this sense, Janet took stock in language (Breuer's talking cure) as essential for diagnosis and, likewise, definition. For our purposes here, I am not concerned with revisiting Madeleine's specific recollections so much as I am interested

[5] Ibid, 93.
[6] Ibid, 96.
[7] Ibid, 231-7.
[8] Ibid, 99.

in drawing connections from her so-called symptoms (as identified by her doctor), that haptic stimulation (real or hallucinated) is erotically stimulating. As Janet suspected, I believe a greater, abstractable truth lingers in Madeleine's experiences, or at least in his studied observations of them.

L'Angoisse à l'Extase begins with select case studies and focuses primarily on Madeleine's experiences as richly informed, with her permission, by her diaries.[9] The three-volume work moves from Madeleine's account to discussion of the muses and the famous case of St. Teresa, as an example of ecstasy comparable to Madeleine's experiences and a precursor to the more general *jouissance* described by Janet's theory. The second volume *Les Croyances* expands Janet's observations of his patients to account for more universal experiences, such as his codification of "La réel réfléchi," which outlines the necessary relationship between three perspectives of memory: (1) the past, (2) one's perceived memory of the past, and (3) a re-collection of that past, which, of course, occurs in the present. Clearly informed by his long-lasting relationship with Henri Bergson, with whom he remained in contact long after their childhood friendship, Janet's theory of temporal experience is importantly thematized in Gilles Deleuze's *Difference and Repetition* and lingers in the philosopher's thoughts also through his later collaborations with Félix Guattari. Accordingly, Deleuze's distillation of Bergson's theory of time (via Hume and Proust) also includes three "syntheses" of experience through memory. And although Deleuze only mentions Janet in passing, he notably does so when memory raises for him questions of the sensual experience of time and most importantly in what he terms "the role of erotic repetition and its combination with difference" in temporal experience.[10]

This chapter examines how certain perceptions of sound might shape an erotic reality. In approaching a definition of the "real" by way of recorded sound, I highlight the similarities between the experiences of the (maligned) ecstatic patient and the (exalted) electroacoustic practitioner. In Western intellectual thought, erotic stimulation is typically expelled to the dark corners of transgression, where rational and reliable observers are expected to separate reflexive, affective responses from objective inspection. But arguably,

[9] Simon Elmer, *The Colour of the Sacred: Georges Bataille and the Image of Sacrifice* (London: The Sorverer's Apprentice, 2012), 306.

[10] Gilles Deleuze, *Difference and Repetition*, trans. Paul Patton (New York: Columbia University Press, 1994), 109.

such distanciation is superficial, a mere delusion of the modern practitioner, and perhaps, with a little provocation, we—expert observers of the aesthetic—could concede that erotic sensation is more than an instinctual urge, that eroticism is a cultivated and aesthetic form of human experience.

While a larger project might delve into a discussion of sound in general, I have chosen to focus in my investigation on electronic music, or compositions made through electronic means, through a computer, a phonograph, tape, or analogue or digital synthesis. Much in the same way that the schizophrenic hallucinations of the ecstatic patient are set off from the experiences of the mentally sound, such compositions set music apart from the historically preferred mode of experience—the "gnostic" live performance, to draw on Carolyn Abbate's reading of Vladimir Jankilevich.[11] The odd circumstances of the disembodied—or at least ambiguous—electroacoustic soundscape cause listeners to question the same fuzzy boundary between real and actual that mark the patient as different from collective society. This, we might say, is the distinction between Janet's case study of Madeleine and Deleuze's idealized schizophrenic.

Whereas Deleuze removes schizoanalysis from the schizoid, raising the philosopher's voice to the transcendental ego that stands apart authoritatively from any specific person of study, Janet provides Madeleine's account as reinforcement for his ideas. She stands at the crossroads between generalized universals and practical realizations. Madeleine is for Janet's theory what the composition is for the music theorist, a record of the actual, and one that provides an opening to the reality of virtual reflection. The ecstatic and the artwork both stand as monuments, as material points for inter-subjective reflection to what are otherwise theoretical visions. I, like Janet, believe that the distanciation of art observed is artificial, that the distinction between real and actual is neither necessary nor possible within the context of erotic experience. Whether in the mind of the maligned schizophrenic or in the ears of the electroacoustic listener, "Art is not imaginary doubling," as philosopher of art Anne Sauvagnargues has said, "art is reality itself."[12] From this perspective it becomes difficult to determine where the phenomena arise, whether from within the

[11] Carolyn Abbate, "Music—Drastic or Gnostic?" *Critical Inquiry* 30/3 (2004): 505-536.
[12] Anne Sauvagnargues, "Deleuze and Guattari as VJay: Digital Art Machines" (talk delivered at The Dark Precursor: International Conference on Deleuze and Artistic Research 2015, Orpheus Institute, Ghent, Belgium, 10 November, 2015.

artwork, in the mind of the schizophrenic, or from the distillation of the observing practitioner. What are the *technê* by which sound is produced, and where does this technology lie in regard to our understanding and interpretation of sounds, whether electroacoustic or hallucinated? In short, when it comes to the erotic, who is it that makes sex sound?

1. Perceptual Experience from Psyche to Psycho

Janet's focus on the distinctive experiences of the ecstatic served as one source of inspiration for Gilles Deleuze's turn to the "virtual" in modeling his "schizoanalytic" philosophy. In *The Logic of Sense* (1969), Deleuze identified the schizophrenic as one who stands at the threshold between conscious thought and unconscious sense, as one who is granted unique entry into the *real* depths of human experience and into the unconscious, in distinction from rational, consciously acquired, knowledge. Exploring language as one instance from which this threshold is observed, Deleuze imagines the cognitive tension between conscious and unconscious thought as a surface upon which words are strung, held up by a consensus of conventional meanings. The schizophrenic stands at the horizon of this surface, obliquely questioning the semantic expanse, scrutinizing each word to the extent of each one's extant sense. Like a skin, the suspended words coalesce together on the basis of semantic tension, and, citing Freud, Deleuze insists that there is a particular "aptitude of the schizophrenic to grasp the surface and the skin as if they were punctured by an infinite number of little holes."[13] Recalling Madeleine's tactile hypersensitivity, the schizophrenic is overly aware of her sensed surroundings. At hearing the voice of God, a tolling bell, or even the voice of a child, her mangled feet become disfigured into raven's claws, her flesh quivers and convulses, her heart rate rises, and her body heat elevates. These "are moments," she says, "when I hear [*j'entends*] the concert of an inexpressible sweetness that delights my soul and gives my heart ineffable pleasure."[14] Sense serves as a

[13] Sigmund Freud, "The Unconscious, (The Metaphysical Papers)," *Internationale Zeitschrft* 3/4 (1915): 189-2013 and *Internationale Zeitschrft* 5 (1915): 257-69, quoted in Deleuze, *The Logic of Sense*, trans. Mark Lester and ed. Constantin V. Boundas (London: The Athlone Press, 1990), 87n5.

[14] Janet, *L'Angoisse à l'Extase*, 96.

point of entry, and when fixated upon as only a schizophrenic can, Deleuze says, words lose all sense.

> The procedure is this: a word, often of an alimentary nature, appears in capital letters, printed as in a collage which freeze it and strips it of its sense. But the moment that the pinned-down word loses its sense, it bursts into pieces; it is decomposed into syllables, letters, and above all into consonants which act directly on the body, penetrating and bruising it…. The moment that the material language is stripped of its sense, its *phonetic elements* become singular wounding. The word no longer expresses an attribute of the state of affairs: its fragments merge with unbearable sonorous qualities, invade the body where they form a mixture and a new state of affairs, as if they themselves were a noisy, poisonous food and canned excrement.[15]

With heightened sensation, words lose sense, such that the schizophrenic ramblings of Lewis Carroll or Antonin Artaud, as per Deleuze's examples, puncture the semantic surface, shifting attention from the semantic to the phonetic, and coming at long last to the sonic—the sonorous pivot adjoining both sides of Alice's wondrous mirror. As Deleuze tells us, "For the schizophrenic, then, it is less a question of recovering meaning than of destroying the word, of conjuring up the affect, and of transforming the painful passion of the body into a triumphant action, obedience into command, always in this depth beneath the fissured surface."[16] Like Carroll and Artaud, the case of Janet's Madeleine invites an intervention into the reality of sensation. Madeleine's visions, deistic and illusory, arise largely from her imagination, but the sounds she describes are, as far as we can tell from Janet's account, very real indeed. In *hearing*, it is not auditory hallucinations from which she suffers, but rather her delusions are stirred by particular sensations, conjured *in response* to sound. So, we might say that the only difference between Madeleine's stimulus and the electroacoustic work as stimulus remains the inter-subjectivity of the experience. If I (as her doctor) do not hear the sound to which Madeleine responds am I at a loss or is she?

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[15] Deleuze, *The Logic of Sense*, trans. Mark Lester and ed. Constantin V. Boundas (London: The Athlone Press, 1990), 87-8.

[16] Ibid*,* 88.

If I do not share my response to the electroacoustic work with my neighbor am I at a loss or is she?

Janet privileges the patient's own recollection, her suspension of thought and curiosity of objective world-forces, much in the same way as is done in Husserl's phenomenology (despite his antagonisms toward psychologism).[17] In contradistinction from the classical scientific method, which takes as its starting point the always-already given physical world, Husserl's phenomenology attempts to approach an object as if never before encountered. The practice is described thus in *Ideas*:

> We start by taking an example. Keeping this table steadily in view as I go round it, changing my position in space all the time, I have continually the consciousness of the bodily presence out there of this one and self-same table, which in itself remains unchanged. But the perception of the table is one that changes continuously; it is a continuum of changing perceptions. I close my eyes. My other senses are inactive in relation to the table. I have now no perception of it. I open my eyes, and the perception returns. The perception? Let us be more accurate. Under no circumstance does it return to me individually as the same. Only the table is the same known as *identical* through the synthetic consciousness which connects the new perception with the recollection… But the perception itself is what it is within the steady flow of consciousness, and is itself constantly in flux; the perceptual now is ever passing over into the adjacent consciousness of the just-past, a new Now simultaneously gleams forth, and so on. The perceived thing in general, and all its parts, aspects, and phases … are necessarily transcendent to the perception.[18]

For Husserl, perception is rendered as if through a cinematic camera, frame by frame, where no one frame proves the object, but an object—so-called, because of its necessary abstraction—emerges only through the process of cognitive *synthesis*. In its reducible form, the table is compared with all other tables regardless of shape, size, or color; such a

[17] Husserl's *Ideas* having first been published in 1928, while Janet's *L'Angoisse á l'Extase* arrived in 1926.
[18] Edmund Husserl, *Ideas*, trans. W. R. Boyce Gibson (New York: Collier-Macmillan, 1962), 117-8, quoted in Brian Kane, "L'Objet Sonore Maintenant: Pierre Schaeffer, Sound Objects, and the Phenomenological Reduction," *Organised Sound* 12/1 (2007): 16.

reductive typological ground is what Husserl refers to as the object's *essence*, arrived at through "imagined variation."[19] Thus, in Husserl's estimation, there is no difference between the real object—the concrete—and the object as imagined; its essence, now idealized, becomes an identity outside of immediate experience.

Janet esteems similar importance to such concentrated attention, if albeit to slightly different ends. For Janet, Madeleine's religious compulsion is necessary for her to thus fixate on the objects of her mind. Religious faith affords the appropriate determination, indeed, conviction. Faith, projected in tension with memory as an equal but opposite force, acts as a suspension of the object's properties. But faith is qualitative; there are degrees of faith just as there are variations of faith that may be set in motion depending on the form of received stimuli. "*L'existence conférée par cette croyance réfléchie sera donc beaucoup plus assurée, plus stable*: l'être, c'est ce que l'on droit par as sentiment immédiat, le* réel *c'est ce que l'on droit après réflexion.*"[20] The object, whether imagined or not, is fixed by the subject's faith that they believe what they hear or see; it is this immediate approval, confirmed upon reflection, that is, after all, the real.

2. Reduced Sense, Beyond Sense

Janet's "fixed" object and Husserl's "perceived thing" both aim to determine the identity of an object prior to abstraction, and under similar observations composer Pierre Schaeffer would make a distinction between "music for tape" and his new concept *musique concrète*. "Music for tape," Schaeffer says, emphasizes the origin of the sound in the medium (not necessarily magnetic tape, but also "the generator, the synthesizer, and so on"). Conversely, *musique concrète* indicates a certain "approach."[21] Schaeffer's approach (similarly to Husserl's and Janet's) expresses a certain attitude toward the idealized sound object (*objet sonore*); his *musique concrète* instantiates sound outside of signification, as Jean-Paul

[19] Edmund Husserl, *Cartesian Meditations*, trans. Dorion Cairns (The Hague: Martinus Nijhoff, 1970), 70, quoted in Kane, "L'Objet Sonore Maintenant," 19.

[20] I have inserted an asterisks at the citation Janet provides to Henri Bergson's, *L'évolution créatrice* (1907), 301, quoted in Janet, 231.

[21] Pierre Schaeffer, interview with Michel Chion, reproduced in *Cahiers recherche/musique* 4, 1977, 122, quoted in Marc Battier, "What the GRM brought to music: from musique concrète to acousmatic music," *Organised Sound* 12/3 (2007): 196.

Sartre said of the phenomenological method, "by separating it from everything else."[22] In order to arrive at this reflective position, Schaeffer advocates a certain attention to sound or intentional listening as summed up in the term "reduced listening [*écoute réduite*]."[23]

Music theorist Brian Kane compares Schaeffer's "reduced listening" to Edmund Husserl's phenomenological reduction, as corresponding approaches that aim to neutralize "a common-sense view of the world" in favor only of that which is observable upon first encounter. According to philosopher Don Ihde, Husserl's reduction takes advantage of the phenomenological suspension, *epoché* as "a rule that *excludes*, 'brackets,' 'puts out of play,' all factors that may not be noted as 'bodily present' or actually fulfillable (intuitable) within ongoing experience."[24] And similarly, Kane notes that,

> For Schaeffer, the natural standpoint must be overcome if we are ever to uncover the grounding of our musical practices. By bracketing out the physically subsisting fact-world, by allowing us to make no judgments in relation to it, and by leaving us only with perceptual experience in itself, hearing can no longer be characterised as a subjective deformation in relation to external things…. Listening becomes a sphere of investigation containing its own immanent logic, structure and objectivity.[25]

For Kane, Schaeffer's and Husserl's approaches are interchangeable, and so he proposes to apply the same critiques launched against Husserl also to Schaeffer. While Schaeffer *claims* to ignore his prior convictions so as to approach a sound object as sound in itself—as concrete—he nevertheless falls into a trap by relying on the *a priori* identity of the object as a pure or "abstract truth."[26] As Kane points out, Husserl's phenomenology—and Schaeffer's application thereof—privilege a pre-existing world of objects that the "approach" merely confirms. For Kane, rather than recover an "originary experience" that escapes the observer's grasp, both Schaeffer's and Husserl's projects rely on an index of

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[22] Jean-Paul Sartre, *Sketch for a Theory of the Emotions*, trans. Philip Mairet (London: Methuen, 1962), 27.
[23] Pierre Schaeffer, *Le Traité des Objets Musicaux: essai interdisciplines* (Paris: Éditions du seuil, 1966), 270-2.
[24] Don Ihde, *Listening and Voice: Phenomenologies of Sound* (Albany, NY: State University of New York Press, 2007).
[25] Brian Kane, "L'Objet Sonore Maintenant: Pierre Schaeffer, Sound Objects, and the Phenomenological Reduction," *Organised Sound* 12/1 (2007): 17.
[26] Ibid.

experienced objects and aspire to assign authorship to a given source and cause that exists merely in the mind of the observer.

I would argue, however, that Husserl's and Schaeffer's respective approaches, while similar in the abstract, appear to diverge when we investigate their practical application; where Husserl's approach is vision-centric, Schaeffer's, of course, turns its attention to sound. Whereas Husserl takes an image as evidence of the physical, tangible body, for Schaeffer there is no such equivalent. Though Kane takes the visual and auditory as equivalent such that he does not hesitate to draw parallels between the two methods, the sounds that Schaeffer analyzes have no visible representation; there is no visible equivalent of sound which can serve as evidence for Schaeffer, and the quality of the sensed makes a difference.

According to philosopher Don Ihde, an inability to distinguish between kinds of observers evinces phenomenology's lack of nuance. It is a limitation that forgoes any consideration of diverging experiences among different people, for example, between hearing and deaf persons, and between distinctive qualities among the senses themselves. For instance, Ihde argues that although phenomenology has always employed imagination as a tool, its descriptive categories are still less rigorous than those of the artist.

> If I place myself a 'white' duck, a 'white' chair, and a 'white-haired' old lady and assume the usual context of the philosopher's way of 'seeing' the world, I will probably structure the situation by asking what is *common* to these three 'objects,' and probably I will quickly come up with 'whiteness' or some such conclusion. Yet, in a critical examination it is not at all clear or 'obvious' that there is this commonality as perceived, for were I an artist I might well note that the 'white' of the duck is a soft, feathery white in its concreteness; the white of the chair is glossy, hard; and the string gray with white of the old lady's hair all strike me as 'vastly different.' Does the philosopher 'overlook' the concreteness of the various whites? Or does the artist not attend to abstract universals?[27]

[27] Ihde, *Listening and Voice*, 33.

On the comparison of the philosopher and the artist, Ihde takes issue with an ocular bias among phenomenological philosophies, a prejudice that becomes increasingly "apparent" not only in the objects that phenomenologists choose to study, but even in the types of investigators that are named "phenomenologists," as is implied already in the above comparison of the philosopher and artist. According to Ihde, the occluded categories adjoined by the selection of kind previously detailed, the "white" chair versus the "white" hair, are precisely the impasses that must be met and addressed when studying sound. Regrettably, the typical phenomenologist, whether Husserl or Schaeffer, privileges one sense over the others and, by doing so, takes for granted an implicit separation between these senses, when all evidence seems to indicate that the senses necessarily communicate. A reduction, as Ihde says, is precisely "a 'reduction' *to a sense*."[28] Rather than promote distinctive "modes" of perception, we should nevertheless take note of the perceptual nuances separating sound and sight, of the degree of gradation in the diverging qualities of the senses.

Now returning to the (cap)abilities of the observer, a second issue Ihde might have recognized in Kane's comparison of Husserl's table example with Schaeffer's sound object, is that, unlike the phenomenologist who studies the world as it appears, either before her (Husserlian or "first" phenomenology) or the world within which she is always-already immersed (Heideggerian or "second" phenomenology),[29] Schaeffer's listeners are confronted with sounds that they may never have encountered in any *actual* real-world setting—though this is not to say that what we hear in recordings is not very *real* to us. It is because of music's imaginative frontier, claims Ihde, that music affords a unique entryway into a more rigorous phenomenology than is offered by either Husserl or Heidegger, since in sound, and especially electronically composed music, one does not take-as-given "sense" as experientially separate. Without privileging hearing over the other senses, it is notably an attention to the qualities of the senses that phenomenological investigations may bring about new understandings of perceptual experience. If the goal of phenomenology is to deconstruct common sense and to reconstruct new habits, new language, and new forms of attention, then "Phenomenology, in making 'common sense' or, better, mundanity,

[28] Ibid, 43.
[29] Ibid, 18-44.

thematic, also calls it into question."[30] As Ihde argues elsewhere, the unique sounds of electroacoustic music, wherein new sounds are generally produced for each piece, provide a space in which to explore perceptual potentials that "resonate" beyond the limitations of tangible objects, and even beyond what makes sense.[31]

Electroacoustic music has a long history of taking sounds from one place and time and using them toward alternative ends altogether; this phenomenon of disruption was given the name "schizophonia" in the 1970s by R. Murray Schafer.[32] As a characteristic facet of electroacoustic music, the schizophonic habit is frequently cited in regard to Pierre Schaeffer's philosophy of listening and, as we will see, tends to be exploited to the extreme by composers creating erotic electroacoustic works. But Schaeffer's *musique concrète* was conceived as somewhat of an antidote to "naïve" listening, to hearing music merely as a collection of identifiable sounds from the real world.[33] Like diligent phenomenologists, Schaeffer's listeners are asked to confront their commonly held beliefs about sound and to approach each piece—and each sound in each piece—anew, without prior associations, convictions, persuasions, or considerations of a sound's source and cause. The Schaefferian approach, with an arguably more challenging objective than classical phenomenology, forces the listener/investigator to not only confront what she or he takes for granted as *common* sense, but the sensical in the context of this music conflicts in many ways with the sensical of the extrinsic, everyday actuality. In short, electroacoustic listeners must make sense of what, for all intents, is auditory illusion.

[30]Ibid, 18; 22.
[31] Don Ihde, "Technologies—Musics—Embodiments," *Janus Head* 10/1 (2007): 21-2.
[32] R. Murray Schafer, "Schizophonia," in *The New Soundscape: A Handbook for the Modern Music Teacher* (Don Mills, Ontario: BMI Canada Ltd., 1969), 43.
[33] Pierre Schaeffer, "La these naïve du monde. L'époche," in *Traite des objets musicaux*. (1966; Paris: Editions du Seuil, 2002), 265.

3. Pierre Schaeffer's "Erotica" Movement

"Man is an instrument that is too seldom played."[34]

- Pierre Schaeffer

Pierre Schaeffer's *Symphonie pour un homme seul* (1950-1) is the first electroacoustic piece I've come across with an explicitly erotic designation. "Erotica" is the title of the work's rarely discussed fourth movement. Conceived in the late 1940s as "an opera for the blind," with its final version appearing in 1966, *Symphonie pour un homme seul* is divided into twelve scenic movements, (1) Prosopopée I, (2) Partita, (3) Valse, (4) Erotica, (5) Scherzo, (6) Collectif, (7) Prosopopée II, (8) Eroïca, (9) Apostrophe, (10) Intermezzo, (11) Cadence, and (12) Strette.[35] *Symphonie* uses a combination of sounds that are, as Schaeffer says, either "interior to man" (various aspects of breathing, vocal fragments, shouting, humming, whistled tunes) or "exterior to man" (footsteps, etc., knocking on doors, percussion, prepared piano, orchestral instruments).[36] Taken together the sounds are meant to paint a complete sonic picture of man, however idealized. The composer explains,

> The lone man should find his symphony within himself, not only in conceiving the music in abstract, but in being his own instrument. A lone man possesses considerably more than the twelve notes of the pitched voice. He cries, he whistles, he walks, he thumps his fist, he laughs, he groans. His heart beats, his breathing accelerates, he utters words, launches calls and other calls reply to him. Nothing echoes more a solitary cry than the clamour of crowds.[37]

In other words, the sounds of the human body resonate.

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[34] Pierre Schaeffer, *In Search of Concrete Music*, trans. Christine North and John Dack (Berkeley: University of California Press, 2012), 48.

[35] Pierre Schaeffer, *La musique concrète* (Paris: Presses Universitaires de France. 1973), 22.

[36] It is important to mention that these categories are not "human" and "non-human," as is written elsewhere, for example, in Peter Manning, *Electronic and Computer Music* (Oxford: Oxford University Press, 2013), 24. For Schaeffer the crux of the matter is sound *in relation* to man, and not the realm of possibilities implicit from a "non-human" context.

[37] Schaeffer, *In Search of Concrete Music*, 55.

Around the time Schaeffer composed *Symphonie pour un homme seul* he gained access to various sound manipulation tools, audio signal generators, filters, and also the first tape recording device arrived at Paris's newly founded Groupe de Recherche de Musique Concrète. This is to say that Schaeffer *could* have easily transformed or distorted his source sounds into so-called objective entities that no longer serve as referents to actual, musically extrinsic objects, and yet he chose to retain such identifying features.[38] 1951 would have been the first year Schaeffer had (officially) come to work with tape, though he was still using this technique of "closed-groove looping," as it is now regarded, using a sticker or other objects to block the player's needle from advancing along the spiral grooves and forcing it to skip back repeatedly over the same groove (as when the record is scratched). As the story goes, Schaeffer first became occupied with looping through a happy accident brought on by a scratched vinyl record. The scratch caused a segment of a bell (absent the attack) to repeat giving the impression of a sustained sound, and this technique came to be widely employed throughout *Symphonie pour un homme seul.*[39] In both tape and vinyl looping, the length of the looped fragment is dictated by the size of the record, though a looped sample may be slightly transformed depending on the speed and direction of the record's playback. On the importance of Schaeffer's happy accident in the formation of his *musique concrète* philosophy, Simon Emmerson notes that, "such regularly repeated sound rapidly loses its source/cause recognition and becomes 'sound for its own sake.'"[40] Schaeffer continued his fascination with furthering the technique by way of the various tools and electronic "instruments" he developed and employed at this time, including the three-head tape recorder (1952) and the morphophone (1953), for example.[41] That Schaeffer did not interfere with the material in *Symphonie* enough to change the audible identity of the voice and piano in "Erotica," that he used vinyl records and not tape, and that he maintained extrinsic connections with real-world sounds, points to his desire for

[38] Marc Battier, "What the GRM brought to music," 195.
[39] Daniel Teruggi, "Technology and musique concrète: the technical developments of the Groupe de Recherches Musicales and their implication in musical composition," *Organised Sound* 12/3 (2007): 213.
[40] Simon Emmerson, *Living Electronic Music* (Aldershot, UK: Ashgate, 2007), 67-8.
[41] Daniel Teruggi, "Technology and musique concrète: the technical developments of the Groupe de Recherches Musicales and their implication in musical composition," *Organised Sound* (2007): 217.

listeners to *recognize* these sources. As Schaeffer himself says, at least of the first version of the work, "The objects of the initial series were perfectly recognizable…"[42]

In the case of the "Erotica" movement, listeners are confronted with laughter, breathing, and sighing that, as the title insinuates, are cried out in a sexual encounter. Here closed-groove looping produces a regular rhythmic cycle within a temporally delimited framework, a periodicity reminiscent of the pulsating sexual organs in *the act* together with the vocalizations that typically accompany it. In Schaeffer's words, the movement is meant as a duet in which a "man's voice [seeks a] woman's voice" with "light percussion accompaniment" and a "Tahitian record."[43] That the movement is entitled "Erotica" and not "Rapport" (as in, *les rapports sexuels*), or something comparably overt, attests to its mere suggestiveness, to the movement's purpose of arousing erotic desire but of not *re*-presenting sex. It is through repetition that the temporality of the "Erotica" movement itself emerges, and this constant provocation through repetition is meant to arouse an object-like, or generalizable erotic quality.

Loop No.	**1**	**2**	**3**	**4**	**5**	**6**
Time	0:02-0:05 pause 0:07-0:11	0:15-0:32	0:32-0:39	0:39-0:48	0:48-0:57	0:58-1:15
Duration	:09	:17	:07	:09	:09	:17
Loop Description	"oua" < < <	TA-ta (A-B) and vamping vaudeville style um-pah um-pah	cycle rotating between pitches f-A-g-f-A-g	Overlapping "sustained" pitch	Vowel-consonant ♫♩ (E-F#)	repeated descending pitch ⌒

Table 1.1 Structure of the "Erotica" movement from *Symphonie pour un homme seul*.

[42] The "initial series" refers to the first version of *Symphonie pour un homme seul* (1950). Schaeffer, *In Search of Concrete Music*, 58.

[43] Schaeffer, *In Search of Concrete Music*, 52.

Structurally, "Erotica" consists of six successive looping background tracks made primarily from short vocal snippets (Table 1.1), and atop this looping one hears the alluring and cooing laughter of a mysterious and unidentifiable woman. The first background loop (0:02-0:05 and again 0:07-0:11) features a crescendoing, ascending vocalization on the syllable "oua"; the second (0:15-0:32 with fade out) alternates TA-ta on two notes approximating the pitches A and B and is accompanied by a vamping vaudeville style um-pah um-pah; the third loop enters directly after the second fades out and is a three-note cycle rotating between pitches f-Ā-g-f- Ā -g;[44] after that, a fourth loop (0:39) sounds as a continuously sustained pitch, given that the sampled fragment has one prolonged pitch from beginning to end (much like the bell in the happy accident); in a fifth loop (0:48-0:57) the voice returns; and the movement culminates in one last stream (0:58-1:15), a repeated descending pitch, that is comparable as a same-but-opposite fragment of the first loop.[45] Atop these loops, the woman's laughing and sighing (I return to a discussion of the perception of the gendered voice in Chapter 3) repeats her own alimentations through mechanically induced looping, though less periodically than is heard in the background. The woman's periodicity seemingly disrupts the continuous background looping with her curiously tumbling laughter, which rises progressively in pitch over the course of the brief movement until, at long last (1:05), a short, codetta-like return of the opening laughter signifies the movement's conclusion.

As an early example of Schaeffer's philosophy put into practice, the source sounds in "Erotica" border on the abstract while also maintaining concrete references. Though the vocal sounds originate from an actual body, they are transformed beyond any human being's ability to perform them. The piece walks a fine line between record as "fixed" evidentiary representation and the schizophonic uncanniness described by R. Murray Schafer, "how a voice or music could originate one place and be heard in a completely different place miles away."[46] Given the movement's identifiable human voices, Schaeffer's "Erotica" did not (or had not yet) successfully realized his aspirations for "acousmatic music": an organized collection of sounds for which no origin is

[44] A diacritical dash is added to the "A" to indicate metrical emphasis.
[45] Times refer to Track 4 of Pierre Schaeffer, *L'Œuvre musicale Volume 2*, INA-GRM ina c 1006-09 cd, 1990.
[46] R. Murray Schafer, "Schizophonia," in *The New Soundscape: A Handbook for the Modern Music Teacher* (Don Mills, Ontario: BMI Canada Ltd., 1969), 43.

determinable.[47] But, to challenge an assertion that Schaeffer's *musique concrète* relies undoubtedly on *a priori* objective forces, we must remember that the composer did in fact modify sounds, however simplistically, to such an extent as to be producible *only* by electronic means. It is for this reason that Schaeffer finds written notation unsuitable for *musique concrète*.[48]

In contrast to "ordinary music," which is conceived first mentally as an abstracted concept, proceeding then through theoretical notation to be executed in performance, *musique concrète*, conversely, originates in material, preexisting elements, and proceeds *toward* the abstract. While the voices in "Erotica" vaguely manifest transcontextual associations among listeners, one cannot point to existing objects of the extrinsic world outside the piece that produce these sounds. In this sense, Schaeffer's sound object *is* distinctively object-*ive*; and his delineation of *Symphonie* into two proportionate "Prosopopée" further supports this approach.

Prosopopée stems etymologically from two words. *Prósopon*, the mask or face in ancient Greek theater revealing a character's emotional state to the audience (while shielding the face of the actor), an identity however stilted, and *poiéin*, meaning to make, the verb from the same root as the noun *poiesis* (see my Preface, p. xvii). Schaeffer's *Prosopopée* present the appearance intended by the composer, shielding or veiling the origins of a sound only to the point that a listener is left questioning their beliefs. His contribution then aims to sidestep the question of *who* or *what* makes sound, and of who or what makes sound *erotic*. Whether or not eroticism is aroused in listeners by what is heard or even if it is evoked by the musical constitution of "the work" as such, the "Erotica" movement is meant only to capture or bottle up the *essence* of the erotic. Given common sonically erotic tropes, such as the moaning woman—though repetition of any kind can be enticing to varying degrees—the erotic then becomes the shared referential point of access to the erotic musical artwork, but neither the source/cause of the originating sounds nor the effects of the erotic essence can be declared as definitively intersubjective. The object, in this case, is not an instance of individuals engaged in sexual intercourse; rather, it is nothing other than "Erotica" *itself*.

[47] Pierre Schaeffer *Traité,* 91.
[48] Schaeffer, *In Search of Concrete Music*, 25.

4. Erotics Anonymous: The Case of Luc Ferrari

After a number of momentous collaborations, including the several-year-long experiments collectively titled *Symphonie pour un homme seul*, Pierre Schaeffer and Pierre Henry arrived at a great disagreement of artistic (and personal) interests, and in 1958 the two went their separate ways. Henry took with him many friends, composers, and researchers, from the Groupe de recherches de musique concrète (GMC) and Schaeffer was forced to repopulate the studio anew.[49] That year he attended a concert of original works by Luc Ferrari (1929-2005) with the composer at the piano, and Schaeffer, thoroughly impressed, invited Ferrari to join his newly titled Groupe de recherches musicales (GRM).[50] In 1962, Ferrari became director of this group, and he, together with composer Beatriz Ferreyra, singer Simone Rist, engineer and composer Guy Reibel, and physicist Enrico Chiarucci, sought to test Schaeffer's concept of electroacoustic ear training by designing a *solfège* for electroacoustic music, an as yet unstandardized musical practice. This research eventually culminated in Pierre Schaeffer's *Traité des Objets Musicaux* (1966).

While, at this time, Beatriz Ferreyra and Schaeffer moved toward the goal of some generalizable typology of musical parameters, Luc Ferrari did not share this vision. He instead went on to explore the more particular attributes of recorded sound as a medium. Setting himself apart from Schaeffer's research-oriented practice, Ferrari sought to engage with the real world around him, with sounds as they occur in their environmental context, a practice Ferrari termed "anecdotal music."[51] Eric Drott explains,

> Unlike music that derives its meaning from the play of abstract forms, anecdotal music has the advantage of not requiring any specialized knowledge of musical syntax or style to be deciphered. And insofar as anecdotal music fashions messages out of the quasi-universal code of everyday sonic experience, it is within the grasp of any potential listener, from the most naive to the most educated. Ferrari thus

[49] Brigitte Robindoré, "Luc Ferrari: Interview with an Intimate Iconoclast," *Computer Music Journal* 22/3 (1998): 8.
[50] Marc Battier, "What the GRM brought to music."
[51] Robindoré, 11.

> describes his anecdotal works as 'an attempt to find a music that is at the same time simple and unfamiliar, and thereby suitable for mass dissemination.'[52]

Ferrari's interest in "anecdotal music," lay in capturing and recording sonic environments with minimal interference from the hand wielding the microphone, though he did not deny the microphone's immanently mediating presence. Such interference invokes Brian Kane's use of the term *technê*, which Benjamin Downs' review of Kane's book summarizes as "any 'technique or strategy' that introduces spacing between the three members of the sonic trinity," that is, of source, cause, and effect.[53]

Ferrari's project conflicted with Schaeffer's ideology in its basic premise. Schaeffer's concern for devising a specialized approach to sound—a *solfège*—surely did not match up with Ferrari's altruistic approach, whereby every individual is encouraged to listen to and even to record her, his, or their own electroacoustic music. Unlike Ferrari, for whom music was created unconditionally, Schaeffer's approach necessitated a certain skill set, requiring only cultivated listeners. Ferrari's philosophy relieved him from the lofty status of composer, putting him conceptually (but not musically) in a camp with John Cage.[54] Ferrari's passive Cagean attitude, which included also his invitation to non-expert participants (practitioners and auditors) is easily observed in his compositional approach to *Presque rien n^{o} 1*, *ou Le lever du jour au bord de la Mer* (1967-70).

Over the course of several months, Ferrari, then living in a seaside town on the Croatian coast, would place a microphone outside his window to record between 3:00 and 6:00 in the morning every day, capturing the passing fishermen, the sounds of the coast, and the world just awakening. These recordings were then condensed, with supposedly minimal interference from the composer, into a unified scene or environment. According to Ferrari, this piece anticipates the electroacoustic practice that became known under R.

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[52] Eric Drott, "The Politics of *Presque rien*," in *Sound Commitments: Avant-Garde Music and the Sixties,* ed. Robert Adlington (Oxford: Oxford University Press, 2009), 155.

[53] Benjamin M. Downs, Review of *Sound Unseen: Acousmatic Sound in Theory and Practice*, by Brian Kane, *Music Theory Spectrum* (2016): 2, published online 21 February, 2016, last accessed 22 April, 2016, http://mts.oxfordjournals.org/content/early/2016/02/21/mts.mtw003.full.pdf+html.

[54] In distinction from himself, says Ferrari, "Cage was not terribly concerned with sound, but rather with concepts." Robindoré, 11.

Murray Schafer, Barry Truax, Annea Lockwood and many others, as soundscape composition.[55]

Ferrari's series of works with the title *Presque rien* are mediated only by the microphone (and not the composer's hand) so as to present musical materials without stipulating their aesthetic ordering, not unlike Cage's chance works such as his graphic score pieces (for example *Music for Carillon no. 1* from 1952), which leave organization to the hands of the performer.[56] To provide some wider context for Ferrari's compositional motivations, it is worth noting that both Stockhausen and Boulez took issue with Cage's indeterminate methods. By refusing to actively structure the work, Pierre Boulez felt that Cage actually asserted a more dictatorial stance than composers who only stipulated the manner in which a musical work should be executed according to a notated score. Without the composer's aesthetic intervention, composition threatens to become reduced to mere mechanism rather than develop into an *art*-work (or "monument" to borrow Deleuze and Guattari's term—more on this later).[57]

Brian Kane disagrees with Ferrari's assertion that *Presque rien* represented the environment as it *actually* sounded—with minimal interference. For Kane, despite the composer's intentions, the piece does not present the environment in a realistic manner and is in fact aesthetically molded.

> In a soundscape recording, the listener relies on aural cues for the reconstruction of spatial relations, evaluation distances according to their volume, reverberation, and

[55] Robindoré, 13; Barry Truax, "Electroacoustic Music and the Soundscape: The Inner and the Outer World," in John Paynter, *Companion to Contemporary Musical Thought* (New York: Routledge, 1992), 374–398; R. Murray Schafer, *The Soundscape: Our Sonic Environment and the Tuning of the World* ([1977] Rochester, VT: Destiny Books, 1994). For more on soundscape composition in practice, see the analysis of Barry Truax's *Song of Songs* in Chapter 3.

[56] Ferrari has composed four works under the heading *Presque rien*, and there are: *Presque rien* No.1 – *le lever du jour au bord de la mer*, *Presque rien* No. 2 – *ainsi continue la nuit dans ma tête multiple*, *Presque Rien Avec Filles*, and *Presque rien* No. 4 – La remontée du Village, collected and reissued recently on, Luc Ferrari, *Presque rien*, GRM 2012 – REGRM 005 et éditions MEGO – INA GRM, double vinyl discs. A more recent work is also titled, *Apres Presque rien* (2004).

[57] Stockhausen characterized Cage's music as "combinatorially interesting but musically banal." Karlheinz Stockhausen, "The Origins of Electronic Music," *The Musical Times* 112/1541 (1971): 649. Deleuze and Guattari subscribe to the phantasmagoric outlook, writing, "The artist creates blocs of percepts and affects, but the only law of creation is that the compound must stand up on its own. The artist's greatest difficulty is to make it *stand up on its own*." Gilles Deleuze and Félix Guattari, *What is Philosophy?*, trans. Hugh Tomlinson and Graham Burchell ([1991] New York: Columbia University Press, 1991),164. See Chapter 4.

> spatial attenuation. A well-mixed soundscape can give us the illusion of depth, and we will hear *through the recording* the intended spatiality: the distant water lapping, the closeness of footsteps on the floorboards, the passing of the motor, a singing voice reverberating of the hard surfaces of the street. In other words, we receive *an image*. *Presque rien* does not present this kind of soundscape. If one listens closely to the mix, the listener may notice that everything is pressed up to the surface and presented with nearly equal audibility and clarity…. When have you ever experienced an auditory environment in which motors, insects, and lapping waves are all *equally audible*? Ferrari's mixing resists a realistic reconstruction of the environment, effacing the difference between foreground and background.[58]

Putting aside the sheer limitations of the electronic compositional medium, where the nuances—the type of dimensional depth and overshadowing—Kane desires from Ferrari may not have been available at the time this music was composed, Kane argues that because the presented environment is not faithful to the real experience, our ear is drawn to the manner of presentation—to the medium of recording—forcing us to therefore recognize the piece (or the pieces of the piece) *as recorded*. From this Kane concludes that *Presque rien*, far from representation, is only a *vestige* of the original environment.

Drawing on Jean Luc Nancy's writing, Kane proposes that the "nothing" of Ferrari's *Presque rien* pertains to its very essence as artwork, to the generalizable ontological status of art in the current collective consciousness. Kane summarizes Nancy, writing:

> The challenge is to think about the trace not as something that leads us back to the source or idea that produced it or would subsume it. Rather, it is to try and think of the trace *as a trace*, as surface, as being right there at the surface and opaquely present in all of its sensibility. This cluster of Nancian terms—vestige, exposure, surface, and trace—spurs us to think of the artwork differently: not as the artwork intended to represent nothing, but as the artwork that has nothing to represent.[59]

[58] Brian Kane, *Sound Unseen: Acousmatic Sound in Theory and Practice* (Oxford: Oxford University Press, 2014), 131.
[59] Ibid, 130.

Kane's theoretical framework, as I read it, is an ascension to what he recognizes as Ferrari's failed ambition to capture reality. Toward this end, the theorist's only means of justification is to remove music of its context completely, to raise *Presque rien* to a representative example of no less than "the recorded character of the recording."[60] Kane invokes Nancy, who speaks of art in general, to distract us from the intricacies of this specific work.

> Perhaps one could state the paradox like this: While trying to meet the transcendental condition of *recording whatever*, the recording is also stuck in the immanent condition of always being a recording of some particular thing.
>
> This is the paradox of *Presque rien*. It is *almost nothing* because it is *almost anything whatsoever*. And to be *almost anything whatsoever* means that while the recording records this particular morning at this particular seaside in this particular Croatian seaside town, it is also indifferent to this fact. It could be replaced by something else, by some other recording, but this replacement would still encounter the same paradox.[61]

Kane's point is that, unlike Schaeffer's vision of *musique concrète*, which asks listeners to focus on sound in itself, Ferrari's anecdotal soundscapes demand that listeners attend to the recording *as recording*, to remain ever-aware of the critical ear of the composer and his imposing hand in creation. But clearly there are some repercussions to opening specific artworks up in this way, that is, to resolving specific musical compositions as abstract case-studies.

In arguing that Ferrari's unrealistic rendering draws attention not to music but only to medium, Kane seems, within his own paradox, to privilege tape as a medium that uniquely transcends the work of the performers or environment it captures, not to mention that his notion of "reality" seems far more restrictive than the literary definition. Why, for instance, should the reality presented by Ferrari be any less real than the novels of Dostoevsky or Flaubert? Is musical realism not defined by the same collectively agreed upon constructs as literary realism? In ignoring the origins of sampled sounds, in focusing merely on the

[60] Ibid, 131.
[61] Ibid, 133.

surface of the recording and the superficial medium of the object, Kane threatens to erase *différance* as a necessary part of artistic practice and experience. It is, of course, quite easy to reduce a recording to nothing more than a recording and thus silence the very voices captured not *in the medium* but in its Being as a musical text. As we know, Derrida's term *différance* draws attention to the written form of this word, to a deliberate misspelling of *difference*. This homophonic erasure parallels the transposition granted by the electroacoustic project, to capture the voices of objects and re-present them as speaking of and *for* the composer who aesthetically organizes these sounds. The electroacoustic trace thus points to the process with which it was captured, to the process of having been recorded, and hence, such a work that emphasizes the recording *as recording*, is comparable to other electroacoustic works as an aesthetic, not *realistic*, organization of sound.

Actually, I agree with what I read as Kane's ultimate conclusion, that musical realism is unique among the arts, especially as realism is conveyed within the electroacoustic or acousmatic tradition. I do not, however, agree that the capturing medium is more apparent than the resulting sound. Imagine that one does not listen to *Preque rien* through headphones, which force sound to the surface or to the threshold of a listener's physical space, but what if instead the recording is broadcast through multiple speakers set at varying distances from the listener? What if the listener is not in the concert hall, but an unsuspecting passerby on streets strewn with speakers, such as the case of Max Neuhaus's early sound installation *Drive In Music* also from 1967? The type of response Kane asks of his listeners requires that listeners hear acousmatic sounds in a very specific way, which brings us to a question of performance practice in electroacoustic music. But before I discuss broadcast traditions, let us first inquire about performers, about source and cause in this tradition. Electroacoustic music aligns itself with non-fiction and photography as an art that captures the semblance of actual things, but also of actual people. It is a medium that likely calls for citation practices that have rarely been implemented. Surely the ethics of surveillance have been on the minds of those wielding sound recording equipment since the advent of telegraphones[62] and the first wiretapping. And we should not be so naive as to

[62] The telegraphone, invented around 1900 by Vlademar Poulsen, was first device capable of recording sound magnetically. "The Poulsen 'Wireless,'" *The Graphic: An Illustrated Newspaper* (London, UK), Jan. 12, 1907, 62, accessed June 9, 2015.

assume that recording, even in its beginnings, did not plunge into the murky waters of voyeurism.

Given his affiliation with Schaeffer in the years before composing the first of four pieces with the *Presque rien* title, it would not be a stretch to assume that Ferrari was influenced by Schaeffer's compositions, though he claimed to avoid falling into the hunt for *concrète* objectification often attributed to Schaeffer. I would like further to draw out Schaeffer's influence as it is already apparent in Ferrari's earliest works precisely in their conceptual bond between sound source and recorded result, the very relation Schaeffer is said to have dispelled. Kane dismisses Schaeffer's theory of reduced listening for its "objective" approach, but emphasizes that, despite our ability to recognize the voice in the *Symphonie* as a voice, we are still unable to pin down a definitive identity for that sound's source and cause. Thus, listeners attuned both to Ferrari's soundscapes and to Schaeffer's concrete creations are trapped in ambiguity—in the spacing, to use a term Kane borrows from Derrida—between effect, cause, and source. But this space is nevertheless negotiable.

Ferrari acknowledges his influence from Schaeffer (and Henry's) *Symphonie* in an earlier tape piece *Hétérozygote* (1963-4), but says that this connection was not observed by Schaeffer, who was harshly critical of the piece. Like the "Erotica" movement of *Symphonie*, Ferrari's *Hétérozygote* features relatively few source recordings with "practically no manipulations."[63] What links this work with the later series of *Presque rien* works is the presence of unadulterated human voices speaking in identifiable languages, though the exact identities of the performers, not credited on the album, are hidden from the majority of the work's listeners. Unless one recognizes the voices, the performers of Ferrari's *Hétérozygote* or *Presque rien* or Schaeffer's "Erotica" movement remain anonymous.

Now to turn to Ferrari's later erotic electroacoustic works, such works as *Unheimlich Schön* (1971), a *hörspiel* (radio drama) done at Südwestfunk (SWF) Baden-Baden for a "respirating young girl who thinks of something else," and the third piece of his anecdotal series, *Presque rien avec filles* (1989), described thus by the composer: "*Dans des paysages paradoxaux, un photographe ou un compositeur est cache, des jeunes filles sont là en une sorte de déjeûner sur l'herbe et lui donnent, sans la savoir, le spectacle de leur intimité*. [In

https://archive.org/stream/graphicillustrat1907unse#page/n53/mode/2up

[63] Drott, 154.

paradoxical landscapes, a photographer or a composer is hidden, young girls are there in a kind of déjeûner on the grass and give him, without they know (*sic*), the show of their intimacy.]"[64] Ferrari's self-proclaimed erotic pieces often feature women in a central role (as do most electroacoustic works featuring the voice).[65] Ferrari's recorded girls do not know that they have been documented or "captured," and we can suppose further that Ferrari never informs them. However naively one may want to read "the intimacy" in the composer's description of *Presque rien avec filles*, Ferrari's repeated emphasis in interviews and in publications on the sexual allure of recording as a form of veiled observation—*sur-veil(l)*-ance—seemingly maintains a certain edge.

If, as per Kane, the electroacoustic *Presque rien* is indifferent to its environmental source, then the recorded content would have little consequence for listeners, but I argue that sound is of consequence, as are the intentions of the composer, to the manner in which a work is received. Listeners *do not* merely hear the recording as such, and I would argue further that having erotic intentions, as Ferrari often does for his works, significantly influences how listeners approach his compositions—even the most naive listeners, to use Schaeffer's term.

5. Whose Voice Is It, Anyway?

Ferrari's electroacoustic music flirts with the boundary between source and representation, between documentation and creation. His many erotic electronic works build on his notion of "anecdotal music," of taking sounds from the world and re-sculpting them toward particular artistic aims—a familiar idea today, but still innovative for Ferrari's earliest compositions. As the composer explains, by recording a sound and then listening to it intently again and again in a studio, a composer can approach sound in a very intimate and sensual manner. By this attitude, Ferrari maintains some connection with his mentor Schaeffer: in supposing that the recording, once divorced from its originating environment,

[64] Translation is taken from Ferrari's website, and includes all grammatical and typographical errors as published therein. http://www.lucferrari.org first accessed 29 April, 2015.

[65] Hannah Bosma "Bodies of Evidence, Singing Cyborgs and other gender issues in Electrovocal Music," *Organised Sound* 8/1 (2003): 5-17. In distinction from the electroacoustic, or prerecorded works, Ferrari's text-based compositions remain relatively open to gender, for example, *Pornologos 2* (1971), a text score for private individuals or private groups.

acquires anonymity, sound becomes sound as such with no previous ties to a source or cause. When confronted by his interviewer Brigitte Robindoré about recording a woman unbeknownst to her, Ferrari proclaimed that this sly manner of recording is simply part of the game.[66]

> FERRARI: Take a woman encountered in a German market who plays with her voice when buying a kilogram of potatoes. Something absolutely extraordinary happens in the vocal sounds at that moment. How that woman buys the potatoes is a mysterious and profoundly human thing and a profoundly sensual thing, too. This observation opened up my preoccupation with sentiments. Naturally many find this approach to be so incongruous to music; they feel it is almost pornographic. Yet I discovered this. It is almost as if I were a musical psychoanalyst. How does the psychoanalyst hear his patient? Once I have recorded the woman buying the potatoes, I feel the same intimacy as the psychoanalyst in discussion with his patient.
>
> ROBINDORÉ: The difference being that the woman in the German market may not know that you are recording her, while the patient is usually conscious of his relationship to the psychoanalyst.
>
> FERRARI: There is another facet to the game here. Indeed, I preserve bits of intimacy, like stolen photographs. Naturally, she does not know, and it is just this aspect that makes it even more remarkable. I have captured something on tape, I bring it into my intimate world—my home studio—and I listen to her again. And here an extraordinary mystery is revealed. As ordinary as it appears on the surface, I am discovering this act in the studio as a blind person, as there are no more images. There is only the sound. And what happens in the voice at this moment? Something extraordinary. I learned this primarily when working with foreign languages. When I heard Algerians speaking of their life—I do not understand Arabic—I came back to my workspace and was faced with a language that left me without reference

[66] Robindoré, 15.

> points. So I listened to the emotion; it is not so much the melody that I heard. With time, you can begin to feel what is being said, thus it is not possible to cut just anywhere in the conversation. Speaking is so intimate. It comes from the deepest part of us: from both the head and the sexual organs, from the heart and from all that we can imagine. Speaking is a place where everything comes together."[67]

This account confirms Ferrari's typical affinity for games. As biographer Jacqueline Caux notes, "[Ferrari] shows…a clear fondness for playfulness. For him, the act of making music is a game: a game of chance, an irreverent game, a serious and at times critical game, but more often a perverse game."[68] And of course, in the context of erotic art, this perverse game is played at high stakes.

Acousmatic uncertainty is a ruse at the core of the electroacoustic impetus. In introducing familiar text or sounds, composers invite listeners to have their own associations, while simultaneously toying with these convictions and therefore leaving open something to ponder. Such is a "game" electroacoustic composers are fond of playing. The game arises at the hands of the composer, but the players can be anyone from listeners to performers, or, when left to chance, a composer may even pull the wool over her or his own eyes. Since sound is a particular effect (in the most technical terms, an impulse set in motion—thus sound-*ing*), the game is dependent on the persisting ambiguity of the source(s) and cause(s) of that effect. The object of the game is to construct a soundscape from the implicit circumstances of these effects (e.g. laughter, moaning, inhaling, exhaling, kissing, or any other sound) occurring together. Electroacoustic composer and theorist Simon Emmerson insists that, even when heard musically as a complex of organized sounding relations, listeners still "analyze" electroacoustic music to assign meaning to sound. In the course of the electroacoustic game, listeners are constantly seeking to place sound within a context *beyond* what they hear.[69]

Emmerson distinguishes *game* from *narrative* in that the latter is concerned only with the manner in which a piece unfolds, while the former necessitates that listeners and

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[67] Ibid.
[68] Jacqueline Caux, *almost nothing with Luc Ferrari*, trans. Jérôme Hansen (Berlin/ Los Angeles: Errant Bodies Press, 2012), 11.
[69] Simon Emmerson, *Living Electronic Music* (Aldershot, UK: Ashgate, 2007), 16.

composer(s) negotiate relations reflexively, concurrently, and cumulatively. The game becomes a competition in which players, preoccupied with the actions of an opponent, take part and strategize to negotiate the piece—regardless of historical proximity.[70] Whether or not the composer is there in the flesh is mere coincidence (though, in electroacoustic music, often composers are present at the mixing desk). Although, the composer's context and historical situation may inform listeners of the "style" or idiomatic syntax of the music and thus help listeners interpret a work's structural organization, as Leonard Meyer says, "The constraints of a style are *learned* by composers and performers, critics and listeners."[71] In other words, the gap left open between effect, source, and cause in electroacoustic music is sculpted in part through a mutual contract between composers and listeners, by way of a shared imagining. To put it into the philosophical terms of John Searle, electroacoustic music is defined by way of "collective intentionality."[72]

Intentionality is generally conceived as an attitude or an attention to something in the minds of individual observers, while collective intentionality, as Searle points out, involves *cooperation* among individuals. Searle's "collective intentionality" therefore involves two (or more) players *believing* that they share a collective goal and each in turn attempting to do her or his part in achieving this goal.[73] Yet some individuals are given special status by virtue of deontic power they are perceived to possess (for example the president of the United States, as Searle suggests, or, in my estimation, the all-mighty composer), and likewise, institutions can also gain status through mutual recognition of such status among multiple players.

On the power of institutions Searle gives the example of a physical building. The building obtains status simply by our mutual agreement to acknowledge its boundaries.

> I imagine a tribe that builds a wall around its cluster of huts, where the wall performs the function of restricting access in virtue of its physical structure because it is too high to climb over easily. We then imagine that the wall decays until nothing is left but a line of stones. But let us suppose that the inhabitants, as well as

[70] Ibid, 23-5.
[71] Leonard Meyer, *Style and Music: Theory, History, and Ideology* (Chicago: The University of Chicago Press, 1989).
[72] John R. Searle, *Making the Social World* (Oxford: Oxford University Press, 2010).
[73] Ibid, 45.

> outsiders, continue to recognize the line of stones as having a certain status: a status that we could describe by saying it is a boundary. And they continue to *recognize* that they are *not supposed to cross* the boundary unless *authorized*. I want that to sound very innocent, but in fact it is momentous in its implications.[74]

Searle concludes from this example that the line of stones comes to impose "an obligation on those who recognize it as a boundary," and obviously we recognize a similar boundary in the confines of the concert hall, an institution wherein certain behaviors are practiced as part of the ritual of listening (sitting still, quietly, and unimposing; applauding at the conclusion of a performance—but not between movements; not crossing the stage's threshold, etc.).[75] In short, "The intuitive idea is that the point of creating and maintaining institutional facts is power, but the whole apparatus—creation, maintenance, and resulting power—works only because of collective acceptance or recognition."[76] In the case of the electroacoustic "performance," the simple act of listening to the musical work is to participate in the agreement, to sign the contract, and to share in a desire to here electroacoustic music as an institution.

As Searle explains, "Human beings and some animals…have the capacity to cooperate. They can cooperate not only in the actions that they perform, but they can even have shared attitudes, shared desires, and shared beliefs."[77] In Western art music, for example, we acknowledge the institutional entity of "the composer" to whom we attribute a certain respect accorded in the terms by which we *attend to* their music. Philosophers Gilles Deleuze and Félix Guattari, in this regard, give the example of a painter. "No two great painters, or even oeuvres, work in the same way. However there are tendencies in a painter…"[78] The institution of "artist" is premised on such individual tendencies, and the composer is no exception.

Given that electroacoustic music is typically "performed" and heard in a concert setting, composers and listeners possess a collective intentionality to even hear music *as*

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[74] Searle, *Making the World Social*, 94.
[75] Ibid, 95.
[76] Ibid, 103. Searle insists that "acceptance or recognition" must always come together, so as to avoid equating acceptance with approval.
[77] Ibid, 8.
[78] Gilles Deleuze and Félix Guattari, *What is Philosophy?*, trans. Hugh Tomlinson and Graham Burchell ([1991] New York: Columbia University Press, 1991), 180.

music and certain sounds as belonging to particular *sources*, though the structures meriting this consensus are likely not designed by any one player. Surely several players are involved in the intentional game. We have the composer *x* in opposition to the listeners *y*, wherein composer *x* faces any *n* number of listeners y_n, and this network grows exponentially with any instance of composer *x*'s Intentional status. Needless to say, all of these situations are "in tension" with one another, with no one situation hierarchically more probable than any other. Thus, collective intentionality occupies both a shared space and a common attitude. Such is the directed form of hearing Schaeffer advocates. After composing *Symphonie*, the composer came to favor what he termed a form of reduced listening encompassed by the term *entendre* (over mere *ouïr*), a word that shares the Latin verb *tenere* with the word intentionality. Schaeffer thus required that listeners direct attention toward the objective facets of sound as divorced from (original or perceived) sources.[79]

Turning specifically to the voice, Brian Kane declares that electroacoustic music situates the voice as an object of desire. The sound of the voice in electroacoustic music is an object deserving—*requiring*—our attention. It is rumored, and commonly reiterated in the canonical texts of electroacoustic composers, that the term "acousmatic" comes from a story of Pythagoras teaching his disciples, the *akousmatikoi*, from behind a veil so as to separate the sound of his voice from the manifestation of his visible, physical form.[80] In Kane's view, when the veil is pulled aside to reveal Pythagoras the master, his students may not be disappointed by the demythicized body, but may in fact come to laud the erudite, flesh and blood man for his ability to construct such a believable ruse—a hypothesis surely evidenced by the acclaim Pythagoras still enjoys today. Lest we forget, Kane reminds us that it is not the speaker that allures us, but only his voice. Once the spacing between source and sound is overcome, "the acousmaticity of the sound is gone," and thus the tension, the desire to know, resolved.[81] The veil becomes enshrined as the source of desire. Pulling aside the veil does not satisfy our desire to reveal the source of a voice, since the body of the speaker lingers as yet another veil that hides the mechanism by

[79] Schaeffer, *Traité*, 103-158. For a detailed exploration of Schaeffer's four categories of listening, see Kane, "L'Objet Sonore Maintenant" and Brian Kane, "Jean-Luc Nancy and the Listening Subject," *Contemporary Music Review* 31/5-6 (2012): 439-447.
[80] On the reputability of this myth, see Kane, *Sound Unseen*, 45-72, in particular 46-50.
[81] Ibid, 150.

which sound is produced. One can lift the veil of deception, reach into the living speaker, and into the mouth and throat of the voice-producing body only to be overcome with disappointment in finding that the producing mechanism hardly corresponds to the meaning with which voice, sound, and language have come to be defined. For this reason, Kane concludes, "Whether we focus on the Pythagorean veil or the veil that is the speaker's body, the voice is always an emblematic object of desire—in Lacan's terms, an *objet a*."[82] Pointing to the famous example of Nipper the dog from Francis Barraud's now classic painting *His Master's Voice*, Kane writes, "We are always lured in by the voice with a source, regarding it—like Nipper—as our Master's voice."[83]

Every composer predicts certain listening behaviors in order to calculate possible future responses and listeners meet composers with mutual expectation, but in electroacoustic composition this prophecy aspires, in the best-case scenario, to mandate what Kane describes as an ungroundable "flicker[ing]," between source and sound.[84] "The privilege that Schaeffer gave to reduced listening in the theory and practice of *musique concréte* has set the terms of a great debate within sample-based electronic music ever since: to refer or not to refer?"[85] But not only do listeners seek a *sound's* source, particularly in sound art and acousmatic traditions, they seek to arrive at the attributable source *intended by the composer*, whether what is recognized is the actual originating source or merely a projection that abides by the rules of the dis-acousmatizing game. The Pythagorean myth feeds into the permanence of the speaker's historical recollection, raising not only the image and sound associated with the thinker, but also valorizing our collective recollection of the one whose reputation becomes marked by a certain status. When read through the lens of a music-compositional philosophy, the master who constructs the game is not necessarily the "performer" producing the sounds on the recording, but the compositional "voice" flickers between these identities, composer and performer. Given this substitution of voice for Voice, I further propose that the composer's elevated status is an inherent aspect of listening to electronic music without corresponding imagery (music in the electroacoustic or soundscape traditions, but also tape and computer music)—arguably

[82] Ibid, 212.
[83] Ibid, 213.
[84] Ibid, 149.
[85] Ibid, 150.

more so even than in other musics. This would then be composer's Voice as Institution, or what Kane terms, after Heidegger, the "voice of conscience."[86] The practitioner who studies his subject, who captures and liberates her voice, remains undisclosed, absent, taken as always-already given. The authoritative voice (of the composer or phenomenologist) must remain silent in order to maintain its power.

The phenomenological account of intentionality is distinct from the classical Cartesian conviction ("I think, therefore I am") because in phenomenology one cannot take one's self as a reliable narrator.[87] As Don Ihde summarizes, "All experience is *experience of* ——. Anything can fill in the blank. The name for this shape of experience is intentionality."[88] While intentionality is itself directed, the state of being directed also occupies a phenomenological category with its own intentionality.[89] "The implication—again quite properly 'anti-Cartesian' in the phenomenological radical alternative—is that I do *not* 'know myself' directly in Cartesian fashion. What I know of myself is 'indirect' as a reflection *from* the world. This also applies to others: I know myself as reflected from others."[90] Not only do I know myself through reflected experience but the means by which objects, or institutions, acquire meaning for me only by way of cumulative reflection. That is, I do not define for myself and others every "thing" each time I encounter it, rather there exists already some agreed upon knowledge that I share with others. Such, explains Searle, is the power of language.

> I have my intentional states of hunger and thirst, for example, regardless of what anybody else thinks. But the intentionality of language, of words and sentences, called 'meanings,' is intentionality-dependent. The intentionality of language is created by the intrinsic, or mind-independent, intentionality of human beings.[91]

[86] Ibid, 199.
[87] Ihde, *Listening and Voice*, 34.
[88] Ibid, 35.
[89] Ibid.
[90] Ibid, 37.
[91] Searle, *Making the World Social*, 66.

Contrary to common opinion, argues Searle, though meaning is founded in language, "meaning itself restricts the possibilities of what one can do with language."[92] We can extend this requirement of meaning also to concepts, where concepts like the "erotic" require intentionality. The erotic is itself defined through a collectively intentional belief of how one performs eroticism, filtered of course through the voice of conscience.

As I said, the electroacoustic "game" evinced by Ferrari's form of surveillance (his watching over) insists with the rest of music history on the controlling hand of the composer. The electroacoustic composition sets up a mysterious situation in which disparate sounds, when grouped together, acquire new meaning from composer's constructed soundscape. The composer predicts certain listening behaviors in hopes of achieving some shared perspective among listeners, and listeners often also meet composers with mutual expectation. By insisting on the severance of sound from source and cause, composers profit from sound's anonymity. Sound, when attributable to an authority like the composer, is less morally suspect.

6. Suspicion of the "Cinema for the Ear"

A firm believer in Ferrari's compositional philosophy, Canadian composer Robert Normandeau's electroacoustic signature is premised on the genre's inherent game, as is evinced already in the electroacoustic composition *Jeu* (1989), released on this first album.[93] The word "Jeu," not easily translated to English, takes its dual meaning from the noun "game" and the verb "play," as in, to play a game, but also, to play a musical instrument or a musical piece. *Jeu* then invokes all of these different connotations in a strategic cat-and-mouse chase between the perceived source, cause, and effect. Divided into five movements, I. *Les règles du jeu* [Rules of the Game], II. *Mouvement d'un mécanisme* [Movements of a Mechanism], III. *Ce qui sert à jouer* [Things to Play With], IV. *Les manières de jouer* [Playing Styles], and V. *Les plaisirs du jeu* [Joys of Playing], the piece is given the following program by the composer.

[92] Ibid, 69n4. Searle explored this notion more completely within an intentional context in, *Intentionality: An Essay in the Philosophy of Mind* (Cambridge, UK: Cambridge University Press, 1983).
[93] Robert Normandeau, *Lieux inouïs*, experientes DIGITALes, IMED 9802, 1998. CD.

La règle du jeu. Jeux du cirque, du stade. Jeux d'adresse. Jeu de massacre. Jeux de société. Être hors-jeu. Mettre en jeu la vie d'un homme. Aimer le jeu. Se ruiner au jeu. Faites vos Jeux. Les jeux sont faits, rien ne va plus. Le jeu d'un verrou, d'un ressort. Donner du jeu à une fenêtre, à un tiroir. Jeux d'orgue. Jouer prudent. Jouer dangereux. Jouer double-jeu. Un jeu brilliant, nuance. Des indiciations de jeu. Jeux de mains, jeux de vilains. Jeux de prince. Jeux de l'imagination, de l'esprit. Jeux de mots. Un jeu d'enfant.

[Rules of the game. Circus games, Olympic games. Games of skill. Wholesale massacre. Parlor game. Out of Play. To gamble with one's life. To like to play. To ruin oneself at gambling. Make your play. The die is cast, "rien ne va plus". The play of a bolt, of a spring. To loosen a window or a drawer. The fame of skittles, of bowls. To have every opportunity. To hide one's game. The big play. Organ stops. To play carefully. To play dangerously. Double play. A brilliant, nuanced manner of playing. Stage directions. "Stop fooling around or it will end in tears." Plays of Prince. A game of imagination. Play of words. A child's play.][94]

It is in *Jeu* that Normandeau first voices his philosophical alliance with an older generation of electroacoustic composers, drawing inspiration from Luc Ferrari's view of electroacoustic music as a "cinema for the ear." Normandeau says that this concept ensures that a sound's "meaning is as important as the sound," but while sounds may be extrinsically referential, they need not conceptually imply a simplistic narrative.

The "cinema for the ear" aims to arouse the minds of its listeners. As Normandeau explains, "The sound of a train will trigger the imagination of the listener in such a way that they are reminded of their own train — and not a train that can be viewed by everybody, like in a film. It is like reading a novel, where everybody imagines their own landscapes and characters."[95] Leaning on the surrealism of painter René Magritte, Normandeau

[94] Robert Normandeau, liners notes to *Lieux inouïs*, 6 and 14. Translation is the composer's as it appears in the album's liner notes.

[95] David Ogborn, "Interview with Robert Normandeau," *eContact!* 11/2 (2009), online, last accessed 26 March, 2015, http://cec.sonus.ca/econtact/11_2/normandeauro_ogborn.html.

exclaims, "the sound of a train is not a train, it is the sound of a train."[96] Thus, the sound is neither representative of a tangible, actual object nor is it divorced or reduced as a free-standing form; rather, the sound of the piece is representative of sound in some conjured mental reality. Normandeau conceives of his "cinema" as a technique of abstractable concepts and a skill developed uniquely in electroacoustic music. Just as film found its own cinematic techniques distinctively from filmed theater, electroacoustic music is distinct from other forms of musical composition on the basis of the "cinema for the ear." The essence of a sound collectively imagined—perhaps an erotic essence, perhaps the essence of a train—is shared among audience members, but the image, context, or narrative evoked, if indeed one is invoked, is not necessarily shared (though there is nothing to prevent such mutual participation).

With the electroacoustic game in full swing, *Jeu*'s inference to gambling carries additional meaning. In musical portrayals of gambling, such as Prokofiev's famous opera *The Gambler*, it is common that players remain anonymous to encourage listeners to identify with individual characters and certain performed actions, and this anonymity emerges electroacoustically in *Jeu* precisely in the gap between source and sound.[97] One gambles to win, and so the game requires that one retain her or his individual standing and fight for what's theirs. Tension is high, since, at any moment, the tables can turn. The gambling game forces one to become hyperaware of one's neighbors to right and left, to suspect and hence to hold one's card's close to their chest. Hoping never to betray an ounce of excitement, lest one disclose her or his particular hand, the rivalry is comparable to the stoicism adopted by classical or "art" music audiences. Gambling's compulsivity, the impulse to remain in the game regardless of the stakes, is simulated Normandeau's *Jeu* with a recurring figure to structure (i.e. fragment) the music, disturbing any sense of progression in the music and thus enforcing the cyclical habit of gambling.[98]

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[96] Alexa Woloshyn, "Interview with Robert Normandeau," *eContact!* 13/3 (2010), last accessed 17 November, 2015, http://econtact.ca/13_3/woloshyn_normandeau_2011.html.

[97] Though Prokofiev names every character who appears on stage, the titles appear in name only in the score and libretto, such that the identities of various characters remain anonymous, e.g. Croupier #1 and #2, Gamblers #1, #2, #3, (#4 is omitted), #5, #6, Reckless Gambler, Unlucky Gambler, Old Gambler, Sickly Gambler, Fat English, Tall English, "6 Players (2 Tenors, 2 Baritones, 2 Basses), and "various silent roles." Danielle Sofer, Appendix in "Confined Spaces / Erupted Boundaries: Crowd Behavior in Prokofiev's *The Gambler*" (M.A. Thesis, Stony Brook University, 2012).

[98] Ibid.

Jeu begins with an excerpt from a recording of (an uncredited performance of) Perotin's famous *Viderunt Omnes*. The familiar sustained chorus that opens the Perotin is quickly defamiliarized when Normandeau superimposes the work with another sample, a flickering effect caused by quickly panning between the right and left channels. This effect persists to various degrees throughout the work, functioning as a dividing boundary between the recognizable samples of each section of the work. The result of this manipulation is that, despite the recognizable sample of *Viderunt Omnes*, one of the earliest polyphonic works and a piece that any student of music history will immediately identify, the interference of the flickering alters Perotin's work to such an extent as to become hardly recognizable. Normandeau says that this beginning introduces the rules of the game.

After a few minutes Perotin's recognizable music dissolves into harshly panned aftereffects, flickering continuously left and right and simultaneously also ascending and descending within the constructed soundscape still occasionally littered with distant recollections of Perotin. Swathed among the flickering are brief scenes depicting the various idioms of Normandeau's description and supported by electronically granulated ambient samples of Perotin and also Stockhausen's *Hymnen*, mechanical sounds (movement II), organ sounds and dropping bowling pins (movement III), fragmented speech (movement IV) and children's voices (movement V). Given the great disparity between samples, these sounds could possibly occupy a single real-world environment collectively. Indeed, Normandeau deliberately fragments the various samples, isolating each by the recurring panned flickering, to ensure that the cinema that emerges is not of images, but only of sounds. In this way, similarly to the "Erotica" movement of Pierre Schaeffer's *Symphonie*, the sounds of Normandeau's *Jeu* dance around a given theme disclosed by the title of the work, but presumably, a savvy French speaker could pick up on the work's allusions even without the title.

The title of a later work, *Jeu de langues* (2009), also follows Normandeau's play on words. In this case, another such double meaning is expressed with "langue," meaning language, as it does in English, but also tongue, as in mother tongue, and implying also a sexual allusion that does not elude. With *Jeu de langues*, Normandeau claims to have stumbled upon a new field of opportunity in the electroacoustic genre. The piece was commissioned by the organizers of the Portuguese Música Viva Music Festival held

annually by the Lisbon-based Miso Music Portugal, an organization dedicated to the preservation and support of electroacoustic music. In 2009 electroacoustic composers and musicians involved in Miso Music Portugal gathered to discuss how apparently absent erotic depictions were from electroacoustic music as a genre. While perhaps some representative examples existed previously, those gathered observed that, compared to acoustic music and the other arts, theater, the plastic arts, or opera (which elides many arts), eroticism seemed not at all present in electroacoustic music.[99] The organizers of Miso Music Portugal hoped to resolve this gap by commissioning a concert of electroacoustic works under the heading, "Cinema Dos Sons Ficções Sonoras Eróticas" (or Cinema of Sounds, Erotic Sonic Fictions). Commissioned works came from five composers, Cândido de Lima, Robert Normandeau, Beatriz Ferreyra, António de Sousa Dias, and José Luís Ferreira for a concert held on 19 September, 2009, and another commission from the festival's co-organizer, Miguel Azguime's *L...*(2010) was later added to the archived materials. The 2009 concert was prefaced by a roundtable, "*Debate Música e Erotismo*," with presentations by Delfim Sardo, Vasco Tavares dos Santos, Pedro Amaral, António de Sousa Dias, Monika Streitová.[100] Given its popularity, the concert program was repeated under the title, "Erotic Sound Stories" and broadcast on the *Arte Eletroacústica* radio program of Antena 2 on 2 March, 2013, the program again repeated in August 2014.[101]

After the first of these concerts, I interviewed Robert Normandeau to ask of his experiences and of how the concert came about. Though he was convinced of the importance of dealing with erotic topics in electroacoustic music, one of the things that struck him about the concert is that three of the five commissions featured only an erotic text, and did not, to his mind, capture eroticism *musically*. In Normandeau's words: "To me who doesn't speak Portuguese, the erotic part of these pieces was completely absent." Further echoing the composer's long preoccupation with composing onomatopoeically, Normandeau continued, "I thought that it was a kind of resignation from the composers to use words instead of sounds only to evoke erotic content. Words belong to literature not to

[99] E-mail correspondence with Paula Azguime, co-founder of the Miso Ensemble and its institution the *Música Viva* Festival, October 24, 2013.

[100] A video-recording of the roundtable, held in Portuguese, is available from *Música Viva.* Materials from the *Música Viva* Festival are archived by the Portuguese Music Research & Information Centre, last accessed 26 March, 2015, http://www.mic.pt/index.html.

[101] I am indebted to Piero Guimaraes for his transliteration and translation of this broadcast.

music."[102] And so, Normandeau hoped to evoke eroticism in *Jeu de langues* through other, as he suggests, more universal constructions.

Normandeau told me in our communications that he imagines audiences responding to *Jeu de langues* as he believes they have to his many onomatopoeic works, such electroacoustic pieces as *Bédé* (1990), *Éclats de voix* (1991), *Spleen* (1993), *Le renard et la rose* (1995), *Palimpseste* (2005/06/09) and more recently, the acoustic *Baobabs* (2012), works in which the titles of each movement attend to a particular emotional state.[103] Below are the titles of each work's movements in what Alexa Woloshyn titles Normandeau's *Onomatopoeias* cycle.

Éclats de voix (1991)
1. *Jeu et rythme* [Play and Rhythm]
2. *Tendresse et timbre* [Tenderness and Timbre]
3. *Colère et dynamique* [Anger and Dynamics]
4. *Tristesse et espace* [Sadness and Space]
5. *Joie et texture* [Joy and Texture]

Spleen (1993)
1. *Musique et rythme* [Music and Rhythm]
2. *Mélancholie et timbre* [Melancholy and Timbre]
3. *Colère et dynamiques* [Anger and Dynamics]
4. *Frustration et espace* [Frustration and Space]
5. *Délire et texture* [Frenzy and Texture]

Le renard et la rose (1995),
1. *Babillage et rythme* [Babbling and Rhythm]
2. *Nostalgie et timbre* [Nostalgia and Timbre]
3. *Colère et dynamique* [Anger and Dynamics]
4. *Lassitude et espace* [Weariness and Space]
5. *Sérénité et texture* [Serenity and Texture]

Palimpseste (2005/06/09)
1. *Furie et rythme* [Fury and Rhythm]

[102] E-mail correspondence with Robert Normandeau. Unless otherwise noted all correspondences are from October 9, 2013.
[103] Robert Normandeau, e-mail message to author, 16 October 2013.

2. *Amertume et timbre* [Bitterness and Timbre]
3. *Colère et dynamique* [Anger and Dynamics]
4. *Fatigue et espace* [Tiredness and Space]
5. *Sagesse et texture* [Wisdom and Texture][104]

Example 1.1 List of works in Robert Normandeau's *Onomatopoeias* cycle.

As one observes simply from looking at the titles of these pieces, Normandeau uses common musical parameters to tie the works of the cycle together, while each piece successively represents a state of mind characteristic to the population it is intended to depict, childhood, adolescence, adulthood, and old age, respectively.[105] Rather than use text to convey his intentions, Normandeau instead concentrates on certain onomatopoeic expressions he finds to be more universally recognizable. In the words of the composer, "Onomatopoeias require no translation, they may represent feelings, you have the feelings in the sounds and cannot clean them." When composing with onomatopoeias, he says, "I can make a piece directly with feelings."[106] But while Woloshyn echoes Normandeau's sentiments, I would nevertheless argue that onomatopoeic sounds still require some interpretation and a basic familiarity within a particular linguistic context, as is clear to anyone who has inquired about the sound of an animal call in an unfamiliar language (a goose call, for example is "*honk honk*" in English, "*ga-ga*" in Hebrew, and "*ca car*" in French).[107] I, as a non-French speaker, was not able to intuit Normandeau's intended states of mind from listening to the onomatopoeic pieces without Woloshyn's analysis (which I believe would also not have been possible without the given titles of the movements). However, I repeat Normandeau's ideas here to convey his compositional philosophy.

Unlike the *Onomatopoeias* cycle, *Jeu de langues* is not based in language, onomatopoeic syllables, or even in alimentations. *Jeu de langues* employs a common

[104] Alexa Woloshyn, "Wallace Berry's Structural Processes and Electroacoustic Music: A Case Study Analysis of Robert Normandeau's 'Onomatopoeias' Cycle" (paper presented at the Toronto Electroacoustic Symposium 2010), 2-4, and published in online format in *eContact!* 13.3 (2010), accessed 23 March, 2015 http://cec.sonus.ca/econtact/13_3.
[105] Woloshyn, "Wallace Berry's Structural Processes and Electroacoustic Music," 5.
[106] Robert Normandeau in discussion with the author, 10 June, 2014.
[107] For some comic relief on a rainy day, take a look at the Wikipedia article on "cross-linguistic onomatopoeias," *Wikipedia, The Free Encyclopedia*, http://en.wikipedia.org/wiki/Cross-linguistic_onomatopoeias (accessed June 9, 2015).

practice in electroacoustic music, sampling existing works from the composer's recorded catalogue. The piece uses three distinct sources, two previously composed pieces, for flute and saxophone respectively, and a third in-studio recording made specially for this work. Each source has its own correlation to intimacy based in a sexual encounter experienced by the composer.[108] Given this contextual history, the composer's intended reception of the work is conveniently situated within the compositional history of its three sources.

In erotic music, composers and listeners may come into a relationship wherein the erotic is what binds the two entities. In erotic music, part of this contract is the virtual simulation of sex (through associations or common tropes or musical idioms). Eroticism can therefore be a shared means of arriving at the *experience* of the musical work, which may be, but is probably not in the end, shared. Only the intentionality is collective, not the experience. For this reason, we might say that, in the act of hearing an erotic composition, composers and listeners enter into a "plural subject-hood," the term used by Andrea Westlund for two people involved in a romantic relationship in which each person remains an *individual* rather than becoming "fused" psychologically or ontologically.[109] In this way, although listeners may not actually become aroused by erotic electronic music, if the audience is told a piece is meant to be erotic or if listeners themselves pick up on cues by way of association—not from traces of the recording's manufacture but from the *sounds they hear*—each individual enters into the collective intentional state. Thus the erotic work comes to serve as a sort of Institution bearing deontic powers by way of its suggestive overtones—in the very quality of sounds employed *and not merely by the material of recording*. In short, there exist certain established or agreed upon habits necessitated by

[108] *Jeu Blanc* is the first piece incorporated in *Jeu de langues*. Premiered by flutist Claire Marchand in the late 1990s, *Jeu Blanc* is an improvisation with extended techniques and, like Normandeau's earlier *Jeu*, the work receives its title from a common turn in gambling, meaning to break the bank or to lose all of one's money—a strategic failure that perhaps foretells of the work's eventual fate. *Jeu Blanc* has since been withdrawn from the composer's catalogue. The second sample incorporated in *Jeu de langues* is *Pluie Noire* (2008), a work premiered by baritone saxophone player Ida Toninato at the 2008 Música Viva Festival. For the *Jeu de langues* recording sessions held specially in 2009, Normandeau invited Terri Hron into the studio, a flutist he met at the Música Viva Festival the prior year. Hron is Normandeau's current romantic partner and she was the only performer who knew of the composer's intentions for her in the piece.

[109] Andrea Westlund, "Love and the Sharing of Ends," *Twenty-First Century Papers: On-Line Working Papers from the Center for 21st Century Studies* (University of Wisconsin-Milwaukee, WI: *Center for 21st Century Studies*, 2005) last accessed 24 April, 2015, http://www4.uwm.edu/c21/pdfs/workingpapers/westlund.pdf, 4.

sound, in how sound is collected, organized, and auditioned within the context of the work simply by virtue of being "music" and thus acceding to its collective experience.

Even when the performer is clearly not the composer, as one gathers from the notably female utterances heard in Schaeffer's *Symphonie*, when auditioned within a concert setting, the piece, and hence the audible voices, nevertheless, come to belong to him. The audience regards the collected voices—no matter the number, no matter the quality—as for all intents *his*. This is perhaps the reason for Ferrari's comparison of his surveilling voyeurism to psychoanalytic practice. Ferrari's erotic study of the German shopper, like Pierre Janet's case study of Madeleine, does not merely present a study of the individual patient, but comes to represent, in both cases, a generalizable approach, or, put simply, a study of an erotic-*ism* rather than a representative account of any single sexual act.[110]

Ferrari does not, however, own his authority. His compositional philosophy attempts to relinquish the composer's authoritative power, since, as he would have it, anyone and everyone should make anecdotal music. Eric Drott has documented Ferrari's affiliation with the *Maison de la Culture* in Amiens as an *animateur musical*, or person responsible for arousing widespread engagement with art beyond the borders of economic class or education.[111] This was the time when Ferrari began composing "realizables" like *Pornologos 2* (1971), text-based works that, absent traditional music notation, could be carried out by anyone.

> In the mid-60s Ferrari had begun writing text scores (he called them 'realizables'), which provided groups of amateurs and professionals with outlines for collective activity. What is more, the abandonment of the work concept allowed Ferrari to rid himself of the now problematic title of 'composer,' trading it in for the more attractive designation of '*réalisateur.*' He explains to [interviewer Hansjörg] Pauli that 'composers should become game leaders, who draw up rules according to which amateurs might be able to meaningfully engage themselves.'[112]

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[110] While we read studies of Freud's or Janet's patients and believe the doctors to be reliable narrators, we might pause to consider, given the textbook framework, the extent to which the storyteller influences the voice of his or her patient.

[111] Drott, 147.

[112] Ferrari in interview with Hansjörg Pauli, *Für wen komponieren Sie eigentlich?* (Frankfurt: S. Fischer Verlag, 1971), 56, quoted in Drott, 153.

Ferrari was also known at this time to carry around a tape recorder himself, as part of his position as *animateur*, to instantly capture his environment but also to encourage others—people he perceived as musical laymen—to record their own anecdotal music.

> Ferrari would remark that the use of familiar, recognizable sounds helped dispose of some of the barriers that prevented the comprehension—and thus widespread public appreciation—of experimental music. At the same time, Ferrari saw in this and other such tape works a model for a new kind of amateur artistic activity, one that would draw upon the ease and affordability of the portable tape recorder in order to open up the domain of experimental music to nonspecialists.[113]

Ferrari maintains that, in recording, composers have no special privilege over others, but if people are surveilling others without their knowledge or consent and using these recordings toward erotic means, it seems absurd to let *just* anyone do it. Actually, in this light, it seems absurd to let anyone do this. Think if someone recorded his neighbors having sex and presented the soundtrack to an audience as an example of erotic art, for example. Ferrari's *Les Danses Organiques* (1973) is presented as just such an instance of intrusive voyeurism, if only staged.

Two women meet for the first time in a dark recording space (perhaps a studio?), their would-be lesbian encounter recorded and subtly interpolated with ambient electronic and instrumental sounds, this is the imagined scenario of *Les Danses Organiques*, a scene wholly constructed through the gaze of the composer. Given that the scene was staged, *Les Danses Organiques* is frequently critiqued as a phallocentric fantasy, a pseudo-lesbian encounter that merely realizes and entertains the male composer's own erotic desires. When asked about the composer's voyeuristic appropriation, however, one performer Rio responded, "*Tout depend de l'attitude de l'homme. Cela peut être au contraire une complicité de sa féminité intérieure avec l connivance de deux féminités. Alors, à ce moment-là, c'est tout-à-fait autre chose: c'est du domaine de la participation et non de la recuperation.* [It all depends on the composer's attitude. This may be on account of the

[113] Drott, 146.

composer's will to participate in the collusion of two women. So, at that point, it has to do with something else: it has to do with participation and not appropriation.]"[114] In Rio's observation, the composer (or a director of any such sexual encounter) presents an event as a means of participation, in empathy, with the women committing the act. But this is perhaps giving Ferrari too much credit.

Presented as merely documenting a sexual happenstance, the staged encounter consists of close-to-an-hour of talking (in French) interspersed with sounds of kissing, cooing, and breathing. Ignoring the language, what Ferrari imagines as erotic, is, frankly speaking, quite boring absent visual accompaniment. Actually the piece is very much like the soundtrack to a pornographic film, complete with dialogue, something like a narrative, and even a "primitive" or simplistically tribal-sounding background (ritualistic bongos introduce the women, occasionally processed with reverberation or sudden panning left and right, and as the atmosphere intensifies quick-rhythmed flutes enter in homophonic accompaniment). Somewhat static, the same sounds of kissing and breathing repeat unceasingly, without any apparent organization, for close to 40 minutes. Presenting an "unmediated" yet obviously staged act makes for a boring and somewhat unnerving experience—to echo Boulez's critique of Cage. The recording, consisting mainly of slurping sounds, is in fact quite repulsive, reminiscent of the sounds people make while eating, but in very close proximity—pressed up to the surface, as Kane says—almost inside the ear. It's hard to imagine that this is what Jodie Taylor had in mind when she advocated for "taking it in the ear."[115] Ferrari would like us all to become the voyeur that he is, to turn our attention toward sound's intimacy, and particularly toward the representative sounds of his compositional voice (despite his claims to the contrary), but his reappropriation of everyday sounds toward erotic ends is nevertheless affected by ethical obligations. Can we in good conscience *allow* voices—pilfered from their originating speakers—to sound independently, unmarked by the signification for which they so desperately yearn? Is the acousmatic utterance yet another form of violence in a long history of unlicensed

[114] Daniel Caux, "*Les Danses Organiques* du Luc Ferrari," *L'Art Vivant* (July 1973), 30. Translation is the author's.

[115] Taylor writes, "The ear can be an erogenous zone. Earlobes licked or bitten are known to sexually arouse some people, while whispering or breathing into the ear may similarly arouse others. The ear has even been constructed as a pseudo-sexual receptacle able to be penetrated with sound, music, and sensation." Jodie Taylor, "Taking it in the ear: On musico-sexual synergies and the (queer) possibility that music is sex," *Continuum: Journal of Media & Cultural Studies* 26/4 (2012): 604; 609.

reappropriations? Such is the heavy weight of responsibility with which works like Ferrari's *Presque rien* or *Les Danses Organiques* or Normandeau's *Jeu de Langues* burden their listeners. To my mind, none of these works provokes listening as aesthetic perception or experience. These are not pieces to broadcast in a concert hall or even in an artistic context. Rather, as representations, these pieces need to be heard within a setting complimentary to the depicted scene.

Normandeau's *Jeu de langues* seems to follow the anecdotal musical approach to the letter: minimal interference with the recorded material, a collage of multiple recordings so as to construct a particular cinematic soundscape (without conjuring a definitive scene), and intimate attention to the subjects who are collected, for the most part, without their knowledge. Normandeau exerted his greatest compositional efforts in removing the pitch material (the exhalations of the wind players) from each recording post-production, leaving only the performers' inhalations, slight gasps, hesitations, and involuntary mechanical sounds made by the performer's bodies striking their respective instruments. The sounding result, inhalation paired with ambient electronic sustained tones, undergoes minimal if any development, which, as mentioned in my above discussion of *Les Danses Organiques*, can be quite taxing on a listener attending to the work for close to twelve minutes. The only change occurs toward the end of the piece (8:23-11:24), when overlapping inhalations are spliced together with instrumental *flautando* effects and occasionally reversed in playback, a comparable arrival to Schaeffer's "Erotica." By increasing the tempo of the initially slowly pulsating inhalations, the piece builds rhythmically toward a common climactic musical arrival, what has become known as music's "climax mechanism."[116]

Outside of the throat clearing that opens the work, we recognize the voice(s) in this piece only through inhalations. And because eroticism is commonly voiced through exhalations (moaning, breath, vocalization), Normandeau jokes that *Jeu de langues* may actually be "anti-erotic," representative of the antithesis of how the composer imagines eroticism to be normally conveyed in sound. *Pluie Noire*, one piece the work samples, takes its title from the play *Blasted* by UK playwright Sarah Kane, which features music by Normandeau. As the composer writes in the notes, "the title is referring to pauses indicated

[116] Robert Fink, "Do It ('til You're Satisfied): Repetitive Musics and Recombinant Desires," in *Repeating Ourselves: American Minimal Music as Cultural Practice* (Berkeley: University of California Press, 2005), 35.

in the play that punctuate it: spring rain, summer rain, fall rain, and winter rain. But all these rains can hardly wash the darkness of the human soul at war, especially that of Bosnia that the play makes implicit reference [*sic*]."[117] The expansive gaps between breaths, hardly supported by the wispy fluttering of the ambient background, draw out anticipation, each inhalation suggesting that an exhalation is to follow, but our expectations are never met. Thus, the pauses from *Pluie Noire*—the negative spaces between sounds—carry over also to *Jeu de langues*. The silent gaps gain additional weight, when combined in *Jeu de langues* as the two previously existing pieces maintain their original lengths running in entirety from beginning to end, burdening our ears with an absence of the sounds they once bore. After the premiere, an audience member, drawn to the silences and periodic inhalations, commented on this loaded significance, exclaiming, "I don't know what your conception is of eroticism, to me the piece is about death," as if hearing the gasps of someone's suffocating last breath.[118] Such was Normandeau's deliberate allusion, a subtle connection to death and "*le petite mort*," a French idiom for achieving orgasm.

In the words of Roland Barthes, *le petite mort* is the moment in literature when language breaks down: "*ce que [le plaisir] veut, c'est le lieu d'une perte, c'est la faille, la coupure, la deflation, le* fading *qui saisit le sujet au cœur de la jouissance* [What pleasure wants is the site of a loss, the seam, the cut, the deflation, the dissolve which seizes the subject in the midst of bliss]."[119] Barthes's linguistic breaking down recalls the punctured surface of the language in Deleuze's schizoanalysis. As Elizabeth Locey elaborates, "The 'text of jouissance' (as opposed to the 'text of pleasure') is that text in which the reading breaks down. The 'coupure,' or cutting, that produces this 'inter-dit' occurs when one (or more) signifier latches onto another and carries—or cuts—the reader away from the text into that place of jouissance that is beyond language."[120] An overabundant lack is conjured in the absence of exhalations in *Jeu de langues*, the literal cutting of the tape is done in service of *jouissance*, injecting silence with a desire to hear more. The gaping holes left in the wake of sound-that-once-was evoke curiosity, seducing us with perforations in the

[117] Robert Normandeau, liner notes to *Pluie Noire*, *electrocd.com: The Electroacoustic Music Store*, last accessed on 17 November, 2015, http://www.electrocd.com/en/oeuvres/select/?id=24606.
[118] Robert Normandeau in discussion with the author, 10 June, 2014.
[119] Roland Barthes, *Le Plaisir du texte* (Paris: Éditions du Seuil, 1973), 15, translation in Elizabeth Locey, *The Pleasure of the Text: Violette Leduc and Reader Seduction* (Lanham, MD: Rowman & Littlefield, 2002), 21.
[120] Locey, 21.

texture of a perceivably preconceived reality. Here, sense emerges from *non*-sense, from nothing; absence produces presence.

Janet recognized this delicate balance between excess and lack as the source of his patient Madeleine's physical, emotional, spiritual, and mental malady; an intriguing diagnosis for Georges Bataille's famous book on *Eroticism.* "'At its highest degree', Janet writes, 'suffering occurs as a sign of change in the tone of feelings. Thoughts on death begin to be considered as a return to nothingness. When Madeleine speaks too often of this, however, and begins to desire it, these expressions, which dwell on the idea of suicide, announce the approach of ecstasy.'"[121] Madeleine's ecstasy emerges by way of her negative, antipodal state. When approached, the limit serves as much to separate as it does to adjoin; this is the simultaneous absence and presence, the flowing over, known as the allure of *jouissance*.

According to Simon Elmer, it was not Janet's text that first piqued Bataille's interest in eroticism but rather Madeleine's mute image, her more-than-half nude photograph captured in the throes of ecstasy (fig. 1). Elmer articulates Bataille's fascination:

> Echoing Saint Teresa's insistence that the delights with which her soul is inundated are 'inexpressible', Madeleine tells the despairing Janet, 'nothing [*rien*] can convey the idea of the interior joys'. To which Bataille adds (this is from the 1952 lecture on unknowing in which he referred to Janet's book): 'What is sovereign occupies the domain of silence, and if we speak of it we move toward the silence by which it is constituted.'[122]

Madeleine's inexplicable "nothing" is, however, inextricably *something*. It is nothing as object, nothing-*ness* that stimulates her. Much more than any "strategy or technique,"

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[121] Pierre Janet, *De l'Angoisse à l'extase: Étude sur les croyances et les sentiments* (Paris: la Société Pierre Janet et le Laboratoire de psychologie pathologique de la Sorbonne avec le concours du CNRS, 1975), 165, quoted in Georges Batille, "L'Économie à la mesure de l'univers – La Part maudite – La Limite de l'utile (fragments) – Théories de la religion – Confeérences 1947-1948 - Annexes," in *Oeuvres Complètes* VII, édition de Thadé Klossowski (Paris: Éditions Gallimard, 1976), 541, quoted and translated in Simon Elmer, *The Colour of the Sacred: Georges Bataille and the Image of Sacrifice* (London: The Sorcerer's Apprentice, 2012), 313-4.

[122] Bataille, "*Conférences 1951- 1953*," vol. 8 of *Georges Batailles: Oeuvres Complètes* (Paris: Éditions Gallimard, 1976), 207, quoted in Elmer, 319-20.

Ferrari's *Presque rien* aspires toward nothingness, to present sound on the verge of collapse, on the threshold of a provocative silence.

Figure 1.1 Madeleine, "*Extase avec attitude de crucifixion debout*," Image reproduced from Pierre Janet, *L'Angoisse à l'Extase*, 43, plate 12.

Modeled on an image of Jean-Martin Charcot's famous fifteen-year-old hysterical patient Augustine, thoroughly investigated by Charcot's admirers André Breton and Louis Aragon, the fascination with Madeleine's image is representative of a general attitude toward ecstatic patients evinced by Janet's initial and Bataille's subsequent attraction to

her.[123] Her body serves as a permanent, noise-canceling, veil, her requisitely mute image enticingly arousing its examiners and compelling a substitution of the mysterious (mystic) for the erotic.[124]

Recalling a centuries-long tradition of confronting "veiled" sounds, Kane tells of the famous "Invisible Orchestras and Angelic Choirs" that became prevalent in both operatic and religious contexts through the 18th century, even noting the erotic potential of veiling sounds from source and cause in a juicy tidbit about Jean-Jacques Rousseau. As the story goes, Rousseau's sexual curiosity was piqued in Venice, 1743, by an unseen chorus of cloistered nuns. Kane does not skimp in his telling on the details of Rousseau's horror and appall upon discovering that the actual figures producing his beloved angelic sounds did not live up to his affected image of them. It is clear from his account that the allure of the veil—the medium—is not merely one of curiosity, but that, like Madeleine's body, which veils the source/cause of her religiously induced hallucinations, the veil's own erotic appeal is also essential to its very existence as a separating divide—as *technê*. It is precisely the veil that lures. As subjects of fascination, both nuns and hysterics are staged to arouse the spectator, but, according to Kane, if we, like Rousseau, uncover the ruse—if we point our attention to the fabrication of the experience, to that which *makes* the situation—the entire illusion is destroyed.[125] In line with Kane's argument, which draws us compulsively to the veil while simultaneously failing to attribute it as the source of sound, the electroacoustic genre appears incapable of erotic signification, our attention being drawn constantly only to the surface of the medium. In proscribing *technê*, Kane asks that we *distance* ourselves from our listening instincts to reinforce the rational reflection proper to Western philosophical inquiry, but the distance in this case is reflexively filled with the actual substance of the medium. Made repeatedly conscious of the phantasmagoric veil as a (mere) device, the spectator's erotic desires are never given the necessary space to flourish.

Feminist philosopher Luce Irigaray characterizes Lacan's phantasmagoric veil as not merely *available* to women but imposed upon them as frequent subjects of study. The expert examiner seeks to understand women while also maintaining a distance from them as objects of study. Referring to a passage in Nietzsche's *The Gay Science* entitled

[123] Elmer, 317-8.
[124] Elmer, 309.
[125] Elmer, 319.

"Women and their action at a distance," Irigaray argues that while imposing this swaddling robe, the (male) spectator moves simultaneously to approach, provoke, unwrap, and penetrate the veil in an effort to better understand her.[126] There is a methodological contradiction that seems both to construct a barrier between the sexes while also reconstituting the lesser Other in terms of the more dominant ideology. This dominance is represented historically by the gendered perspective of male composers, philosophers, and psychoanalysts, and encapsulates also an artificial estrangement of non-normative sexual behaviors, some physical in/abilities, and other categories of the implicit majority, including class and race. In Nietzsche's words, "The magic and the most powerful effect of women is to produce feeling from a distance, in philosophical language, *action in distans*, action at a distance; but this requires first of all and above all—*distance.*"[127] Distance ensures separation between same and different, between one and an-other. It is in his very desire to study Woman, says Irigaray, that Nietzsche erects a distance from them. It is indeed no coincidence that Nietzsche in this very passage contrasts Poseidon's pained singing with what he observes as women's curious silence: "When man stands in the midst of *his own* noise, in the midst of his own surf of projects and plans, he is also likely to see gliding past him silent, magical creatures whose happiness and seclusion he yearns for—*women*."[128] In his resolve to broach this silence, man would allow her to speak, to betray her "Veiled Lips" (the title of Irigaray's essay), but only on his terms.

Such distances—gender gaps—are the difficulties one faces in telling the history of eroticism in electroacoustic music. The distanced subject, woman as represented by examining man, seems ever set apart from the history that encapsulates her. Her story is recounted secondhand, through the canon of representative musical compositions that capture and conceal her voice. Hannah Bosma's 2003 article "Bodies of Evidence, Singing Cyborgs and Other Gender Issues in Electrovocal Music," was the first to point out a gender disparity in "electrovocal music." This disparity, as Bosma recognized it, is

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[126] Luce Irigaray, "Veiled Lips," translated by Sara Speidel, *Mississippi Review* 11/3 (1983): 105.
[127] Friedrich Nietzsche, *The Gay Science*, trans. Walter Kaufmann (New York: Random House, 1974), §60 quoted in Irigaray, "Veiled Lips," 104. The quotes of Nietzsche in Irigaray come from, and hence serve also as commentary on, Derrida's reading of Nietzsche. Jacques Derrida, *Spurs: Nietzsche's Styles*, trans. Barbara Harlow (Chicago: University of Chicago Press, 1979) quoted in Irigaray, "Veiled Lips," 123n8.
[128] Friedrich Nietzsche, *The Gay Science*, trans. Josefine Nauckhoff (Cambridge, UK: Cambridge University Press, 2001), §60.

reflected in the overwhelming majority of electronic music composed by men featuring women's voices.[129]

Like the composers identified in this chapter, Nietzsche asserts a secure and singular distance between the controlling male examiner and his female object of study, but we see an alternative mode of inquiry in the writing of Marcel Proust as read by Gilles Deleuze. In Deleuze's reading, Proust's theory hinges on a substitution of the sexes, on the possibility that gender is merely a courtesy, a placeholder or sign into which bodies are cast, but a sign by which bodies can also exchange places. Gender impinges on society, as a sign in and of itself, permitting an exchange and *transposition* of identity.[130] As Deleuze notes, Proust, a lover of men, made many "transpositions" several times over to arrive at this theory, an intricate *abyme* of mirrored signs that inevitably adjoin the two opposing subjects.

> Insofar as the beloved contains possible worlds, it is a matter of explicating, of unfolding all these worlds. But precisely because these worlds are made valid only by the beloved's viewpoint of them, which is what determines the way in which they are implicated within the beloved, the lover can never be sufficiently *involved* in these worlds without being thereby excluded from them as well, because he belongs to them only as a thing seen, hence also as a thing scarcely seen, not remarked, excluded from the superior viewpoint from which the choice is made.[131]

By this logic, Deleuze argues, Proust's eroticism arises through a deliberate tension between the visible and the invisible, between sense—the *sensed*—and the non-sense of the "virtual" world. Deleuze summarizes Proust's sense of suspense—this "resonance" of a memory—as, "real without being actual, ideal without being abstract."[132] What one envisions in the electroacoustic experience is, as far as it is virtual, very real indeed: "The virtual is opposed not to the real but to the actual. *The virtual is fully real in so far as it is virtual*. […] Indeed, the virtual must be defined as strictly a part of the real object – as

[129] Hannah Bosma, "The Electronic Cry: Voice and Gender in Electroacoustic Music" (PhD diss, University of Amsterdam, 2013).
[130] Gilles Deleuze, *Proust and Signs: The Complete Text*, trans. Richard Howard (London: Continuum, 2008), 89.
[131] Deleuze, *Proust and Signs*, 89-90.
[132] Deleuze, *Difference and Repetition*, 209.

though the object had one part of itself in the virtual…."[133] In a reverse transposition of Proust's male-centric theory, where, in Deleuze's observation, men who like men sleep with "women who suggest young men," Irigaray's erotic sociality hinges on relations among women—not in the gap left by women's absence, but in a space outside this context, a place wherein women exist on *their* own terms.[134]

From the results of Bosma's research, we see that male composers face an impossible hurdle to overcome: On the one hand, they need to include a greater diversity of voices to dispel the master/slave dynamic that potentially results from a man "fixing" the voice of a female performer. On the other hand, if male composers "correct" the disparity by composing for male performers, then, once again, women are excluded from the creative processes of electroacoustic music. But perhaps another orientation to be taken to this history of electronic music is one focused on the power of collective reception.

Unlike Pierre Schaeffer or Luc Ferrari, who each in his own way aims to bracket out sounds from their originating contexts, composer Annea Lockwood relies on listeners having shared transcontextual associations. In *Tiger Balm* (1970), the loud, repetitive low-frequency purring conjures a cat almost immediately to mind, and, given a basic familiarity with the animal and its impetus for purring, listeners may further intuit that the animal is experiencing pleasure. After the initial three minutes of purring, Lockwood introduces an ostinato in gongs as an acoustic backdrop to the predominant purrs. The rhythmicity of the purrs becomes emphasized through its now syncopated groove against the gongs, and before long a twanging jaw harp enters to amplify this groove. About a third of the way through the 20-minute piece, a woman begins to moan in the same rhythmic cadence as the purring, and this association is obviously intentional. Lockwood explains, "The sounds [in *Tiger Balm*] flow in a transformational process, often merging and emerging based on shared characteristics which are evocative of the tiger's presence – cat, mouth harp, tiger, woman, plane; all variants of the same sonic energy."[135] Lockwood's purring cat and moaning woman, like Schaeffer's looping laughter, rely on the correlation among sounds to

[133] Deleuze, *Difference and Repetition*, 208; 209.
[134] Marcel Proust, *A la Recherche du temps perdu* (Paris: Bibliothèque de la Pleide, 1988), II:622, quoted in Deleuze, *Proust and Signs*, 89.
[135] Annea Lockwood, liner notes to *Early Works 1967-82*, EM1046CD, 2007.

draw further on the emotive contexts in which these sounds are likely to arise, but it is not solely the medium to which our ears are drawn.

The breathing of a living animal *is* for all intents evidence of that animal. That the purring cat is nowhere in sight does not contradict this sound's identity as a meaningful referent. This immediate correlation is certainly an important clause upheld by the contract one enters in listening to Lockwood's pieces. As she says in her interview with composer John Young:

> One of the things that, to me, is seductive about sounds is that this very immaterial substance conjures up 'a cat' – a cat's purring conjures up 'a cat' – with a real kind of concrete presence. When the cat coughs in *Tiger Balm*, everyone responds – I think it's the concreteness of the feeling 'here is a cat' that people are responding to, so that link between the sound and its source is very much a part of the piece on one level – as it is in many of my pieces. I think 'Musique Concrète' is a very nice term – a very real term! But quite apart from that, if I'm thinking of myself as working with phenomena then I like to work with the real phenomenon *itself*.[136]

The ambiguity left open by extrinsic associations is also what spurs on the intrinsic associations among sounds within the piece. And contrary to how Schaeffer is commonly portrayed, it is not that he denies such extrinsic associations, only that he believes listeners are capable of hearing *beyond them*. That one associates a real (but not actual) cat with the sound of its voice does little to explain how the cat's purring relates to the woman's breathing in *Tiger Balm*—this is only approachable with a particular kind of "bracketing," or how we "segment" the piece, to use music theorist Christopher Hasty's term.[137] According to Dora Hanninen, a music analyst's associations are what define segments, orientations are therefore important for understanding "the motivation or rationale for particular segments and segmentations" in music analysis.[138] The cat's cough (0:38, 1:35,

[136] John Young, "Source Recognition of Environmental Sounds in the Composition of Sonic Art with Field-Recordings: A New Zealand Viewpoint" (PhD diss., University of Canterbury, 1989), 479.
[137] Christopher Hasty, "Segmentation and Process in Post-Tonal Music," *Music Theory Spectrum* 3 (1981): 58; 57.
[138] Dora Hanninen, "Associative Sets, Categories, and Music Analysis," *Journal of Music Theory* 48/2 (2004):150.

3:09) in *Tiger Balm* is notable particularly because of what happens later in the piece. The regularly lilting purr stumbles momentarily as the force of the cat's breathing increases causing it to emit a glottal vocalization, an involuntary alimentation much as Schaeffer's laughing woman in "Erotica." Caught in the cat's throat, the cough surely arouses empathy in human listeners (and additionally, my cat's curiosity was also piqued by the purring of my computer speakers). As John Young elaborates in his analysis of the piece, at the moment of the cough, the cat purr moves from "static sign" to something more; the cat's cough not only initiates the game but triggers with it a certain narrative.[139]

This narrative need not arise from actual persons. It is evident in the apparent character of the music, in the relation between streams and not in the material that binds them. When the woman joins the purring tiger (10:49), she too elicits the rhythm of breath, inhale / exhale, weak / strong. A struggle ensues, as the woman's inhale rushes ahead of the cat's dominant exhale, confronting, challenging, and syncopating that dominance as the breathing drives intensively toward an impending convergence (13:00-13:15). To an attentive listener, an improvised third stream of breath joins the two previously recorded, the breathing of the listening spectator. At least, such a group dynamic *should* result in Lockwood's ideal performance of the work. She says, "I really hope that people are going to allow themselves to be enveloped by the sound and taken over by it – have it, in a sense, streamed through their bodies and be absorbed by it…"[140] Thus, the objective characteristic of the erotic *prosopopée* is embodied by the listening specter, owing in part to the work but also partly to the listener.

Tiger Balm is an experiment in audience participation, suggests Lockwood. "I was concerned with how our bodies respond to sound, and with the concept of sound as a primal energy and nutrient…"[141] Whereas eroticism is generally thought of as a subjectively arising feeling, composers of erotic music intend their art to be consumed *collectively* as a common sensory experience, whether in the concert hall or merely in the imagined collective (for example, several individuals listening at home with headphones). Though a work may be conceived with an ideal type of listener in mind, one who listens in a certain way and who is attentive to certain features—a composer does not usually write with a

[139] Young, 348.
[140] Ibid, 482.
[141] Lockwood, liner notes to *Early Works*, 9.

single individual in mind. The collective attitude pertains to the contract between and among listeners and composers, a contract very much like the 'rules' Don Ihde identifies as required for two individuals to engage in in an argument: there must be some common premise from which the two proceed.[142] These rules are continuously redefined on the basis of a covered common ground, perhaps even without any explicit verbal agreement, but "Fortunately, in a very general sense, the phenomenologist can rely on a certain latent 'phenomenological' ability on the part of others…. Thus I can rely preliminarily on the other to have such and such experience and on the other to be able to detect whether such and such may or may not be the case."[143] For the electroacoustic game to work, part of the composer's job in this musical contract is to predict which musical parameters will encourage particular reactions from listeners and to implement these parameters within some structural formulation to ensure some sort of aural exchange occurs between listeners and music.

Lockwood ensures such real-world associations by attempting, like Ferrari, to maintain the natural environment of the sounds she captures.[144] As she explains in response to questions of interviewer Tara Rodgers:

> TR: There are these very different trajectories in the history of working with sound—on one hand, there's the spirit of musique concrete [*sic*], with composers like Pierre Schaeffer who would catalogue and classify sounds and their properties so extensively. And then there is this other way of working, which you describe which involves discovering as many sounds as you can, but mostly accepting them and leaving them as they are.
>
> AL: Or not needing to *fix* them. 'Cause I think they're essentially not fixable. But in their natural state, *sounds in their natural state*—that's a concept I sort of like—are not fixable, are they?[145]

[142] Ihde, *Listening and Voice*, 32-3.
[143] Ibid, 33.
[144] Tara Rodgers, *Pink Noises: Women on Electronic Music and Sound* (Durham, NC: Duke University Press, 2010), 125.
[145] Ibid.

One could interpret Lockwood's perceived "natural state" as reliant on the hive of collectivity through which the electroacoustic soundscape is construed. Sound, as heard in electroacoustic music, is never mere duplication, magnetic tape skews the sonic image captured by the microphone, and the loudspeaker shapes that sound according to the spatial dimensions of the place in which it is broadcast—such, as we've learned from Kane, is the inherent trace of *technê*. Like the psychotherapist who diagnoses the maladies of the ecstatic patient, the electroacoustic composer isolates the uncontrollable "abnormalities" of sounds from their natural environments.[146] However, ultimately a composer writes in service of sound, of what sounds and for whom.

Electroacoustic composers seem particularly concerned with the ideological implications of sounding contexts, as they are constantly occupied with the relation between a work's intrinsic details and its extrinsic significance. Although Lockwood was probably not thinking directly of *Tiger Balm* in the above discussion of "sounds in their natural state," and more likely referring to her life's work of documenting sound maps of the world's rivers, her statement provokes an interesting question for this dissertation.[147] Let's, for a moment, imagine that Lockwood *is* speaking of *Tiger Balm*. What, we might ask ourselves, actually is the "natural" soundscape of this erotic circumstance? The question of a constructed soundscape of sex points importantly to a certain limitation in the ideological thrust of the soundscape movement, wherein "the" environment, or "natural state," refers only to certain conceptions of environment and only to some types of engagement with "natural" contexts. What is intriguing about Schaeffer's "Erotica," Normandeu's *Jeu de Langues*, Lockwood's *Tiger Balm*, and even Ferrari's *Les Danses Organiques* is each composer's ambition to normalize the erotic soundscape, to capture an erotic essence as a completely legitimate part of the audible human environment.

Positioning Lockwood in the ultimate authorial role, John Young has claimed the source for the woman's voice in *Tiger Balm* as Lockwood herself masturbating (though

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[146] This was at least one motivation behind the mid-twentieth-century faithfulness to High Fidelity, which regarded a special attention to the recording's manner of presentation.

[147] Annea Lockwood, "Sound Mapping the Danube River from the Black Forest to the Black Sea: Progress Report, 2001-03," *Soundscape: Journal of Acoustic Ecology* 5/1 (2004): 32-4; Annea Lockwood, "What is a River?" *Soundscape: Journal of Acoustic Ecology* 7/1 (2007): 43-4. This is not to dismiss the erotic potential of hearing the rushing waters of the Danube, recall the intensely erotic glance exchanged between Count Friedrich and the girl in Josef Freiherr von Eichendorff's *Ahnung und Gegenwart* (1815).

nothing in the transcription of his interview with the composer or subsequent notes on the piece suggest as much).[148] *Tiger Balm* is an artistic project that invites such conjectures, whether true or merely a disturbing hiccough of an inseparable and inevitable "voice-body." Incidentally, Young's inference supplies an ideological connection between Lockwood's erotic work and its historical precedent, Schaeffer's *Symphonie pour un homme seul*, which, as its title suggests, is intended to be performed by a single individual whether by Schaeffer or by Schaeffer's stipulated "lone man," should *he* be able to find a symphony within *himself*. The common setup for these performances, with Schaeffer surrounded by a slew of phonographs tailored for his particular rendition, ensures that the emergent erotic soundscape is always-already stipulated by the person at the controls (in this case the controlling composer). Such is the composer's desire to participate, as Ferrari's Rio says, and this participation is never passive. With the composer at the desk, the sounds that emerge divorced from source and cause become alternative expressions of the *composer*. Still, rather than the performance of a narcissistic exhibitionists, the purpose of this music is not for listeners (including the composer) to reflect back upon the composer but for members of the audience to submerge themselves in the music, to join the constructed space of the sound that envelops them. Decades after composing *Tiger Balm* (possibly following John Young's presumptions), Lockwood would confessed: "[*Tiger Balm*] is part of my blending with myself as a woman – making love with one's essence, merging with it."[149] One need not necessarily fulfill—that is, remain faithful to—what the composer intends listeners to identify as source and cause to arrive at a composer's desired effect, the point is rather to engage collectively with the music but each on her, his, or their own terms.

8. Conclusions on *the* Object of Desire

In *What Is Philosophy?* (1991), philosophers Gilles Deleuze and Félix Guattari move to define "the work of art." They argue that once the work of art is created it departs from the controlling hands of its composer or creator, but that it remains nevertheless organized by

[148] Young, 509.
[149] Lockwood, liner notes to *Early Works*, 10.

such lingering structures. Regarding affect, Deleuze and Guattari therefore say that, although composers do not create affect, they do in fact organize materials in such a way as to elicit affect. "It should be said of all art that, in relation to the percepts or visions they give us, artists are presenters of affects, the inventors and creators of affects. They not only create affects in their work, they give them to us and make us become with them, they draw us into the compound."[150] Art for these two thinkers is construed by way of a synchronic Bakhtinian polyphony, as a product of collective intentionality, as gaining significance independently of any one individual.[151] The "work" of art has a life of its own while still referring back upon its creator. From this, we might understand that an erotic (musical) work is not in itself desire, but that the structures of the work elicit desires. I will return to these points again in the conclusion of my final chapter.

The listener is a companion to the composer, an accomplice, what the ancient Greek philosopher might call a friend. This is an imagined representative, a persona embodying a possibly unforeseen orientation toward a given work. The game of intentionality therefore engages listener and composer in a dialogic struggle toward new conceptions of the musical object now eroticized. As the object is that which elicits desire, it is desire not in consequence of something lacking but aroused in excess of the artistic material. It is the orientation of the philosopher toward something—*philo*-sophy. But be forewarned, given the stakes of such a game, "Friendship would then involve competitive distrust of the rival as much as amorous striving toward the object of desire," say Deleuze and Guattari.[152]

In his conclusion, Kane distances himself from music practitioners inspired by Deleuze and Guattari, practitioners, who, in his mind,

> …[start] from a view about the material properties of sound but [move] quickly in the direction of the subject's affective states. The claim is that sound is a material, vibrational force; when it encounters a body, this force makes a direct impact on the nervous system of the listener, one that bypasses his or her cognitive categories and

[150] Deleuze and Guattari, *What is Philosophy?*, 175.
[151] Ibid, 171.
[152] Ibid, 4.

> forms a representation (to use Kantian language); the impact produces immediate somatic, affective states.[153]

In distinction from this view, Kane insists that any change in sound is necessarily *perceived* as changed, though its physical properties may nevertheless remain constant.

> To experience a change in the acousmaticity of a sound, there need not be *any* alteration in the vibrational properties of the sound. A change in acousmaticity can only be articulated in cognitive terms. The vibrational-affective theorist has no interest in the cognitive, epistemological dimension of listening, which, I take it, is precisely their point. Yet that leaves them unable to account for acousmatic sounds.[154]

As Kane would have it, what remains of the electroacoustic work after its composition is the recording as material, but not its physical manifestation: the work remains only an illusive cognitive constraint.

By privileging the recorded medium over sound's physical properties, Kane erases any distinction between original and copy. In fact, he does so deliberately to point to an ontological discrepancy between the commonly conflated descriptions of schizophonic sound and the acousmatic.

> Schizophonic sounds, in R. Murray Schafer's description, are sonic copies that have been separated from their original context, usually as the result of mechanical reproduction. The criterion for schizophonic sounds requires both a copy and an original. Acousmatic sound, when defined in terms of acousmaticity, does not require this; it only requires spacing of the source, cause, and effect.[155]

Presumably Kane emphasizes this distance to resist the delineation Deleuze and Guattari make between the immediate affects of art and the "concepts" of philosophy, in order to

[153] Kane, *Sound Unseen*, 225.
[154] Ibid.
[155] Ibid.

preserve the necessary distance of conscious reflections. But in emphasizing mere sound, Kane seemingly privileges a strict and, I might add, false delineation between cognitive experience and physical sensory experience, and does so at the expense of music.

Reading Kane, one supposes that the voice is only voice as mechanism, a sort of formalized or structural entity distanced from sound and hence even listening.[156] From this, we might conclude, with the conservatives among us, that not only is erotic sound transgressive, but it is an abomination and a contradiction to the acousmatic project as a whole. We might say that the erotic is not deserving of voice, that the erotic sounds bombarding our ears underdetermine our desire to hear them—at least this has been the predominant position of Western philosophy, psychology, religion and yes, musical composition for centuries. Eroticism is sacred, and hence hidden from view. It might be seen but should definitely not be heard—at least not explicitly. Eroticism lingers behind the veil without a sound to indicate its presence, we thus acknowledge it (however independently), in whatever guise but do not disclose its whereabouts. But the experience of acousmatic sound involves a necessary dis-acousmatization, a placing, locating, and an identifying of sound beyond its mere objecthood. Listeners are compelled to dispel the myth of the acousmatic, to disturb its sacred dwelling, and this urge is precisely the allure of erotic electroacoustic *music*.

Such a position thus far follows Kane's argument, which confronts Mladen Dolar's insistence that "there is no such thing as disacousmatization."[157] A necessary part of acousmatic sound is indeed its *dis*-acousmatization. Disacousmatization occurs upon acknowledgement of sound's separation—its spacing from source, cause, and effect. And yet, what Kane fails to articulate, is that this spacing is not *merely* cognitive, as one cannot experience sound without *hearing* it, without physical sensation (even imagined sound has

[156] In Rose Rosengard Subotnik's reading, structural listening, in the manner advocated by Schoenberg and Stravinsky (respectively) and by extension Adorno's representations of these composers in his writings, is only an idealized, "conceptless process" of autonomous formalist analysis "almost completely dependent on scores, as if the latter were books." Subotnik, Rose Rosengard. "Toward a Deconstruction of Structural Listening." Andrew Dell'Antonio repeats Subotnik's critique in his "Introduction" to *Beyond Structural Listening?: Postmodern Modes of Hearing* (Berkeley: University of California, 2004), 3. Coming upon these parallels between soundless contemplation, one might conclude that structural listening even does not concern scores, but rather it remains so entirely conceptless as to become immaterial.

[157] Mladen Dolar, *A Voice and Nothing More* (Cambridge, Mass.: MIT Press, 2006), 70, quoted in Kane, *Sound Unseen*, 150.

been shown to stimulate the ear).[158] The presence of the sound *object* requires that sound *sound*. Why else should we desire to amplify vibrations, if not in service of hearing them, if not in order to engage in the sensory experience of sound? Engagement with sound's vibration is, therefore, a confrontation with the *physical in service of* the cognitive.

In a lecture entitled "Panophonia," Steven Connor returns to R. Murray Schafer's previously mentioned "schizophonia" to confront the supposed problem of the loudspeaker that severs sound from source. As Connor insists,

> …*there are no disembodied voices*; for every disembodied voice is always also what I called a 'voice-body', the body implied by or intuited from the voice. Far from being what Douglas Kahn calls 'deboned', dissociated voices always seemed to summon in their wake a phantasm of some originating body, effect convening cause.[159]

Connor, like Brian Kane, confronts the assumptions made in Schaeffer's *musique concrète* approach, arguing that, for most listeners, the voice emitted by the loudspeaker is always-already representative of a vocalizing body. And Connor goes even further to argue that this link has intensified in the current era. The "voice-body" has become so intuitive in our present relationship with sound, he says, that we "have in fact continuously and actively to inhibit this tendency."[160] For Connor, although "hearing voices" historically aligns itself with pathology, to date, this inclination toward "technical ventriloquism" has become an

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[158] Lore Thaler, neuroscientist at Durham University, has shown in several studies that "sight" is not linked solely to visual stimulation from the eyes, but that the other senses, particularly hearing and specifically echolocation, play an important role in intuiting images of spatial character and depth. In her studies, blind individuals have shown brain stimulation related to the perception of texture, lightness, motion, orientation, and shape when faced with objects moving in space in the vicinity of the participant. Lore Thaler, et al, "Neural Correlates of Motion Processing through Echolocation, Source Hearing and Vision in Blind Echolocation Experts and Sighted Echolocation Novices," *Journal of Neurophysiology* 111(1): 112-127. Similarly, researchers have discovered that deaf individuals have comparable brain activity in parts of the brain related to aural stimulation when comprehending language. Hiroshi Nishimura, et al, "Sign language 'heard' in auditory cortex," *Nature* 397/6715 (14 January 1999): 116.

[159] Steven Connor, "Panophonia," lecture delivered at the Pompidou Centre, 22 February 2012, http://www.stevenconnor.com/panophonia/panophonia.pdf (accessed 24 November, 2014), 1. See also, Steven Connor, *Dumbstruck: A Cultural History of Ventriloquism* (Oxford: Oxford University Press, 2000), 353.

[160] Steven Connor, "Panophonia," 4.

inescapable phenomenon.[161] Though the electroacoustic game, when immersed in the erotic, may be parodic of the real act of sexual intercourse, the contract between creator(s) and receiver(s) does not usually seek to reproduce actual experiences from real life—as Kane surmises in his discussion of Luc Ferrari's *Presque rien*—but rather the contract shapes representation already from our first encounter, upon first listening, upon first *sensing*.

We learn from Deleuze and Guattari that the work remains *at work* long after humans have come and gone. Like a concept, the raw material is interpreted anew with each passing moment, always in flux, immanently in *becoming*. "It is true that every work of art is a *monument*, but here the monument is not something commemorating a past, it is a bloc of present sensations that owe their preservation only to themselves and that provide the event with the compound that celebrates it."[162] As a monument, the work must stand on its own. According to Deleuze, that which defines art as such lies outside of art. Like a game, its moral compass is determined by factors beyond itself. As he says, "the game is explicitly taken as a model only because it has implicit models which are not games: the moral model of the Good or the Best, the economic model of causes and effects, or of means and ends."[163] Aside from the generalizable "source," "cause," and "effects" of electroacoustic music, in erotic electroacoustic works, the game only works because it refers to some extent moral code outside of this agglomeration. Hence Deleuze muses on the "ideal game": "Such a game—without rules, with neither winner or loser, without responsibility, a game of innocence, a caucus-race, in which skill and chance are no longer distinguishable—seems to have no reality. Besides, it would amuse no one."[164] If it is Kane's will to amuse and challenge his readers, he ultimately loses us in his ambition, first, to sever what is acousmatic about sound, and second, to sublimate the spacing of sound's various sections onto its recording medium. As I see it, without the sounding effect, without triggering or engaging with sound's circumstance (and not the medium that contains it) we would have absolutely no concern for the acousmatic as a phenomenon.

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[161] Ibid.
[162] Deleuze and Guattari *What is Philosophy?*, 167-8.
[163] Deleuze, *The Logic of Sense*, 59.
[164] Ibid, 60.

9. Conclusion

One surmises that listeners gather some information from musical composition—for example, erotic connotations—based on context surrounding the work's composition. And this is even before we consider the quality of sounds heard. Such is the *effect* of listening regardless of *source* or *cause*. But owing to the examples given thus far, the erotic electroacoustic game necessitates that such effects are conjured by the desire to find a sound's corresponding source, to "dis-acousmatize" sound. Better yet, according to Charles Darwin, such is our evolutionary instinct. Summarizing Darwin, Simon Emmerson writes, "Not knowing the cause of a frightening sound is (in the first instance) a severe disadvantage if we feel it poses a threat, though one substantially reduced in the 'cultural' confines of a concert hall or in private listening."[165] However distant in evolutionary terms, Emmerson maintains that electroacoustic music still retains such signification. But I would argue further, that when such signification arises in the context of an erotic work—and particularly when a composer has intentions to arouse listeners with erotic feelings—this trickery takes on new (intentional) meaning.

Compare, for example, the experiences of hearing a pornographic film and an erotic electroacoustic work. In a pornographic film a woman's moaning voice typically builds in intensity and dynamics until a moment of climax, which brings about a relaxation and eventual subsiding of the moaning. When auditioned in the context of a television sitcom the sound is amusing because of what it signifies to the audience, an association to the over-dramatized, fabricated and orchestrated porno, or maybe the sound is a sore reminder of one's overly rambunctious neighbors—this is part of a satiric game. But in the context of an electroacoustic music concert, in addition to such associations, the audience feels the "obligation," as Searle would say, to attend to the sounds in a musical manner, observing the gate or periodicity of the moaning, its relative and surmounting pitch, volume, and so on. This obligation is heightened by the concert hall's function as "curiosity shop," to borrow a term from Jacques Rancière, wherein "religious artifacts and ethnographic

[165] Emmerson, *Living Electronic Music,* 18.

specimens are aestheticized as objects of disinterested pleasure."[166] Such "cultivated" listening is not the usual way of listening to pornographic sounds, because generally the sounds are not as much the focus of that particular situation as the visual accompaniment of the film or the end result of an orgasm.[167] In the context of a musical performance, following the mutual agreement or collective intentionality of what defines this institution, sound is auditioned with a certain kind of attention, although the purpose of listening in this way may not be shared by all listeners. Presumably this is the reason why, when I invited Beatriz Ferreyra, Schaeffer's assistant in the early days of the GRM, to discuss her erotic work *Pas de 3…ou plus* (2009), commissioned like *Jeu de Langues* by the organizers of Miso Music, she claimed that the theme of eroticism in electroacoustic music is *only* a game—or worse yet, a joke.[168] Taken out of the context of the sexual encounter, the sounds of sex seem to require that listeners focus on sound removed from sign, to focus on sound in itself or on the recording *as recording*, when in actuality this way of listening is somewhat comical, if not absurd, or completely impossible in the context of such intuitively recognizable sounds.[169] But, of course, this all depends on the attitude of the listener, which is already one register removed from the intentionality of the collective audience gathered to partake in the concert experience. While one member of the audience may be "savoring" the experience, her neighbor may be focused on the anger he feels toward his partner for dragging him to such a lurid event during the final match of the

[166] Jacques Rancière, "The Aesthetic Revolution and Its Outcomes ," in *Dissensus: On politics and aesthetics*, 115-133, ed. S. Corcoran (New York: Continuum, 2010), 126, quoted in Jairo Moreno and Gavin Steingo, "Rancière's Equal Music," *Contemporary Music Review* 31/5-6 (2012): 498-9.

[167] For more on this comparison between pornography, sexualized sound, and the pleasures of "Aural Sex," see John Corbett and Terri Kapsalis, "Aural Sex: The Female Orgasm in Popular Sound," in "Experimental Sound & Radio," special issue, *TDR (1988-)* 40/3 (1996): 102-111.

[168] Beatriz Ferreyra in discussion with the author, 11 May, 2015.

[169] It would seem that Schaeffer ultimately concluded, on this basis of interpretation, that an objective analytical methodology for acousmatic music was, perhaps, unattainable. Michel Chion points out that in the *Traité*, "the stage of analysis is only just sketched out," and furthermore that, "The author states clearly that it is '*probable that the quest for what we might call the philosopher's stone of new music will not succeed with the analytical method. (…) In this sense, the present work proposes to go as far as possible, but (…) it would be unwise, and certainly make no sense, to want to reach authentically musical structures directly by this path*'." Michel Chion. *Guide To Sound Objects. Pierre Schaeffer and Musical Research*, trans. John Dack and Christine North (London: 2009), 115-6, last accessed 16 April, 2015 http://monoskop.org/images/0/01/Chion_Michel_Guide_To_Sound_Objects_Pierre_Schaeffer_and_Musical_Research.pdf.

World Cup.[170] Regardless of individual experience, participating in the event already assumes collective intentionality.

[170] The "savoring scholar," relates to the "cultivated listener" introduced by Pierre Bourdieu in his critique of middle-brow art, Pierre Bourdieu, "Outline for a Sociological Theory of Artistic Perception," in *The Field of Cultural Production*, ed. Randal Johnson (New York: Columbia University Press, 1993), 215-37 and Pierre Bourdieu, et al., *Un art moyen* (Paris: Editions de Minuit, 1965), translated as *Photography: A Middle-brow Art*, trans. Shaun Whiteside (Stanford: Stanford University Press, 1990), quoted in Drott, 155, see citations 161n41 and n54.

Chapter 2: The "Ongoing Interculturality" of Alice Shields's *Apocalypse*[1]

"The whole point of shame is to *prevent* performance."[2]

- Paul Attinello

India has a rich and complex history with sex. Its music, dance, and art practices have been cultivating an aesthetics of erotica for centuries, but decades of colonial suppression altered the tenor of such explorations, causing many practices to fall from grace, to become tainted with negative connotations in a society that at the turn of the twentieth century was forced into increasingly prudish standards of indecency. At the height of the colonial stronghold, however, something changed to bring Indian traditions back to the interests and control of the local population. Ambition to showcase the history of Indian culture and society came in equal parts from the colonizing British powers, who prided themselves on their conquests, as from the occupied Indian people, who feared the loss of their long cultivated arts. Carnal statues decorating the walls of the Lakshmana temple and writings such as *Vatsayana's Kamasutra* motivated and inspired an early-twentieth-century revival of ancient Indian dance practices, and specifically the *sringara rasa* dance of the bharatanatyam dance-drama.

In *sringara rasa*, the solo devadasi dancer portrays multiple characters, a complex of physicality and emotion. Her movements, similarly to Peking opera, draw on a convention of gestures that communicate to the audience distinctly from the more abstract movements of a ballet dancer. In Western classical traditions of dance, music, and performance art, the audience may observe and even identify with the action on stage, but there is no expectation in this tradition that the audience take part by entering the mind of the character to embody that character's feelings as their own.

[1] I would like to thank Alice Shields for taking the time to answer my various questions by e-mail and in person. Without her assistance this analysis would not have been possible.

[2] Paul Attinello, "Performance and/or Shame," *repercussion* 4/2 (1996): 119.

Figure 2.1 "Shiva as Lord of Dance (Nataraja)." Copper alloy sculpture dating from ca. 11th century India.[3]

In sculpture, as in the bharatanatyam dance-drama, the god Shiva (see Figure 2.1) is commonly portrayed with the two-hand gesture *Abhaya muhdra*, in which the right hand is raised, bent at the elbow with palm facing out, the arm resting above the extended left hand with palm facing down, pointing toward the raised foot. When apprehended together in dance, movements of the arms and legs and subtle facial gestures combine to invoke Shiva as a character, but additionally each movement also symbolizes a characteristic of the deity. *Abhaya*, meaning fearlessness in Sanskrit, refers to protection from evil and is presented by the right hand, while the left hand gives the sign of the elephant, of leading through the jungle of ignorance. Where sculpture captures one moment of movement, dance brings these gestures to life. Without a moment's notice, the dancer can instantly transform from Shiva to Shakti, the mundane appellation of Shiva and an expression of his feminine energy. In the characteristic statues, Shiva and Shakti are frequently depicted with the

[3] Image used with permission from the Metropolitan Museum of Art, New York, New York.

bodily form of the man and woman in ecstatic entwinement. In contrast to Western ballet, which ordinarily conceals the most tender parts of the body, the modern dress of bharatanatyam dancers exposes the dancer's shoulders and stomach and frequently draws attention to her genitals in deep plies (see Figure 2.2). A transition from Shiva to Shakti is achieved through the ritualized sexual union known as *maithuna*.

Alice Shields's electronic opera *Apocalypse* (1993) follows the spiritual, emotional, and physical journey of "the Woman" from birth to her first carnal relations. But this is hardly your fairytale love story. Along the way, she finds power in the Indian Devi (goddess), and later her lover, the God Shiva, is accosted by a chorus of prudent objectors, resulting momentously in the opera's metaphorical, dramatic, and literal climax. The final scene of *Apocalypse* stages Shiva and the Woman's bodily union complete with directions for Shiva to place his two-foot phallus conspicuously on the Woman's vulva as they enact three ritualized orgasms before the assembled onlookers. This chapter details the opera's composition, situating various strands of inspiration within the contemporary sexual politics and social climate in which the opera was created, 1990s New York City.

The dramatic structure in *Apocalypse* draws heavily from bharatanatyam, which the composer studied for nearly a decade. In our conversations, Alice Shields repeatedly noted a distinction between Indian dance and contemporary Western dance on the basis of liberties bharatanatyam extends to the female body. Shields recalled her excitement at first encountering Shakti in Nepalese statues. She explained to me her first impressions of this imagery: "Shakti's typical gesture would be of her curling hair, her breasts, her hips…. In the act of intercourse, Shiva's hair, which is fire, is circling around the world, and she is there with her leg partially over him—intense intercourse—and I loved it!" The transformation from Shiva to Shakti is "so well defined that the two are one, and this is where the *maithuna* in *Apocalypse* comes from."[4]

[4] Unless otherwise noted, all quotes from Alice Shields originate from interviews and e-mail correspondences dating from January-August 2014.

Figure 2.2 "Swelling breasts, hard, like golden cups." Image reproduced from Projesh Banerji, *Erotica in Indian Dance* (New Delhi: Cosmo Publications, 1983), plate 13.

In bharatanatyam, the devadasi does not merely imitate the poses of the deities or characters, but her gestures are imbued with an emotional inflection. The performer's *muhdras* (signifying gestures) are expressive of *bhavas* (moods) that draw on a long history of associations. The *muhdras* convey the dancer's experience but are also intended to arouse a specific response, or *rasa* meaning flavor or essence, from spectators.[5] The eight *rasa*s arise in four pairings, where the first of each pair is dominant.

Love/Humor (*Sringara*/ *Hasya*)
Valour/Wonder (*Vira*/ *Adbhuta*)
Anger/Sorrow (*Raudra*/ *Karuna*)
Disgust/Fear (*Bibhasta*/ *Bhayanaka*)

Navarasa theory, which serves as a guide for Indian drama performers on how to imbue audiences with the above emotional complex, is expounded in the *Natya Shastra*, a transcription of oral tradition from between 100 BCE and 100 CE. *Navarasa* theory is attributed to Bharata Muni, after whom the later revival of the *Sadir* dance genre is renamed bharatanatyam, though Adya Rangacharya, the preeminent English translator of the *Natya Shastra*, speculates that many authors have since "interfered" with Bharata's original manuscript.[6] The treatise likens the experience of *rasa* to enjoying a delicious meal, where a diner does not relish each taste distinctively, but takes joy rather in the entire experience.[7] The eight *rasas* are like flavors enjoyed by members of the audience as spectators of a dramatic performance. Furthermore, the tones of one *rasa* may linger behind another, meaning that a drama arouses many *rasas*, though Bharata advises that in a successful drama, "only one *rasa* must be predominant and others subordinate to it."[8]

Of the eight *rasas*, *sringara*—love, either romantic longing (*viyoga*, meaning separation or absence) or sexual union (*samyoga*, meaning coincidence or alliance)—is the "king of *rasas*," according to feminist scholar of Indian art and philosophy Ranjana Thapalyal. This is because "love is the one emotion that, by definition, encompasses all the

[5] Judith Lynne Hanna, *Dance, Sex, and Gender: Signs of Identity, Dominance, Defiance, and Desire* (Chicago: University of Chicago Press, 1988), 102.
[6] Adya Rangacharya, *Introduction to Bharata's Nāṭya-Śāstra* (Bombay: Popular Prakashan, 1966), 69.
[7] Ibid, 70-1.
[8] Ibid, 75.

others."[9] In the *sringara rasa* dance practice, the dancer forfeits her own bodily presence; she is not merely portraying the union of two characters, but she is herself uniting with the divine. This is *maithuna*.

Though *Apocalypse* was never staged, in 1993 Alice Shields released a CD with selections from the electronic part.[10] The electronic music playback—what we hear on the recorded album—is intended to accompany the performance in a sounding collage of music, declamation, and singing—basically the opera *sans* live performers. The opera is modestly scored for the Woman (mezzo-soprano), Seaweed a sea-goddess (soprano), Shiva (baritone), and SSAATTBB chorus, in addition to the instrumental electronic guitar and fixed media playback. The Woman, the opera's main character, journeys from birth to spiritual consummation, where the possibilities of the electronic medium allow Alice Shields to take on the roles of every character. Shiva is the only part occasionally sung by someone other than Shields, performed in the "Dismemberment and Eating" scene (III:7D) and "Organ Screaming" (IV:11B) by Michael Willson.[11]

In addition to bharatanatyam dance styles, Shields also incorporates ancient Greek movements depicted in statues and vases, engaging with a rich ancient mythological subtext from India, Greece, and also Ireland. By drawing together disparate cultures from distant historical periods, Shields engages associatively with various musical idioms, textual allusions, dramatic strategies, and aesthetic philosophies—though listeners need not necessarily be familiar with these associations to pick up on the opera's erotic underpinnings. Shields maintains the sacred intimacy of erotic encounters, while dismantling the conservative separation of public and private, of intimacy and exhibition, and abolishing that which is prohibitive about sex. Rather than preserve the conventions of her inspiring sources intact, *Apocalypse* inclines toward the utopic, where the composer shapes the texts to conform to hopeful realizations of her own sexual imagining. Using

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[9] Ranjana Thapalyal, "Sringara Rasa: The Feminine Call of the Spiritual/Erotic Impulse in Indian Art," in *The Sacred and the Feminine: Imagination and Sexual Difference*, eds. Griselda Pollock and Victoria Urvey-Sauron (London: I.B. Tauris & Co., 2007), 137.

[10] Alice Shields, *Apocalypse: An Electronic Opera*, Composers Recordings NXCR647-CD, 1993, compact disc. See the appendix for a list of tracks and corresponding scenes. In the early 2000s Shields was approached by Akademie der Künste in Berlin for a proposed filmic adaptation of the opera, but this staging has yet to be realized.

[11] Scenes are enumerated according to the opera's libretto, Unless otherwise noted, all text and stage notes are from the unpublished libretto of *Apocalypse*. Alice Shields, *Apocalypse* (unpublished libretto, 1991-1994). See Appendix B.

popular music as a guide, Shields encourages audience participation, thereby allowing the ordinarily tacit spectators to engage with what is happening on stage and to actively confront its sexual implications. By inviting the audience to partake on stage, *Apocalypse* fuses individual experience with the musical and dramatic styles performed in the opera, and thus aspires to transform our understanding of sexuality by inviting the utopic to become realized.

1. Alice Shields

Upon arriving at Columbia University in the 1960s, Alice Shields was surprised to discover that, "Supposedly no one, not even the musicologists specializing in medieval or renaissance history, had ever heard of a woman composer, including Hildegard von Bingen or Elizabeth Jacquet de La Guerre, who were famous in their time."[12] But Vladimir Ussachevsky, director and co-founder of the Columbia-Princeton Electronic Music Center (CPEMC), made special efforts to encourage women composers. After her remarkable success in the undergraduate counterpoint sequence, Ussachevsky insisted that Shields join his composition studio. Upon completing a Bachelor of Science in music (1965) and a Master of Arts in music composition (1967) at Columbia, Ussachevsky convinced the university to open a Doctor of Musical Arts program in music composition, and Shields and Charles Dodge were the first enrolled. Because the program was still new, there were only limited courses designated solely for those pursuing the degree, so, in addition to the coursework for composition, Shields and Dodge were also expected to complete the requirements of the parallel track in musicology. For Shields, this "extra" training in music history and theory provided a welcome point of departure for new discoveries, and she reveled in the opportunity. Though in Shields's student-days electronic music was a relatively new discipline, it reflected the challenges of form and compositional methodology typical of older music. Shields became Ussachevsky's assistant and, like him, carried her interest in counterpoint into the electronic domain.

[12] I am indebted to Anna Guilia Volpato, a.k.a. Johann Merrich for providing me with the original transcripts for this interview, which appears in Italian translation in Johann Merrich, *Le Pioniere della Musica Elettronica* (Milan: Auditorium Edizioni, 2012), 91.

In her early days of working at the CPEMC in the 1960s and 70s Shields says she rarely encountered other women, and given the figures most commonly associated now with the Center, Milton Babbitt, Bülent Arel, Mario Davidovsky, Charles Dodge and Charles Wuorinen, it remains still apparent that women were scarcely represented there. CPEMC colleagues Pril Smiley and Daria Semegen, who themselves also went on to become successful composers of electronic music, studied alongside Shields and, like her, were active for several years in the CPEMC[13], though they too, until recently, were omitted from printed histories about the Center.[14] In our conversations, Shields laughingly recalled an early encounter with a fellow composer in the Columbia music library, a brutish male student who definitively proclaimed that no "normal" woman could succeed as a composer. As she explains, "I realized thereafter that [he] meant that I couldn't be what I want, a straight woman—which I was—and be normal, and write exciting music. It was meant as an insult and I think it was a defense statement that you can't write music as good as me, or better… But that was very typical." Shields was taken slightly aback by this comment, though it did little to sway her conviction that composing was her life's calling.

Surrounded by men in her professional life, Shields began looking to women for inspiration. A composer primarily of operas, she looked toward operatic characters. But even the plots of many operas, and particularly love stories in opera, valued female characters differently than men. As Catherine Clément capitulates, "In opera to love is to wish to die."[15] Unfolding as if in slow preparation for the death of the central female character, Puccini's 15-year-old Cio-Cio San sacrifices her body and her life for her American hero, Lucia is driven from madness to death, and Wagner's Isolde dies simply of love-sickness. Avoiding these tropes may have been what led Shields to first compose operas that were devoid altogether of women. Her thesis composition, part of a trilogy on Homer's *Odyssey* (composed respectively in 1968, 1970, and 1975), featured only male parts. But whether or not Shields was conscious that her all-male compositions replicated

[13] Author in interview with Alice Shields 24 July, 2014.

[14] Pril Smiley began working with Ussachevsky at CPEMC in 1963. Daria Semegen similarly recalls the absence of women in her undergraduate studies in composition at the Eastman School of Music 1964-68, in fact, she was the only woman studying in that program at that time. Elizabeth Hinkle-Turner, *Daria Semegen: Her Life, Work, and Music* (PhD diss., University of Illinois at Urbana-Champaign, 1991), 18-9.

[15] Catherine Clément, *Opera, Or, the Undoing of Women*, trans. Betsy Wing (Minneapolis: University of Minnesota Press, 1988), 53-4.

the monochromatic atmosphere at Columbia, it is clear that she made an effort in later works to change such representations by incorporating prominent female roles.

Shields immersed herself in the writings of female authors and she was also drawn to women represented in religion, those depicted in the classic Greek, Hindu, and Gaelic myths as powerful, knowledgeable, and intelligent *people* (not merely women). But what especially piqued Shields's interests was the freedom with which non-Western mythology and religion portrayed women's physicality and sexuality. In Indian mythology, says Shields,

> Each part of the body of the "Great Goddess" is lauded, every part, toenails, everything! And I thought, how magnificent that a women could be celebrated and celebrated in the Indian case as fearsome. All these goddesses are powerful and are not just addressed, though some are, in moments of grief, like the Virgin Mary can be addressed by some Christians here, but they are to be feared and at the same time intensely sexual, which was such a relief.[16]

Since composing her first operas, Shields has devoted a large portion of her music to these literary and religious icons. The Great Goddess Devi is one character in *Apocalypse* (1993) and she appears also in the mini-opera *Shivatanz* (1993) and in *Sahityam* (2000) for solo marimba or bassoon. The Virgin Mary, the quintessential female icon from Shields's Christian upbringing, appears in *Ave Maris Stella* (2003) for SATB chorus and *Kyrielle* (2005) for violin and tape. In a reconstruction of Chaucer's *Troilus and Criseyde*, the composer returned to Boccaccio's Italian text to retell the story from Criseyde's perspective in an opera named after the title role *Criseyde* (2010), and not restricting herself only to religious and mythological texts, Shields has also drawn inspiration from living (or once living) women, such as the Japanese poet Komachi (*Komachi at Sekidera* [1987/1999]) and Rachel Corrie, a woman crushed to death by an Israeli forces bulldozer as she stood before it trying to prevent the demolition of a Palestinian home in the Gaza strip, to whom Shields dedicated her requiem *Moiritza* (2003) for trombone and "computer music on tape."

[16] Author in interview with Alice Shields 24 July, 2014.

Shields's initial attraction to these women may have been motivated by a need to represent in art the idols she longed for in life. Yet her compositions betray greater ambitions than mere recreation. Though art may be perceived as a reflection of lived experience, the context of art also affords individuals certain liberties that are not normally tolerated in "real" public spaces, especially when it comes to sexual situations. In an interview conducted in June 1982, Michel Foucault remarked that contemporary art was one context where individuals could express sexual tendencies that are ordinarily ignored or suppressed by society.

> When you look at the different ways people have experienced their own sexual freedoms—the way they have created their works of art—you would have to say that sexuality, as we now know it, has become one of the most creative sources of our society and our being. My view is that we should understand it in the reverse way: the world regards sexuality as the secret of the creative cultural life; it is, rather, a process of our having to create a new cultural life underneath the ground of our sexual choices.[17]

Foucault confronts the artistic autonomy prided by the modernist European avant-garde, arguing instead that postmodern (and post-war) art expands the realities of life, such that life should be modeled after art and not the other way around.[18]

In the 19th century, "high art" gained an aesthetic autonomy that set it transcendently beyond the human realm and, outside of a highly nuanced romanticism, sex all but disappeared. Works of art had no agency, only people could be actors. This imagined artistic autonomy persisted into the twentieth-century musical avant-garde, where electronic music was its greatest point of innovation. Electronic music's success arose with the modernist creed for progress, sailing on the heels of scientific advancement, and was fueled in the 1950s and 60s by advocates for the reformation of advanced studies in music at the

[17] Michel Foucault, "Sex, Power, and the Politics of Identity," in *Ethics, Subjectivity, and Truth*, ed. Paul Rabinow (New York: The New Press, 1997), 163-4.

[18] "Art=Life" was an expression of the Prague-based avant-garde movement Devětsil, active between the World Wars. Thomas Ort, "Art and Life in Avant-garde Prague, 1920-1924," *Modern Intellectual History* 7/1 (2010): 63-4.

university level.[19] Though electronic music composers could choose to employ ultra-musical subject matter as inspiration for works in this new genre, the mechanics of tweaking knobs and slides to yield precise pitches and rhythms allowed composers to forego literary, emotional, and performative considerations in favor of what could be distilled by the music "itself." At least this is the common conception of the "serious" composer of electronic music, though in reality, even at the peak of "high modernism" many compositions betrayed "extra-musical" influences.[20]

In *The Routledge Companion to Philosophy and Music*, music theorist Joseph Dubiel defines "Analysis" as an "interpretation of music, focusing on attributes of compositions likely to matter to listeners *with certain interests*."[21] He continues:

> Music analysis tends not to address questions of biography or historical context to the degree that is routine in literature. There is no deep or compelling reason why it could not, but in the world of music scholarship as we find it, analysis is recognized, at least informally, as primarily the study of patterned sounds and their perceptual interpretation.[22]

Not for nothing does the philosophy of music tend generally toward instrumental works, absent text, stage design, and directions, allowing the analyst to focus more easily on matters that pertain solely to the *music*. By definition, music analysis then forces the body—outside of the listener's ears—to be rendered inconsequential.

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[19] Milton Babbitt, Shields's colleague at the CPEMC, famously advocated for an academic refinement of music composition and theory on par with scientific specialization. Milton Babbitt, "The Composer as Specialist," in *The Collected Essays of Milton Babbitt*, ed. Stephen Peles (Princeton: Princeton University Press, 2003), 48-54; and later, in the inaugural volume of *Perspectives of New Music*, Babbitt foresaw the technical capacities of musical composition in the advancement of electronic hardware. Milton Babbitt, "Twelve-Tone Rhythmic Structure and the Electronic Medium," *Perspectives of New Music* 1/1 (1962): 50-1.

[20] See for example Susan McClary's critique of the old guard of composers, who she argues aimed to divorce musical works from the everyday, making such music difficult to stomach. Composers of "difficult music" are granted a "terminal prestige," as they are the only few capable of understanding this strain of music, whose quality rises in proportion to the complexity of its methodological structure. Susan McClary, "Terminal Prestige: The Case of Avant-Garde Music Composition," *Cultural Critique* 12 (1989): 57-81.

[21] Joseph Dubiel, "Analysis," *The Routledge Companion to Philosophy and Music* (New York: Routledge, 2011), 525. Emphasis added.

[22] Ibid.

And if the body is of no consequence, where then does that leave sex? Why, only in the mind of each listener, of course! In electroacoustic pieces, which feature no visually corresponding body (why we should trust vision over the sound of her body is another matter) sound might be presumed to be just another object, an organization of air particles. Music, outside of instances of live performance, is merely a sensory phenomenon, where it's only meaning is imbued in the perceiver's attunement—to recall Dubiel, the peculiar "interests" of the listener.

Philosopher Roger Scruton, who also contributes to *The Routledge Companion* on the subject "Composition," elsewhere identifies some consequences of ignoring sex in philosophical discourses. Outside of "an allegedly 'scientific' approach," writes Scruton, "the subject of sexual desire has been largely ignored by modern philosophy."[23] But while Scruton claims to broach this silence in his book on *Sexual Desire*, the author maintains a certain distance, conspicuously avoiding the feminist branch of philosophy, which has a long history of dealing with sexual subjects (both people and topics).[24]

Notwithstanding Scruton's assessment, Feminist philosopher Luce Irigaray confronts (as she tends to do) the absence of sex from Western culture, society, and philosophy. Her most relevant works on the subject, *This Sex Which Is Not One* and *An Ethics of Sexual Difference* anticipate Scruton, drawing primarily on Plato and Kant by cleverly situating women in relation to these philosophers (as the philosopher's wife, sister, or even mother), always deliberately insinuating a sexual relationship.[25] Irigaray maintains that in philosophy, which is a distillation of society, the sexual act is completely obfuscated, where self-love and same sex-relations are shrouded even more in secrecy.[26]

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[23] Roger Scruton, *Sexual Desire*: *A Philosophical Investigation* (London: Continuum, 1986), vii.

[24] Scruton claims to default to the masculine pronoun throughout the text as a means of "leaving sex out of it," presumably to avoid those sticky issues of gender that seem to muck up the feminist front. Scruton, *Sexual Desire*, 10. He does, however, publish a separate text to account for this disparity, as if to segregate the contemporary from the past and the great female figures from the everyday man, see Roger Scruton, *Xanthippic Dialogues: A Philosophical Fiction* (South Bend, IN: St. Augustine's Press, 1998)

[25] Margaret Whitford, "Introduction," *The Irigaray Reader*, ed. Margaret Whitford (Oxford: Blackwell Publishers, 1991), 8. Luce Irigaray, *This Sex Which Is Not One*, trans. Catherine Porter (Ithaca, N.Y.: Cornell University Press, 1985); Luce Irigaray, *An Ethics of Sexual Difference*, trans. Carolyn Burke and Gillian C. Gill (London: Continuum, 2005).

[26] Luce Irigaray in interview with Franca Chiaromonte, "Women-Amongst-Themselves: Creating a Woman-to-Woman Sociality," in *The Irigaray Reader*, trans. David Macey, ed. Margaret Whitford (Oxford: Blackwell Publishers, 1991), 192.

> Why? Why has sexuality always been made secondary, devalorized, at least in our culture? Men have had speech, the written word, all the instruments of expression, for centuries. Few, if any, of the sexual models on offer are ethical, particularly not that of pornography, nor that of psychoanalysis. Why the deficiency? How are we to explain it? Men had socio-cultural power. No one else could have forbidden them to valorize sexuality. Why did they rate so many values higher than that one?[27]

In another context Irigaray expounds on the "dissociation of love and desire," the separation of the physical sexual act from its mental correlate.[28]

For Irigaray, the point of contact between mind and body occurs at the skin. The skin is both a witness to physical relations and its evidence. We feel music on the skin, but also sexual sensations. Skin is also the boundary between the self and other; it contains the womb of the woman and the man's phallus. Bodies unite when touching skin, forming a renewed "covenant" through which Irigaray sees the body and mind joining once more.[29]

> [The covenant] requires us to invent another style of collective relations, another relationship to space and time, relationships which reject the body-mind split and contrive constant growth without any sacrificial break, a permanent becoming with alternations and not breaks, an active and responsible transition from what is most vegetative in our identity to what is most divine. [30]

Outside of the role handed to us by men, women have no role in the patriarchal society.[31] Likewise, women's pleasure and sexual desire is frequently if not immanently warranted by men, the phallus serving as a universal symbol for desire though there is nothing feminine about it. According to Irigaray, feminine love "has almost no symbolic forms." Remedying

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[27] Luce Irigaray in interview with Franca Chiaromonte, 191.
[28] Irigaray, *An Ethics of Sexual Difference*, 44.
[29] Luce Irigaray in interview with Franca Chiaromonte, 193.
[30] Ibid.
[31] This idea was widely popularized in the beginning of the twentieth century by the Austrian philosopher and pseudo-scientist Otto Weininger with his book, *Geschlecht und Charakter: Eine Untersuchung* (Vienna: Wilhelm Braumüller, 1903), 378. In their investigation of Weininger's influence on Ludwig Wittgenstein, David G. Stern and Béla Szabados recognize Weininger's notion, that Woman is man's projection, as one of the salient points of his text. David G. Stern and Béla Szabados, "Reading Wittgenstein (on) Reading: An Introduction," in *Wittgenstein Reads Weininger*, eds. David G. Stern and Béla Szabados (Cambridge, UK: Cambridge University Press, 2004), 8.

the "dissociation of love and desire" then requires us to rejoin the mind and body, to "invent another style of collective relations" through "an active and responsible transition from what is most vegetative in our identity to what is most divine."[32] If sexuality, according to Bataille, is sacred, then women's sexuality, in Irigaray's mind, is the height of the spiritual. Both are inaccessible, repressed, located "elsewhere." Part of the reason that sexuality is shrouded in mystery is because this is how the (heteronormative) sexual act is performed; sex is hidden from plain view, the penis is hidden in the folds of women's physical anatomy and her pleasure—her *jouissance*—is relegated to unseen, private thoughts.[33] This is Irigaray's definition of ecstasy, *ek-stasy*.[34] Women's pleasure, invisible, lacks a coded symbol, and is therefore pushed to the transcendental or divine. As Irigaray says, "Nothing is more spiritual than female sexuality."[35]

Music theorists are long familiar with problems resulting from this bifurcation between mind and body Irigaray identifies, at least since Suzanne Cusick's instantiating intervention. Cusick argues for an "embodied music theory," to engage not only the minds of listeners, but for listeners to also take note of how the body is engaged or *performed* in music. For Cusick, music's performativity provides a unique medium in which to challenge gender's embedded power relations. She writes:

> If as Joan Scott argues, gender is always and everywhere a meta-metaphor of power; and if ultimately musical performances can be deciphered as simultaneously individual and social enactments of power (control of the self and control of tools; cooperation with, support of, domination of one's companions), then we might learn a great deal about how the norms of gender pass sideways through society by watching them pass through such bodily actions as musical performance. Indeed, we might discover implicit as well as explicit gendering attached to certain musically

[32] Luce Irigaray, "Women-Amongst-Themselves: Creating a Woman-to-Woman Sociality," in *The Irigaray Reader*, 193.
[33] Luce Irigaray, *This Sex Which Is Not One*, trans. Catherine Porter (Ithaca, NY: Cornell University Press, 1985), 77.
[34] Ibid.
[35] Irigaray, *An Ethics of Sexual Difference*, 46, quoted in Irigaray, "Women-Amongst-Themselves: Creating a Woman-to-Woman Sociality," in *The Irigaray Reader*, 190.

> performative acts, from which we could learn enormous amounts about how music teaches or (possibly more importantly) unteaches gender."[36]

Cusick recognizes that, though music theory and composition are mostly activities of the mind, there are performative aspects of music pertaining to the bodily that should not be ignored, gender being one of these and sexuality, as she writes elsewhere, another.[37] I emphasize here, as I have already in the previous chapters, that listener response is not merely subjective (in the mind of individual listeners), but that overlapping listener experiences attest to a consensus among listeners that contributes to a *re*-teaching of gender through music; such is music's necessitated collective intentionality.[38]

Electronic music is one medium that affords women the opportunity to present sexuality as they experience it. In electronic music women can reclaim sexuality from the invisible by using audible evidence to perform sex. As mentioned, in *Apocalypse* Shields plays the voices of every character in the opera, including both the Woman-turned-Devi and Shiva as they embark on their sexual union. By staging the normative heterosexual coupling Shields doesn't seek to alter its mainstream symbolism (the phallus) only its usual perspective. Although two characters in *Apocalypse*, one male and one female, engage in heteronormative sexual activities, Shields does not stipulate that observers embody one particular gender. In bharatanatyam, the dancer embodies both Shiva and Shakti, though she is the sole performer. In the Vedic literature, Ardhanarishvara is the androgynous form emerging from the union of Shiva and the Devi (also known as Shakti). Though *sringara rasa* is more commonly depicted by the deity Krishna and his compatriot Radha, Shields deliberately casts Shiva in the opera precisely because of this dual appellation, explaining that "instead of Krishna's emphasis…on duty and emotional detachment…Shiva teaches identification with all life, the breaking of the illusion of separateness, through the vivid metaphor of sexuality."[39]

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[36]Suzanne Cusick, "Feminist Theory, Music Theory, and the Mind/Body Problem," in *Music/Ideology: Resisting the Aesthetic*, ed. Adam Krims (Amsterdam: G+B Arts International, The Netherlands, 1998), 49-50.

[37] Suzanne Cusick, "On a Lesbian Relationship with Music: A Serious Effort Not to Think Straight," in *Queering the Pitch* (New York: Routledge, 2006), 67-84.

[38] On Collective Intentionality, see Chapter 1, and see Chapter 3 on possibilities of re-teaching of gender through music.

[39] Alice Shields, liner notes to *Apocalypse: An Electronic Opera*, Composers Recordings NXCR647-CD,

Where Irigaray argues for a psychoanalytic intervention, for women to change society's rules by changing the language they employ, Alice Shields advances an insurrection of sexual norms through a staged confrontation. Like the great Greek tragedian Aeschylus, Shields casts herself in the principal roles of *Apocalypse*, in the electronic part she performs every character, the Woman, but also, the Great Goddess Devi, the divine Shiva, and even the voices of the Aeschylean chorus.[40] When asked about the Woman's role—her role—the composer replied definitively, "I consider art transformative at best, so for me, writing a piece, I'm looking for not just healing, but transformation. And that was one of those moments, when I created that piece. The woman is the hero—the true hero and no one is dying, as in so many operas by men." By performing and magnifying the "malestream" symbolism of the sexual act, Shields instigates a social transformation—a reevaluation of sexuality—by placing the act front and center, in plain sight.[41] By reclaiming female sexuality from its relegated "elsewhere," Shields's *Apocalypse* makes sex audible and visible, both current and present.

Despite common parlance today, the pre-modern etymology of "apocalypse" is not associated with destruction, catastrophe, or a literal end to the given world. Indeed, Shields restores the word's roots in Christian eschatology, which are more closely attuned with an end to life *as we now know it*. Apocalypse is a process of revelation, of uncovering something once hidden, precisely the kind of discovery on which Shields's Woman embarks. After the chorus attacks and devours Shiva, following his subsequent reincarnation the God and chorus chant together "*ahpohkahléoh*" ("to call back"), the woman then responds "to give up the ghost again," and the God and chorus echo her in Greek "*ahpohkahpüeyen tsükáyn*" ("to give up the ghost once again").[42] The three-time repetition of the three syllables "*ahpoh-kah*" in the exchange recalls the opera's title, and Shields likewise embeds a three-part repetition in the opera's structure. For example, the dialogues that take place between the Woman and Seaweed and between Shiva and the

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1993, 3.

[40] Alan H. Sommerstein explains that the Aeschylean chorus communicates with the actors or even the audience instead of serving as mere agreement or support. Alan H. Sommerstein, *Aeschylean Tragedy* (London: Bloomsbury, 2010), 25.

[41] On the "images and myths" invoked in malestream discourses associated with electroacoustic music, in popular magazines, course texts and software," see Andra McCartney, "Gender Symbolism," in "Creating Worlds For My Music to Exist: How Women Composers of Electroacoustic Music Make Place For Their Voices (M.A. Thesis, York University, 1997), 43-76.

[42] Greek transliteration appears in *Apocalypse* libretto, 62.

Woman-turned-Devi are repeated three times. Shields acknowledges the common three-part structures in bharatanatyam dance, but she also connects these to her training as a psychoanalyst. "In music or anything," says Shields, "you can't repeat beyond three times, but to fully have the pattern it seems to be a cross-cultural, human thing—three times that's it."

Shields likens the therapy session to a rondo, where the patient and/or therapist "[return] to a certain concern, feeling, or thought, alternating with new material."[43] In this way, she explains, both music and therapy are cyclic, and hence temporally relational activities, always in motion. Writing on the relationship between music and therapy, Shields cites Melanie Klein's definition of repression, which results from the patient's projection of a "bad object." The "bad object" is the Jungian "shadow," which dwells in the patient's subconscious. It is the therapist's duty, writes Shields, "to help the patient become aware of their internal Shadow, the complement of verbal expressions and nonverbal, sound expressions."[44] Alice Shields's *Apocalypse* helps the patient, or spectator, to identify, recognize, and acknowledge sex. To retrieve sex from the shadows and, more than that, to shed light on erotic currents of (electronic) music. Her manner of "making sex sound," then, is to stage sex in the most obvious, visible and audible manner, so as to avoid any ambiguity in the matter. For Shields, more than sexual intercourse, *maithuna* expresses "the universal joy of being alive," and presents an opportunity for continually developing artistic expression.

2. Sexual Prohibition, the First Sign of the Apocalypse

"Apocalypse Song" is one of the final scenes of the opera and was the seed for its motivation. The inspiration for *Apocalypse*, as told in the composer's liner notes to the CD, came to Shields in a visit with friend and fellow composer, Daria Semegen.[45]

[43] Alice Shields, "Patient and Psychotherapist: The Music," in *The Psychoaesthetic Experience: An Approach to Depth-Oriented Treatment*, ed. Arthur Robbins (New York: Human Sciences Press, 1989), 60.
[44] Shields, "Patient and Psychotherapist," 58.
[45] Elizabeth Hinkle-Turner, "Precedents and Pioneers," in *Women Composers and Music Technology in the United States: Crossing the Line* (Aldershot, UK: Ashgate, 2006), 18; alcides lanza, Review of CD "Alice Shields – Apocalypse-An Electronic Opera," *Contact!* 8.1 (1994).

> The actual writing of APOCALYPSE began in the summer of 1990. Outraged and depressed by the ignorant and bigoted Puritanism reemerging in the United States, in June I went to visit my friend Daria Semegen in Stony Brook, NY. As I sat with Daria on her patio in the summer night, I began improvising derisive verse. She chimed in, and we threw phrases back and forth to each other – peals of our raucous laughter mixed with the dark, heavy-laden shadows of the trees, and would momentarily interrupt the croaking of the crickets and tree-frogs. The candles around us, too, would flicker with our laughter in the summer night, and then resume their motionless, quiet burning.
>
> On returning to Manhattan, I used this first text to compose "Apocalypse Song." And then began to create the entire drama around this piece.[46]

I asked Shields to explain what she meant by "bigoted Puritanism." Since I had little information about which instruments were used and how the electronics were cultivated I thought her response would enlighten me specifically to the work's musical structure and composition. I imagined that the fusion of popular and "academic" musics may have caused a stir, or even that the interdisciplinary performance involving dancing, amplified singers engaging in staged sexual acts was somehow pushing the boundaries of sexual expression, which I already knew featured centrally in opera. But her answer surprised me.

Shields told me that she was reacting to the resistance to abortion and women's reproductive rights that became suddenly more pervasive in the United States in the 1980s. On the coattails of the AIDS scare, when the U. S. government finally began to acknowledge that the disease was spreading indiscriminately—without heed for the host's sexual proclivities—Ronald Reagan brought into law the 1984 "Mexico City Policy," a "global gag rule" that effectively prohibited family planning centers from receiving government funding for performing abortions or even for providing counseling and referral services regarding abortions.[47] As Shields recalls it:

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[46] Shields, liner notes to *Apocalypse*, 4.

[47] The "Mexico City Policy" was later reinforced also by *Rust v. Sullivan* (1991) and *Planned Parenthood of Southeastern Pennsylvania v. Casey* (1992).

> I remember an outrage with Reagan, because when he took over in the 1980s, the country radically changed…. As for women's rights, which I consider to be one of the main problems of the entire world, unless women take over or at least become fifty percent of the rulers everywhere, we're done for. Though many women have fallen to the male thing of dominance too, so there isn't one simple answer.

Political scientists Barbara B. Crane and Jennifer Dusenberry, specialists of reproductive rights issues, assert that the 1980s and 90s "opposition to the government-supported family planning services, like abortion, grew from a set of beliefs about the role of modern contraception in promoting promiscuity, moral breakdown and the weakening of the traditional male-dominated family structure."[48] Ronald Reagan's policy proliferated widely through his wife Nancy's "just say no" campaign, which in one fell swoop waged a "war on drugs" while simultaneously discouraging premarital sex by linking these two issues through self-control and abstinence. In addition to obvious resistance from the conservative right, the stigma against promiscuity was also advanced by vocal feminist anti-pornography campaigns, which masked their biases as an effort on par with the women's liberation movement.[49]

When articulated as an attitude about sex rather than any quantifying measure of actions, the "promiscuity" buzzword deceptively amplifies the supposed risks associated with sex. And stigmas against sex inevitably fall on the backs of individuals who skirt the social and physical norms advocated by these groups, women and gay men, but also individuals transitioning between genders and individuals with physical and mental disabilities. Clearly even a single night of passion can result in an unwanted pregnancy, catching an STD, or both. But under the canopy of "promiscuity" all sexual activities are magnified and scrutinized to the point of censure, where only certain sexual behaviors are permitted (recall the "certain interests" of the music theorist). According to sexual activist and academic Gayle Rubin, those who publically lampoon pornography "have condemned virtually every variant of sexual expression as anti-feminist," Rubin herself having been a

[48] Barbara B. Crane and Jennifer Dusenberry, "Power and Politics in International Funding for Reproductive Health: The US Global Gag Rule," *Reproductive Health Matters* 12/24 (2004): 128-137.

[49] For more on the tension between feminist anti-pornography campaigns and the stigmatization of sex, see my Introduction, pp. 14-16.

first-hand victim of these accusations.[50] Anti-pornography activists, which most feminists were in the 80s and 90s, claimed to be performing a social service, while, in Rubin's words, the discourse presented "most sexual behaviour in the worst possible light. Its descriptions of erotic conduct always use the worst available example as if it were representative."[51] Theodor Adorno summarized the aftershock of the supposed sexual liberation thus: "Everywhere prostitutes are being persecuted, whereas they were more or less left in peace during the era when sexual oppression was allegedly harsher."[52] Support for such organizations came easily, since individuals were portrayed under these campaigns as victims of sexual misconduct and activists became sworn protectors of these victims. Ultimately, both conservatives and anti-porn feminists yielded similar agendas: both aimed to remove sex from the public eye altogether, thus condemning sexual intercourse (an evolutionary trait designed to promote population growth and to prolong the human condition), ironically, as an anti-human act.

Like their conservative counterparts, feminist activists campaigning against pornography also prioritized long-term monogamous (lesbian) relationships. This particular brand of feminist, says Rubin, censures "prostitution, transsexuality, sadomasochism, and cross-generational activities. Most gay male conduct, all casual sex, promiscuity, and lesbian behaviour that involve roles or kink or non-monogamy are also censured."[53] Such censure not only delimits which sexually charged images, ideas, and acts are permissible in the public domain, but given Reagan's proposed restrictions on family planning services, these prohibitions inevitably invade private, domestic spaces—the typical venues for viewing pornography and engaging in sexual activities. What's more, this invasion of privacy likely further enhanced the same negative psychological effects anti-porn feminists and conservatives were seeking to "cure" in the first place.

Dissident feminist Camille Paglia echoed Rubin's concerns in 1992, writing, "Like so much current feminist ideology, this supposedly liberal statement on sexuality represents

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[50] See my Introduction.

[51] Gayle Rubin, "Thinking Sex: Notes for a Radical Theory of the Politics of Sexuality," in *Deviations: A Gayle Rubin Reader* (Durham, N.C.: Duke University Press, 2011), 165; 166. Rubin points to the *Newspage* of San Francisco's Women Against Violence in Pornography and Media and the *Newsreport* of New York Women Against Pornography, both active from the late 1970s through the 1980s, as representative examples. Rubin, "Thinking Sex," 165n.

[52] Theodor Adorno, "Sexual Taboos and Law Today," in *Critical Models: Interventions and Catchwords*, trans. Henry W. Pickford (New York: Columbia University Press, 1998), 77.

[53] Rubin, "Thinking Sex," 172.

not progressive thinking but a throwback to pre-Sixties conventionalism, rigid, narrow, and puritanical."[54] Like Alice Shields, Camille Paglia was raised in New York State in the midst of what both describe as conservative Christian obscurantism. As Paglia explains, she grew up in the 1950s and 60s in a place dominated by American Protestantism, which "systematically repressed both sex and emotion as part of the Puritan bequest." Later, in the early 1990s—at the time Shields was composing *Apocalypse*—Paglia asserted that "repression continues in current American liberalism, which is simply Protestantism in disguise."[55] Paglia recognized sexuality as a deeply complicated expression of humanity, where, "Above all, to understand sex and emotion, you must study the world history of art, music, and literature, which is the precious record of the strange, kaleidoscopic human imagination."[56]

It is against this social backdrop that Shields composed *Apocalypse* as a response to, and commentary on, the role of sexuality in the community in which she was living. The work, however, is not merely reactionary. As I argue in this chapter, *Apocalypse* serves as an important example of how composers contribute not only to culture but also to social issues of relevance beyond the world of music. Shields's utopian enterprise truly reflects a world absent sexual stigmas very different from the one in which she lived, but not so distant from the world we see around us today.

3. *Apocalypse*, More Than Cultural Borrowing

In *Apocalypse*, Shields fuses Indian *muhdras*, and *bhavas* with the gestures preserved in Greek statues, and the postures of Irish educator and clergyman Gilbert Austin's *Chironomia*, an 18th century treatise on rhetorical delivery, Shields thereby contributes to the ongoing chorographical reformulation typical of bharatanatyam practice for centuries. Shields heavy reliance on bharatanatyam, a dance tradition foreign to her White, American, protestant upbringing, to dismantle the representative patriarchal symbolism of late-

[54] Camille Paglia, *Sex, Art, and American Culture: Essays* (New York: Vintage, 1992), 29.
[55] Paglia, 30.
[56] Ibid. Funding for the abstinence program run by the United States Department of Health and Human Services has been eliminated in the 2017 budget proposed in February 2016 by President Barack Obama. The US Congress will have until October 1, 2016 to debate over whether to instate these amendments into the budget.

twentieth-century sexual but also musical politics compares to another famous example of cultural borrowing, Antonin Artaud's "Theater of Cruelty."

The "theater of cruelty" appears as a concept in Artaud's collected writings on *The Theater and Its Double*. One of the earliest contributions found in this book is the chapter "On the Balinese Theater," a review of a performance Artaud witnessed at the Paris Colonial Exhibition in 1931. His review admires the unattainable mystery of the Balinese gestures and movements as signs that "Occidental" intellectuals have long forgotten. He writes, "The actors with their costumes constitute veritable living, moving hieroglyphs. And these three-dimensional hieroglyphs are in turn brocaded with a certain number of gestures—mysterious signs which correspond to some unknown, fabulous, and obscure reality which we here in the Occident have completely repressed."[57] In Artaud's text, the dancers' performance is not merely representative of Balinese culture, but, by fusing a linkage between the entrancing performers and the mesmerized audience, it invokes a "Theater of Cruelty" that underdetermines the Western notion of theater as representation.

In traditional Western theater, representation refers to a limit drawn between theater and culture, where theater concerns living beings in the moment and culture an observation in retrospect. Artaud called to create a visceral linkage between stage and audience in order to disrupt and destroy the petrified idea of the theater as representation.[58] The "cruelty" of Artaud's manifesto aims to remove the aesthetic distance from art so as to invite the audience to partake in the immediacy of the theatrical transformation. For Artaud, "The essential thing is not to believe that this act must remain sacred, i.e., set apart" but rather to stir an absolute reality—an ideal surreality. This fantasy is shared by Shields, who, like Artaud, also turns to the East for inspiration.[59] However, Artaud's aspirations for introducing Balinese theater to the West differ from Shields's studied experience with bharatanatyam, which allows her to work from within the practice rather than attempt to emulate and thus return to some originary experience. Dance theorist Janet O'Shea describes such a desire as, "The orientalist model of translation," which rests on the assumption that an interlocutor with "specialist knowledge" (i.e. Artaud), "could unlock

[57] Antonin Artaud, *The Theater and Its Double*, trans. Mary Caroline Richards (New York: Grove Weidenfeld, 1958), 60.
[58] Ibid, 12.
[59] Ibid, 13.

[the] mysteries [of Eastern choreography] for 'the West.'"[60] Artaud furthers Europe's common "representation of 'foreign' texts and practices" at this time, which O'Shea says, "did not encourage viewers[slash]readers to examine their own cultural investments but rather reinforced the presumed objectivity of their own social and political position."[61] Secondly, a return to such repressed reality presumes that "the Balinese have done the same kind of dances 'for centuries,'" as opposed to developing their practice continuously, as is done in Western ballet. Contrary to Artuad's belief, theater theorist and historian Nicola Savarese has shown that, at the turn of the century, "the Balinese invented new dances—which were in fact reconfigurations of known steps, patterns, bodily positions, and gestures."[62] Indeed, as Savarese points out, the *janger* Artaud observed at The Dutch East Indian Pavilion was actually a contemporary configuration, and not, as Artaud supposed, a dance of ancient tradition.

Artaud suggests we turn to "the orient" for an example of his ideal theater, and yet, in envisioning an exact replica of the Balinese performance, he himself falls prey to the fallacy of his own critique. Artaud writes:

> By an altogether Oriental means of expression, this objective and concrete language of the theater can fascinate and ensnare the organs. It flows into the sensibility. Abandoning Occidental usages of speech, it turns words into incantations. It extends the voice. It utilizes the vibrations and qualities of the voice. It wildly tramples rhythms underfoot. It pile-drives sounds. It seeks to exalt, to benumb, to charm, to arrest the sensibility. It liberates a new lyricism of gesture which, by its precipitation or its amplitude in the air, ends by surpassing the lyricism of words. It ultimately breaks away from the intellectual subjugation of the language, by conveying the sense of a new and deeper intellectuality which hides itself beneath the gestures and signs, raised to the dignity of particular exorcisms.[63]

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[60] Janet O'Shea, "At Home in the World?: The Bharatanatyam Dancer As Transnational Interpreter," *TDR* 47/1 (2003): 177.
[61] O'Shea, 177.
[62] Nicola Savarese, "Antonin Artaud Sees Baliense Theatre at the Paris Colonial Exposition," trans. Richard Fowler. *The Drama Review* 45/3 (2001): 73.
[63] Artaud, 91.

Though his intentions are good, Artaud's invocation of Balinese theater as "pure theater" is typical of the early-twentieth-century avant-garde colonialist co-opting of "other" practices. In 1978, Edward Said termed this stilted view from the West "Orientalism." He writes, "Orientalism was…a system of truths, truths in Nietzsche's sense of the word. It is therefore correct that every European, in what he could say about the Orient, was consequently a racist, an imperialist, and almost totally ethnocentric."[64] Perhaps it is a bit compulsive to charge every European as inherently racist, but Artaud's search for the truth for the "deeper intellectuality…beneath the gestures and signs" of Balinese theater raises questions about his role as an authority able to supposedly uncover such truths. In asking Europe's theater to carry over the trace of an authentic performance, such rhetoric carries with it also an image of Balinese gamelan as a single, constant and unchanging artistic practice.

In America, the late twentieth-century revival of bharatanatyam was first characterized by cultural theorists as an inflexible idealization of Indian culture,[65] even though feminist critiques pointed to the dance's role in constructing, defining, and delimiting the roles of women of Indian heritage—both in India and abroad.[66] In the relatively distant world of 1920s India, devadasi—women, who were once respected artists and idolized religious nuns—were cast aside, silenced and denounced by British colonizers as "a seedy symbol of a perverse and backward Indian culture."[67] Though largely detrimental to the preservation of traditional Indian customs, the British occupation was instrumental in facilitating a revival of the sacred bharatanatyam dance drama. The oppressed Indian population responded to the lewd accusations against the devadasi by revitalizing the ancient dance culture. Traditionalist dancers like Balasaraswati sought, on the one hand, to cleanse dancers of their association with prostitutes, while also restoring their prominent position "to a 'respectable' Indian public."[68] Revivalists changed the circumstances under which the dances were performed, moving bharatanatyam out of the temple and into the dance hall, and garnered renewed attention for the dying art while also

[64] Edward Said, *Orientalism* (London: Penguin Classics, 2003), 204.
[65] Partha Chatterjee, *The Nation and Its Fragments* (Princeton: Princeton University Press, 1993).
[66] Anita Kumar, "What's the Matter?: Shakti's (Re)Collection of Race, Nationhood, and Gender," *TDR: The Drama Review* 50/1 (2006): 72-95.
[67] Pamyla A. Stiehl, "Bharatanatyam: A Dialogical Interrogation of Feminist Voices in Search of the Divine Dance," *The Journal of Religion and Theatre* 3/2 (2004): 282.
[68] Stiehl, 282-3.

reorienting and at times disturbing older practices of this long-established genre. Most significantly was the diminished emphasis reformists placed on certain sensitive subjects, such as the traditional *sringara rasa*, a dance conveying "the amorous mood through posture, gait, gestures, glances, adornment, perfume, and accompanying song."[69] Balasaraswati opposed carnally suggestive realizations of *sringara rasa*, which she saw as mere physical and not *spiritual* devotion. She diminished from physical desires to emphasize the loving moods of the *navarasa*, saying famously that "Dance like music is the practice of the Presence; it cannot be merely the body's rapture."[70] But alternately, Rukmini Devi, wife of the head of the Indian Theosophical Society Lord Arundale, embraced the physicality of the dance, countering, "If you were respectable, then *Sringara* would itself become respectable."[71] The two dancers had a longstanding feud, and its remnants are still felt in the studios of various bharatanatyam revivalists all over the world.[72]

In "At Home in the World?: The Bharatanatyam Dancer As Transnational Interpreter," Janet O'Shea, a professor of World Arts and Cultures specializing in dance, cites late-twentieth-century performances involving bharatanatyam as rather one artistic practice that severs the orientalist narrative by invoking "methods of exchange between epistemologies that circumvent or reverse an orientalist problematic."[73] In O'Shea's examples, an orientalist paradigm is circumvented in performances where South Asian languages are paired together with English or the primary language of the audience in an equivalent manner, not dubbing over the original language but rather conveying its sentiments to the new audience. Shields's incorporation of the *Sringara rasa* dance is an example of how the composer contributes to bharatanatyam's continued development, forcing listeners to confront and, as O'Shea says, to "examine their own cultural investments" and stigmas alongside the subtleties of other traditions with which they may have little to no familiarity.

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[69] Hanna, 103.
[70] Tanjore Balasaraswati, "Bharata Natyam," *National Centre for the Performing Arts (India) Quarterly Journal* 5/4 (1976): 2.
[71] Douglas M. Knight, *Balasaraswati: Her Art and Life* (Middletown, C.T.: Wesleyan University Press, 2010), 131.
[72] For a detailed history of how this tradition is carried into the present, see Stiehl, 291-5.
[73] Janet O'Shea, "At Home in the World?: The Bharatanatyam Dancer as Transnational Interpreter," *TDR (1988-)* 47/1 (2003): 182.

Shields's Woman opens the opera by singing in English, where the Greek chorus is disposed to repeating the Woman's words in English and a mishmash of ancient and modern Greek. In such instances English could gain a primacy over Greek, depending on the audience's prior familiarity and whether English is established as the dominant language through program notes or introductions to the performance. *Apocalypse*, however, does not endure these explanatory translations and several scenes in the opera incorporate non-English texts without explication, though translations and transliterations appear in the libretto. Possibly problematic is that the liner booklet accompanying the CD contains only the English with parenthetical notes indicating the language sung on the recording. Shields might have maintained the back-and-forth translation of the first act for the entire opera thus constantly situating whichever "foreign" language in a subsidiary role. But the second act quickly introduces Gaelic (Old Irish) in the "First Greeting" exchanged between the Woman and the Seaweed Goddess (II:4C, track 3).

Translating still spoken languages introduces an invisible power dynamic, where one language is given primacy over the other. O'Shea explores this problem in the context of bharatanatyam dance, where often performances in English-speaking countries are introduced with a verbal explanation of the Indian language, gestures, and philosophy of the tradition.

> Verbal translation paradoxically accords the choreography an inscrutability while also demonstrating its translatability. This kind of preperformance synopsis lines up two thought systems: an English verbal framework and a South Indian choreographic one. The explanation of mudras in succession interprets the 'Eastern' choreography through the 'Western' linguistic system. The English-language epistemology thereby emerges as the means through which the audience finds the choreography intelligible… When a dancer, viewer, or promoter presents bharatanatyam as both requiring and evading translation and treats the English-language explanation as culturally 'neutral,' s/he revisits the central premise of the 18th- and 19th-century orientalist treatment of Indian literary and scholarly texts. The orientalist model of translation rested on the assumption that the 'Eastern' text

> required the intervention of an interlocutor who, through his specialist knowledge, could unlock its mysteries for 'the West.' [74]

Ancient Greek, on the other hand, is no longer in use and rarely, if ever, spoken, therefore, as sophisticated as they are, typical opera-goers would not be expected to understand the language let alone know the plot of an opera that as yet has not been performed. After the Woman's initial sacrifice and conception in Part I, in the first scene of Part II "The Sea" (II:4A), she engages in the first question-and-answer exchange to invoke the Seaweed Goddess. Chanting to drops of water that fall from her hand, the Woman calls to the Goddess in English, and the modulated and reverberating chorus echoes her appeal in a Greek translation (CD track 2). Together the chanting builds in range and dynamics until it is disrupted by the eerie, chromatic music signaling the deity's approach (II:4B). In "The Sea" scene, English serves as a translation of the ancient Greek text, which might beneficially serve to guide Shields's presumably Anglo-centric audience.

The integration of multiple musical and dance stylings could also break the Orientalist offsetting of "Other" cultures by pairing bharatanatyam dance with European classical music or some other intercultural exchange where each tradition necessarily benefits from the other. O'Shea points out that performances that incorporate the movements and philosophy of bharatanatyam in settings that stray from the practice's Indian origins support an "ongoing interculturality," which is enhanced by the cosmopolitan environment of such stagings in cities like Los Angeles, London, Singapore, and Chennai, bharatanatyam's home city.[75] Looking to Toronto-based choreographer Hari Krishnan's *When God Is a Customer* (1999), British dance company Angika's *Triple Hymn* (2000), and Canadian choreographer Lata Pada's *Cosmos* (1999), O'Shea explains that these works

> …engage explicitly with bharatanatyam's transnational position and offer the possibility that choreographic translations can move beyond orientalist models of interpretation. These choreographies, rather than representing isolated experiments,

[74] O'Shea, 177.
[75] O'Shea, 180.

> speak to the dance form's history of strategic negotiation with globality and hybridity as well as with the staging of local, regional, and national affiliations.[76]

Apocalypse predates the performances cited by O'Shea and other scholars who support the global transmigration of bharatanatyam, but the opera nevertheless incites a similar transnational rupturing.

As O'Shea explains, the linguistic primacy in an "orientalist model of translation" is subverted when the audience is aided not only by the linguistic translation, but they are able to follow a story arc also through the performing character's visible gestures and the atmosphere created by the music. Not merely transplanting exact replicas of bharatanatyam dance practices, the opera combines Indian dance movements with Greek movements through hand gestures that are common to both. Shields envisions *Apocalypse* as a fully choreographed performance, though few gestures are incorporated in the libretto. At respective encounters with Seaweed and Shiva, the Woman and the deities take part in a ritualistic call and response greeting, complete with movements. Figure 2.3, replicated from the libretto, shows the hand gestures the Seaweed Devi and the Woman exchange in the first, second, and third greetings in Part II of the opera (II:4C, 4F, 4I). The first gesture, symbolizing invitation, was inspired by Gilbert Austin's *Chironomia*, and later, in the dialogues (II:4D, 4G, 4J), the Woman (pre-transformation) and Devi exchange three kneeling postures that return also in Part III with the dialogue the Woman exchanges with Shiva (III:6B, 6D, 6F).[77] Some of Shields's desired choreography is modeled after "the bodily movements frozen in the ancient statues and vase-paintings of Greek women dancing in the throes of the Dyonesiac ecstasy,"[78] but, she qualifies, "I may have snuck in a few Japanese muhdras."[79] Much of ancient mythology, from Greece to India, is preserved in sculpture, and the Greek word for statue, *agalmata*, implies a precious and irreplaceable object that can be used in valuable exchanges. Where surely material or monetary gain is one outcome of cultural bartering, sculpture also affords a historical record of the dress,

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[76] O'Shea 182.

[77] *Chironomia*, meaning "the art of gesture" draws its name from the roman rhetorician Quintilian, who inspired Austin toward compile a series of images properly depicting the movements of the hands, body, and feet necessary for good rhetorical delivery. Gilbert Austin, *Chironomia, or a Treatise on Rhetorical Delivery* (London: T. Cadell and W. Davies, in the Strand,1806).

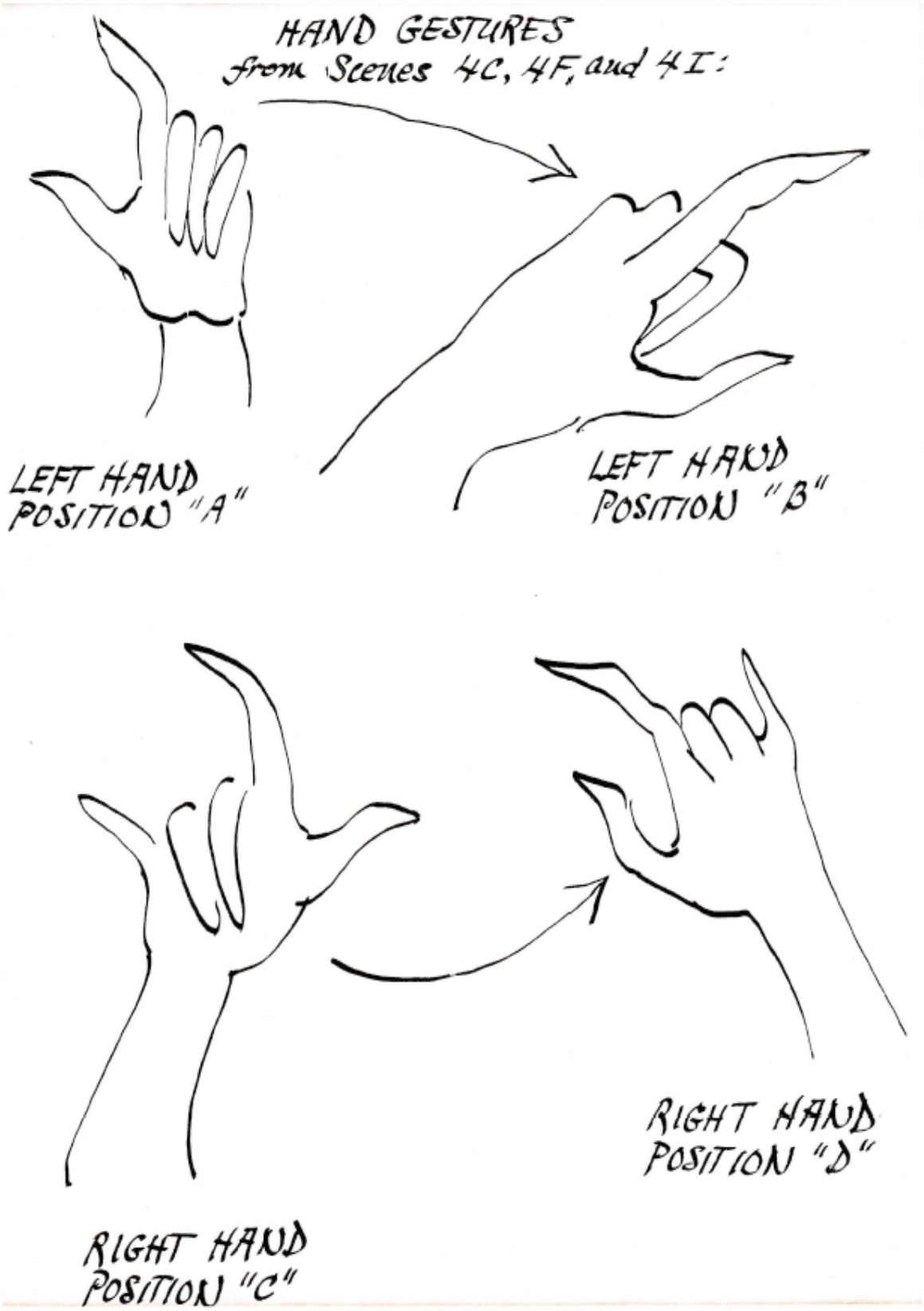
[78] Liner notes to *Apocalypse*, 5, with slight alterations by the author.

[79] Author in interview with Alice Shields 24 July, 2014.

hair styles, mythology, and even the movements of the ancient people. But Shields does not merely accost the Indian and Greek traditions. Rather she takes them as inspiration to build toward new artistic ongoing intercultural realizations.

In *The Nation and Its Fragments*, Partha Chatterjee explores the construction of anti-colonial nationalism in India, arguing that the new nationalism was dominated by masculine idealism. Chatterjee points out that the Indian nationalist movement and its enduring history only recognizes women according to their individual contributions to national reconstruction, as if the movement were advancing independently of women. Chatterjee instead sets up his proto-feminist historiography of "women in the nation" by underscoring women's ongoing contributions to the post-colonial nationalist movement.[80] And similarly, in the following analysis I compare Alice Shields's contribution to a transational fusion of music, dance, and language that subverts the typical colonization of extant cultures. Like the history of Indian nationalism, the story of electronic music, as told until now, merely enriches its history with individual contributions from women without acknowledging the extended and ongoing innovations initiated by women like Alice Shields. As a director of the CPEMC for decades, Shields was in many ways responsible for constructing the center's artistic image and ideology, though she hardly if ever has been given recognition to the extent of her male colleagues.

[80] Chatterjee, 136.


HAND GESTURES
from Scenes 4C, 4F, and 4I:
LEFT HAND
POSITION "A"
LEFT HAND
POSITION "B"
RIGHT HAND
POSITION "D"
RIGHT HAND
POSITION "C"

SELECTED POSTURES
from Scenes 4D, 4G, and 4J:

LISTENING
POSTURE

TEACHING
POSTURE

ASKING
POSTURE

Figure 2.3 Hand gestures, postures, and movements in *Apocalypse*.[81]

[81] *Apocalypse* libretto, 82ff.

3. "Cock Rock" Meets "Oriental" Transmigration: A Comparison

Preeminent musicologist Donald J. Grout characterizes the traditional Greek chorus as an "articulate spectator," where the chorus merely simulates "the audience's response to the events portrayed in the action, remonstrating, warning, or sympathizing with the hero."[82] But when Grout first published his *Short History of Opera* in 1947, he could not have known to what extent the role of the Aeschylean chorus would expand with the incumbent electronic means of musical composition. Even when the chorus and protagonist are one and the same performer, the chorus and protagonist can sing together in harmony or in unison. The distinction between chorus and heroine is blurred. Using magnetic tape or a computer, the chorus might be comprised of only one voice layered—copy and pasted—several times, thereby creating acoustic depth. But most importantly, the manifestation of the "chorus" is not restricted to the performer's bodily location, electronic amplification grants the composer a much greater use of space, where the fragmented voices of the performer—a multitude of bodily appellations—can occupy numerous spatial dimensions simultaneously. In this way, Alice Shields's role as the devadasi does not merely convey the illusion of multiple characters, but her sounding voice confirms her multiplicitous presence.

In *Apocalypse*, the voices of the actors emerge from behind the curtain's threshold to advance into the audience. In the first scene "Sacrifice" (I:1), the Woman performs a ritualistic dance with two attendants who illuminate her body as she moves about the stage. Here Shields establishes the atmosphere of the opera, introducing distinctive dance gestures and soliciting a rapport with the audience, who is expected at any moment to engage with the characters as they cross the threshold of the stage into the audience. After the curtain is drawn, the Woman stabs a bloody sacrifice and hurls it toward the spectators. Bathed in blood, she descends into the audience "seemingly searching for an audience member to whom she is intuitively drawn."[83] She gestures toward an individual, who, unbeknownst to the audience, is a plant from the chorus, shrieking at them "DO YOU WANT THE MARK?" The "audience member" signals ascent, and the woman continues her ritual,

[82] Donald Jay Grout and Hermine Weigel Williams, *A Short History of Opera* (New York: Columbia, 2003), 10

[83] *Apocalypse* libretto, 1.

The Woman raises her cupped left hand, and freezes.

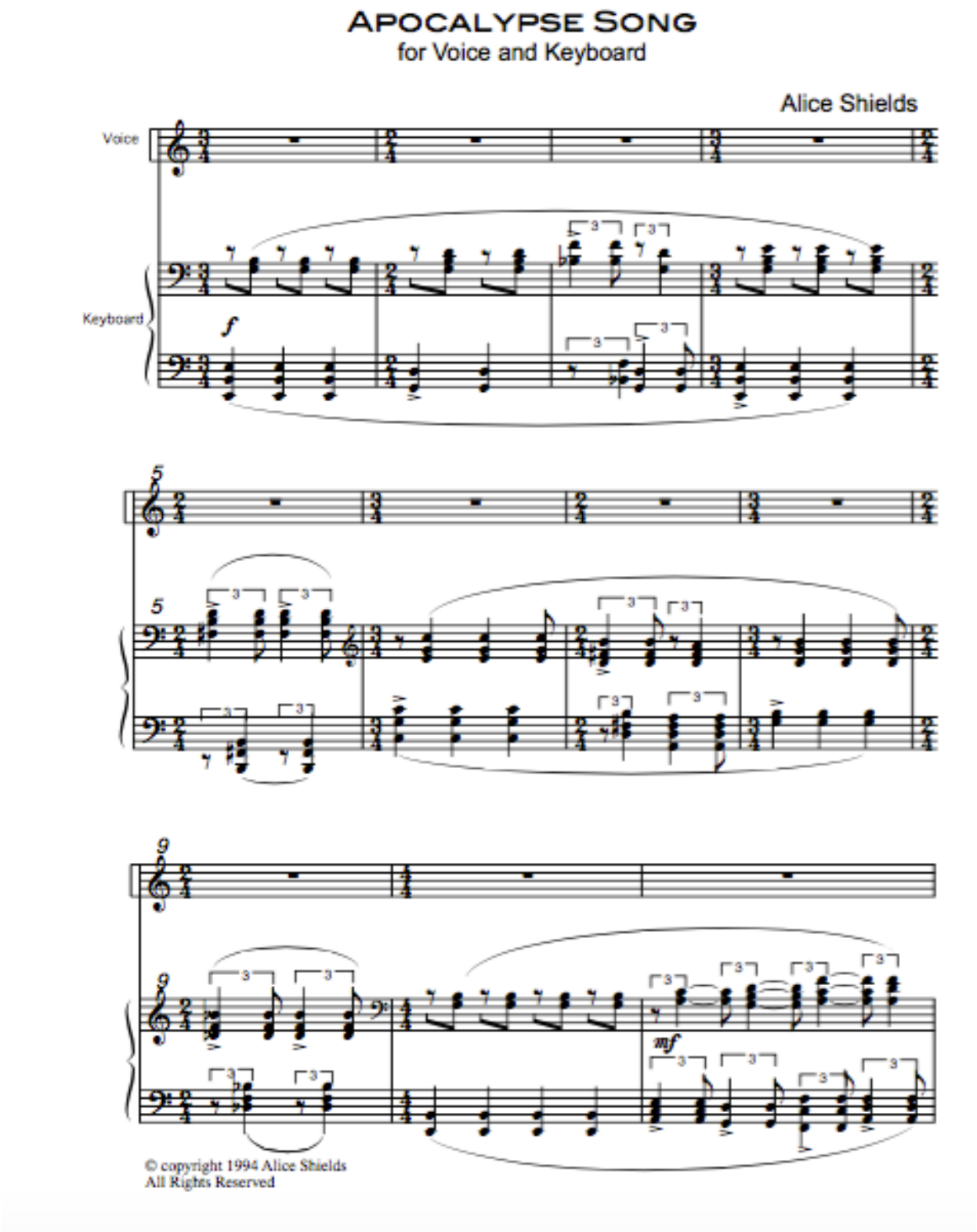
She dips her right fingers into her left palm, and freezes.

With her right index finger, the Woman marks a line on the 'audience member's' face from ear to nose, pausing with her hand still touching the face.

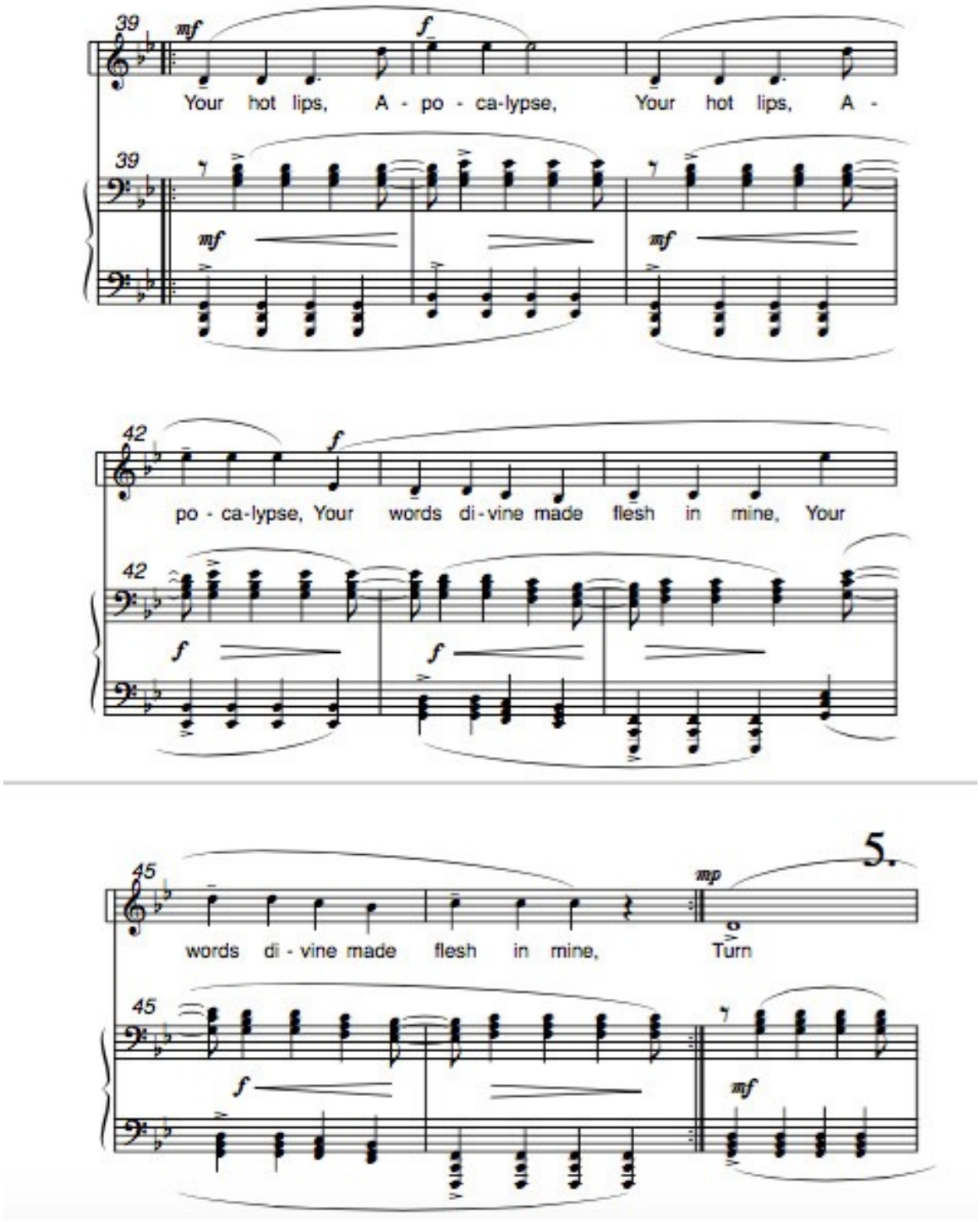
The Woman lowers her arms. While staring at the person's eyes, she raises her head back as far as it will go, and speaks to the person in ancient Greek.[84]

Physical and audible audience participation is not traditionally a part of Western classical music. Such participation, however, plays a large part in Western popular music, where the audience often takes pleasure in singing along, interacting with the performers on stage, or imitating the performer's movements. In addition to addressing the audience directly, Shields also incorporates musical attributes from popular music, as one reviewer put it, *Apocalypse* is "…a full-blown electronic opera, based in Indian classical music and…'heavy metal rock.'"[85] But, until relatively late in her life, Alice Shields had not paid attention to rock. She enjoyed and exclusively studied classical genres of music, whether American, European, Indian, ancient Greek, or Gaelic. Having heard of The Beatles only in passing, and showing minimal interest even then, it was only when she first heard Janice Joplin and Led Zeppelin in the 1980s that her attention turned to popular music. Her whole life Shields opposed the corporate consumerism that was becoming increasingly evident in the popular music industry, but Zeppelin's relatively complex orchestral arrangements nevertheless intrigued her. Presumably, songs like "Kashmir," with its lush string arrangements went over particularly well with "academic composers," and the band's strong inclination toward British, Celtic and American Folk revivals and mythological subtexts was surely appealing to Alice Shields specifically.

[84] *Apocalypse* libretto, 2.
[85] Excerpt from review by *The Splatter Effect*, "What the Press is Saying," Alice Shields's website, last accessed 16 February, 2016, http://www.aliceshields.com/reviews.html.



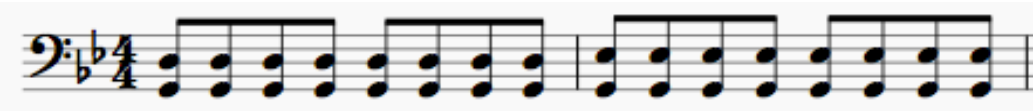
Example 2.1 Piano reduction of the central aria of *Apocalypse*, "Apocalypse Song," mm. 1-11. Reproduced with permission from the composer.



Example 2.2 Piano reduction of the central aria of *Apocalypse*, "Apocalypse Song," mm. 39-47. Reproduced with permission from the composer.

Though it's unclear to what extent she riffed off pop genres, Shields says that the accompaniment to "Apocalypse Song" (Part IV:10C, track 11), came as a direct result of trying to imitate the rock stylings of bands like Led Zeppelin. In fact, Shields was so inspired when composing *Apocalypse*, that in addition to booking time at the Columbia-Princeton Electronic Music studio, the composer asked engineer and guitarist Jim Matus to use his Quality Studios, located then on Spring Street in New York City, which she says were more suited to the jazz and rock sound she craved for the opera. Excerpts of the composer's piano reduction of the central "aria" and climactic culmination of the opera appear in Example 2.1 and 2.2.

Looking only at the keyboard accompaniment of the song we see country-inspired accompaniment, an alternating binary rhythm, common in early American folk music, reminiscent of the banjo's alternate string "hammer-claw" technique, and a "swinging" ternary rhythm—common to both jazz and Bartók piano pieces.[86] The cycle of minor thirds outlined in the bass, E-G-B♭, divides the octave into four equal parts, and although cycles of thirds are commonplace in the Western canon from Bach to Wagner to Debussy, given the swung rhythms it is likely that, instead, Shields here references another tradition along the lines of John Coltrane's music, particularly the modulatory cycles on the album *Central Park West.* "Apocalypse Song" does not complete the cycle until measure 9, when the fourth pitch of the set, D♭ enters to finally return us to E. When the voice enters in m. 39 (Example 2.2), the accompanying harmony is toned down, stabilizing itself on G, unfolding through F to E and back again. Here the simple melody D-E♭, the Apocalypse motive, together with the G in the bass function much like a metrically augmented version of the alternating fifths and sixths in the "Berry-Style Blues" (open-position) accompaniment, which, when simplified, might look like the reduction in Example 2.3.



Example 2.3 Harmonic reduction to reflect "Berry-Style Blues" accompaniment, Apocalypse Song, " mm. 39-40.

[86] Luca Cerchiari, et al., *Eurojazzland: Jazz and European Sources, Dynamics, and Contexts* (Lebanon, NH: Northeastern University, 2012), 13-20.

Aside from the work's apparent Jazz influences, *Apocalypse* blends musical characteristics from many traditions, including English folk and Southeast Asian music. In this regard, Led Zeppelin's "The Battle of Evermore" compares to the palette Shields evokes throughout the opera. In its original release, Zepplin's song featured singer Sandy Denny of the British folk group "Fairport Convention," and according to the band's guitarist Jimmy Page, the idea was to bring her in for a musical "question-and-answer type thing."[87] Zeppelin's 1994 MTV unplugged set, performed around the time that *Apocalypse* was composed, features a revamped "Battle of Evermore," infused with "world music" influences from British-born vocalist Najma Akhtar , who replaced the late Sandy Denny.[88]

The live version of "The Battle of Evermore" opens with a droning hurdy-gurdy and a lightly drummed bodhrán to conjure the "British" setting of J. R. R. Tolkien's *Lord of the Rings*, the inspiration behind the song. A wandering introductory melody emerges atop this backdrop summoning the entrance of the familiar arpeggiating mandolin part from the original song. Zeppelin's influences here are not limited to old English sources, the band significantly expanded the 1994 rendition from the original to include Najma Akhtar's extensive South Asian vocal techniques. Akhtar has collaborated with musicians ranging from Philip Glass to Jethro Tull and is influenced by semi-classical Indian, Pakistani, and Mediterranean music and culture. She therefore sees her music as contributing to a global musical cohesion of sorts.[89] Yet despite Akhtar's ambitions, the band does little to engage such varied traditions in a "conversation" across borders, in an "ongoing interculturality," to recall Janet O'Shea's advice. Rather, "The Battle of Evermore" incorporates "ethnic" elements unchanged as if Aktar's voice, the Irish percussion, or the hurdy-gurdy serve only as referents to a preserved culture.

Najma Akhtar's stage presence in this performance is a particularly unsettling realization of cultural iconography. Despite her diverse resumé, which evinces her extensive involvement in jazz and contemporary and classical "art" music projects, in

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[87] Dave Schulps, "Interview with Jimmy Page," *Trouser Press*, October 1977, accessed 22 March, 2016, http://www.teachrock.org/resources/article/jimmy-page-the-trouser-press-interview/.

[88] The performance of "The Battle of Evermore" on MTV unplugged can be viewed here: "Led Zeppelin- The Battle of Evermore 1994 (MTV Unplugged)." YouTube video, 6:47. Posted by "Amit Singh," November 13, 2010, last accessed 22 March, 2016, https://www.youtube.com/watch?v=7jvATYNxkRs. A recording of the song appears on the Plant/Page reunion album *No Quarter: Jimmy Page and Robert Plant Unledded*, Atlantic 82706-2-4-1, 1994, compact disc.

[89] See "info" at the performer's website http://www.najmaakhtar.com/

Zeppelin's song she is limited only to singing the same repeating flourishes. "Battle," like *Apocalypse*, incorporates "question-and-answer" exchanges, but foregoing the communication barrier, Akhtar sings mostly untexted melismas, or otherwise echoes the English texts of the primary vocals in mantra-like repetition, "Oh dance in the dark of night, Sing to the morning light." Here, despite the "oriental flavor" of Akhtar's melody, English is established as the primary language, her song subordinated to the main tune sung by the band, like any backup vocalist in the typical vein of American popular music.

Musically, both the opera and Zepplin's song incorporate non-Western ornamentation practices. For example, *Apocalypse*'s "First Greeting" (Part II, 4C) features an ornate synthesizer accompaniment. The right hand begins with a stepwise motive *mi-fa-mi-re-do-si*, elaborated first by on-the-beat turns beginning above the note, and elaborated from *re* onward by trills. Similar ornamentation opens the introduction to Zeppelin's "Battle," where three ascending melodic pitches are elaborated by a lower then upper neighbor, an inverted turn omitting the primary pitch (a double appoggiatura). The melody is also punctuated on the descent by trills. The melodic introduction in "Battle" foreshadows the zamzama embellishment Akhtar employs in the question-and-answer section of the song, which begins around four minutes in. In *Apocalypse*, the singers do not emulate the elaborate instrumental ornamentation; rather the voices (Shields's voices) only emphasize the primary pitches with increasingly exaggerated vibrato reminiscent of the Hindustani kampan. Unlike Akhtar's repeating mantras in "Battle," each response from the Goddess in *Apocalypse* is different. The Goddess's responses are not set apart as static repetitions, but rather her music and text invigorate the intensity of the drama with an improvisatory element common to south Indian vocal performance practice.

Despite many textual and musical differences, *Apocalypse*'s sexual imagery nevertheless recalls rock music's common sexual overtones. Since Led Zepplin's rise to fame, many have attributed this band and other heavy metal or hard rock bands emerging in the 60s and 70s, such as Thin Lizzy and the Rolling Stones, with a predominantly "male" musical aesthetic. Though this view has been challenged more recently by an increasing presence of women journalists and academics, a faction that was relatively underrepresented in earlier discourses, who have expressed an interest in rock through

published writing.[90] Notably, if we regard Shields's compositions as commentary, her portrayal of women in *Apocalypse* intersects nicely with these discourses.

In their seminal 1978 article on "Rock and Sexuality," Simon Frith and Angela McRobbie single out rock as a quintessential expression of male sexuality. Controversially, the authors begin from the presupposition that, "in terms of control and production, rock is a male form. The music business is male-run; popular musicians, writers, creators, technicians, engineers, and producers are mostly men."[91] Frith and McRobbie dub this genre "Cock Rock" because its music exhibits a hyper-masculine aesthetic that is reflected not merely in the genre's fan base, but also in the lyrics and even equipment used by performers from "Elvis Presley to rock stars like Mick Jagger, Roger Daltry, and Robert Plant."[92] For Frith and McRobbie, "mikes and guitars"—the very same instruments in Alice Shields *Apocalypse*—"are phallic symbols; the music is loud, rhythmically insistent, built around techniques of arousal and climax; the lyrics are assertive and arrogant, though the exact words are less significant than the vocal styles involved, the shouting and screaming."[93] In contrast to Rock 'n' Roll, the authors claim that young women were more likely to listen to "teenybop" music, which "plays on notions of female sexuality as serious, diffuse, and implying total emotional commitment."[94] Though Frith and McRobbie would hardly group Shields's "Apocalypse Song" with the rock music they describe, the number shares many elements with the genre.

"Apocalypse Song" features extensive vocal acrobatics, jam-band guitar flights, and a synthesizer accompaniment to rival any psychedelic improvisation, not to mention the jocular humor that stands so starkly in opposition to how Frith and McRobbie imagine female sexuality. Sounding an hour and a half into the one-hour-forty-minute opera, "Apocalypse Song" is situated at a musically climactic moment. The song's lyrics also boast typical rock buzzwords "blood," "flesh," "hot lips" (think Deep Purple's

[90] Simon Frith and Angela McRobbie, "Rock and Sexuality," in *On Record: Rock, Pop and the Written Word*, eds. Simon Frith and Andrew Goodwin ([1978] New York: Routledge, 2005): 318. Susan Fast, "Rethinking Issues of Gender and Sexuality in Led Zeppelin: A Woman's View of Pleasure and Power in Hard Rock," *American Music* 17/3 (1999): 247.
[91] Simon Frith and Angela McRobbie, "Rock and Sexuality," in *On Record: Rock, Pop and the Written Word*, eds. Simon Frith and Andrew Goodwin ([1978] New York: Routledge, 2005): 319.
[92] Ibid.
[93] Ibid.
[94] Ibid, 320.

"Bloodsucker" from 1970 or Foreigner's "Hot Blooded" released in 1978), but in some ways Shields's execution couldn't be farther from this tradition.

Text to "Apocalypse Song":	Your hot lips, Apocalypse, Your words divine made flesh in mine, Turn my blood back into wine.

Alice Shields's voice soars multiple octaves, at times tinted with a rock-sensible guttural rage, and yet her apparent heavy vibrato and operatic timbre (using the "head voice") mark her performance distinctly from 1970s rock's throaty "shouting and screaming."[95] Still, despite these divergences, claiming that Led Zeppelin inspired a women-centric opera like *Apocalypse* is nevertheless a contentious claim—even in the progressive sexual and musical climate of the 1990s.

In 1999, Susan Fast revisited Frith and McRobbie's article, arguing that, although rock is perhaps advertised as a male commodity, rock bands like Led Zeppelin boast a surprisingly large base of female fans (2/3s male to 1/3 female).[96] That women are a large minority of the band's fans puts into question the determination that there is something "inherently 'male' about the music" or even that Zeppelin is exhibiting a distinctively "*male* sexual performance."[97] Unlike Frith and McRobbie, who cite rock as a repressive instrument of hyper-macho dominance, Fast recognizes the empowering role taken on by Led Zeppelin's fans—regardless, or perhaps *in spite*, of gender. As a whole, Alice Shields's *Apocalypse* is one example of how rock fans could redefine music presumably characterized by rigid social, musical, gendered, and sexual demarcations, through what might be described as varied repetition.

Alice Shields trained as a psychotherapist and she frequently refers to music psychology to justify her compositional choices. She writes, "As both psychotherapist and composer, I have felt myself drawn to viewing each role through eyes and ears sharpened by the other."[98] As mentioned, Shields often invokes metaphors of musical form to describe

[95] Ibid.
[96] Fast, 249-50.
[97] Ibid, 246; 251. Emphasis added.
[98] Shields, "Patient and Psychotherapist: The Music," 57.

her take on the therapy session, explaining that therapy might be characterized as a form of theme and variations "represented…by partial repetitions and enlargements upon the initial concern."[99] By extension, Shields's music engages with Led Zeppelin's chiseled rock aesthetic by employing the same instruments, language, and similar musical and textual devices, but never explicitly quoting from their music.

As is apparent from the soundscape conjured in *Apocalypse*, Shields favors electronic instruments like guitars and synthesizers to the synthesized electroacoustic capabilities of a computer. Although Shields acknowledges having used the then newly available Max software when composing *Apocalypse*, she notes that she took great measures to keep the sound as clean as possible, "going carefully through ring modulators and very carefully controlled filters afterwards" to leave out the "garbage" that was frequently and involuntarily introduced through music processing.[100] She describes her favorite tool in those days, the *Klangumwandler*, as "half a ring modulator" but "much more easy to control and much more useful musically."[101] Today it is easy to dismiss the synthesized (read *synthetic*) "piano" and "lyre" sound patches (at times a sitar other times a dulcimer) of, say, Part One's "Conception" scene (I:3A) as failing to elicit the sounds of the *real* piano, lyre, or sitar. Shields's playful music has, in some sense, an audible, lo-tech artificiality. And given the capacity of synthesizers in the early 1990s when the opera was composed, one may attribute this failure to hardware limitations of the Buchla synthesizer, or describe it generously as a characteristic sound of the times. But, arguably, the odd pairing of lyre and piano already betrays an intentional compositional dissonance. Shields purposefully couples the instruments to create a unique soundscape, which, by that time, might only have been encountered in Indo-Jazz fusions.[102] Were the composer to record a real sitar and piano, she may have infused this scene with literal references to Coltrane's

[99] Shields has taught courses in the psychology of music at NYU, and has also published on the subject, see for example her contribution "Patient and Psychotherapist: The Music," 61.

[100] The author in conversation with Alice Shields, 25 July, 2014.

[101] For details on the Klangumwandler employed by Alice Shields, see Vladimir Ussachevsky, "Musical Timbre Mutation by Means of the – Klangumwandler, a Frequency Transposition Device," a paper delivered at the Audio Engineering Society Convention held in White Plains, NY, (1 September , 1958). The instrument was first encountered by Ussachevsky and Otto Luening in 1955 on a trip to Baden-Baden for conducting "research on electronic music." This research was funded by the Rockefeller foundation. Otto Luening, "An Unfinished History of Electronic Music," *Music Educators Journal* 55/3 (1968): 136-7.

[102] For example, John Mayer's Indo Jazz Fusions, The Mahavishnu Orchestra, and Turiyasangitananda (a.k.a Alice Coltrane, jazz pianist, organist, harpist, and composer, and John Coltrane's second wife).

"India" or Joe Harriott & John Mayer's Indo Jazz Suites or even to Led Zeppelin, but instead, Shields chooses electronically synthetized imitative timbres over "concrete" referential associations, and in so doing she links her peculiar sound to the electronic world—the only medium in which these particular timbres are available. Shields's notes to "Apocalypse Song" indicate that the choice of instrument is flexible to an extent.

> Keyboard instruments appropriate for this song include piano, synthesizer, organ, electric harpsichord; any keyboard with appropriate pitch range and dramatic power. In other words, don't even think of something like a toy piano or a celeste - they are too weak in timbre and dynamics for this piece.

Instructions in the piano reduction also specify that the voice should be amplified in order to balance properly with the electronic playback. Shields explains, "Although this song is written for classical voice, you may, if you feel you can pull it off, amplify the voice so that it matches the power of the keyboard." More so than the written score, the recorded electronic work posits certain temporal, timbral, and overall performative restraints, and Shields uses the medium's fixity to ensure her desired outcome. The composer sets limitations so as to ensure the performance she envisions, thus preserving *Apocalypse*'s sound world, which is all the time and ever more apparently aging.

Is Shields's *Apocalypse* any less masculine or less sexually explicit simply because the piece was composed and performed by a woman? Certainly the phallic imagery of the *maithuna* scene elicits the same "explicit, crude, and often aggressive expression of male sexuality" cited by Frith and McRobbie as quintessential to the "cock rock" aesthetic. I will return to this point shortly.[103]

5. Intertextual Ruins

Alice Shields's methods of continual variation are not only musically apparent, but she exerts similar treatment on her textual sources. Weaved throughout *Apocalypse*'s libretto are varied texts from Sappho, Archilochos, Aeschylus, the Bhagavad Gita, the ancient

[103] Frith and McRobbie, 319.

Gnostic Gospels, and unidentified Gaelic folklore. Quoting none at length, Shields says she combines phrases or adjectives "crudely together, creating ruins of language analogous to the ruins of temples."[104] In building and reshaping the traditional imagery, music, and text, Shields expands traditional practices through new interpretations rather than enshrining these practices into idealized representations of a permanently fixed culture, nation, or time. Shields is sensitive to the traditions and history of her sources, where her reinterpretation aims to amplify connections *across* cultures, geographical borders, and historical periods. As a white American woman of Presbyterian background, Shields says her attraction to Indian, Greek, and Old Irish mythology, art, and religion was first motivated by her need to move away from her own sheltered heritage. By incorporating languages and mythology from various origins, her music does more than merely replicate predisposed idealizations. *Apocalypse* offers a new universe, a constructed collage of unlimited inspiration.

Though Shields cites some authors, many more arise only through allusion. Shields's fictional Seaweed Goddess speaks in both English and Gaelic (which Shields specified as Old Irish in our interview). As with the other non-English texts in *Apocalypse*, the Seaweed's text is an agglomeration of texts whose sources the composer no longer recalls.[105] Given the prominence of Gaelic-language text, I was driven in my analysis to identify some of these mythic sources. But sadly, by the time we conducted our interviews—over twenty years after the opera was composed—the composer was no longer able to recall precisely which texts were used in *Apocalypse*. And so I set out on a wild goose chase to hunt down probable sources.

Inspiration for the "Dismemberment" (III:7D) and "Organ Screaming" (III:11B) scenes seem likely to have come from an adaptation of a popular Old Irish folktale transcribed in the lay *Laoidh Chab an Dosáin*. This is one of many tales featuring Conán Maolis, a frequent victim of fantastic misfortunes in Celtic Folklore. The story told in *Laoidh Chab an Dosáin* is as follows.

[104] Shields, liner notes to *Apocalypse*, 8.

[105] Regrettably, a reconstruction of the old Irish texts would be nearly impossible, since the texts were likely partially composed by the composer's sister, a specialist of Celtic languages and literatures, who assisted in realizing the translated English text back into old Irish.

Laoidh Chab an Dosáin

Conán enters *Bruidhean*, a fairy dwelling where one can always expect a mishap. Conán is generously hosted, and so, sated with food—five lines of the lay detail how stuffed he is—he prepares for bed.[106] Nearly satisfied, Conán voices one last request before sleep: "it's well I would sleep now till day,/ If I would get one foray on a woman."[107] Unfazed by his companion Diarmaid Ó Duibhne's shushing on the topic, Conán is insistent he find a woman that night. And, in a slight of fortune, moments after Conán's head hits the pillow, a woman appears in the bed beside him.

On the woman's first appearance, only her legs are visible, and Conán takes the opportunity to pounce. He launches toward her, but in a magical sleight the attacker finds himself suddenly dangling from a plank suspended high above a moving body of water—the image recalling the seaside of *Apocalypse*'s Part II. The plank splits and Conán is sent plummeting. Just as he hits the water he is awoken from slumber, screaming in terror and seated in a cauldron. The commotion wakes the residents of the home, who have rushed into the kitchen just then to chastise Conán for his foolish behavior. And so Conán returns to bed.

Once he begins to drift back to sleep, he is again taunted by the appellation of the beautiful woman, and he launches at her for the second time. Twice deceived, he finds himself transported to a dark enchanted forest surrounded by a band of clawing and snapping cats—recalling the ravenous chorus of *Apocalypse*'s "Dismemberment Dance," on which more shortly. The vicious cats attack and attempt to eat Conán and drive him up a tall tree. In terror he rouses once more from slumber with the house's inhabitants again surrounding him, the unfortunate victim perched atop a table with a kitten licking his lips. Again they reprimand him.

Conán returns to bed for the third and last time, again the apparition appears and again he approaches her. Upon returning to sleep, the woman appears to him once more but this time he catches her. Repulsed by Conán's unwelcome advances the fairy "punishes" her attacker by turning him into a woman—recalling the Woman's transformation to Shiva in *Apocalypse*—and if that weren't demeaning enough, *she* then proceeds to sexually

[106] *Laoidh Chab an Dosáin*, lines 18-22 in James January McCann, "*Laoidh Chab an Dosáin*" (Master's Thesis, Aberystwyth University, 2011), 65-6.
[107] Laoidh Chab an Dosáin, line 23, James January McCann, "*Laoidh Chab an Dosáin*," 66.

assault *him*.[108] Throughout his violent rape, as his bones shatter beneath her mighty force, Conán begs the relentless spirit for mercy. In the end, the fay impregnates Conán, and, through a mystical acceleration of the gestation period, he is instantly in labor. In his confused state Conán implores his companion Diarmuid to help him give birth, and shouting in pain and terror, he asks Diarmuid to tie a rope to the baby and pull it out of him. The commotion again rouses the residents of the dwelling who rush into the visitors' room for a third time to discover Conán, untransformed, and Diarmuid pulling with all his might at a rope tied to Conán's testicles!

Though the lay resembles some aspects of the opera, *Apocalypse* does not incorporate the violence of the third episode. However, this omission should not be taken as evidence exempting the story as a possible candidate for *Apocalypse*'s narrative. According to historian of Celtic folklore Seosamh Watson, though *Laoidh Chab an Dosáin* was preserved through a long oral history, the woman's third appearance was later omitted from many of the lay's transcriptions, of which there exist nearly twenty and the earliest of which surviving from the 1730s.[109] "The obvious reason" for the omission, writes Watson, was "that the literary author was too prudish to include these details…"[110] Though fit for verbal dissemination, writes Gerard Murphy, "[the author(s)] deliberately omitted the third episode on account of its being too uncivilised for the literati."[111] And, when I asked Shields about the story's similarities to *Apocalypse*, she acceded that Conán's first two encounters with the fairy were familiar to her.

"Dismemberment Dance" (III:7D, for the scene's accompanying physical movements see Example 2.3) engages the lay's imagery of "devouring" hunger, where the chorus, like the cats, represent a protective entity to guard the woman from the looming threat of sexual assault. Complete with chewing, belching, bird sounds, and a light show, this is the most elaborate of the non-vocal musical scenes in the opera.[112] Guitarist Jim

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[108] Some readings claim that she herself has turned into a man, matching her reversed role to his, but it's not clear to me from the text that her own transformation in fact takes place.

[109] James January McCann, "*Laoidh Chab an Dosáin*," 1.

[110] Seosamh Watson, "Laoi Chab an Dosáin: Background to a Late Ossianic Ballad," *Eighteenth-Century Ireland / Iris an dá chultúr* 5 (1990), 39.

[111] Ibid, 38.

[112] The "Dismemberment Dance" is alternately titled "Dismemberment and Eating" on track 8 of the album. Other non-vocal scenes featuring choreographed stage directions set to music include I:3, II:4B, 4L, 4M; III:4P-2, 5A, 5J, 5K, 7D, 9B, 10B, 11A; these occur primarily in Part III of the opera, and are mostly omitted from the CD.

Matus, in whose studio many of the effects were recorded, is also credited in the "Dismemberment" scene as "a gifted belcher who can perform upon command." Additionally, Shields's liner notes read, "Jim also soloed in this scene on broccoli; I accompanied him with yogurt. The various 'bird' and 'sea-lion' sounds are also my own voice; I'm sure my operatic voice teachers would be proud."[113] After devouring Shiva, sated and placated the chorus grows suddenly remorseful and makes efforts to reassemble the God's body from its strewn remnants (III:8A).

Scrambling around on their hands and knees, they frantically squash together gobs of flesh with unexpected results. The following stage commands are enacted silently:

> They find sections of his phallus, and put it together again. The newly assembled phallus is two feet high, with balls the size of grapefruit.
>
> They carry the phallus lovingly to a pedestal mid-center stage, and place it thereon.
>
> Sitting in a circle around the Phallus-Monument, they pray to it to come alive again.[114]

The chorus then begins to chant in Greek along with the reverberating and gradually crescendoing tape part, desperately trying to awaken the God.

> Stroking the Phallus, they cry out.
>
> They try to lift the balls of the Phallus.
>
> They press their lips to the Phallus, kissing it, stroking it, trying to turn it on.
>
> They step back and watch expectantly for it to come alive:

[113] Shields, liner notes to *Apocalypse*, 3. Shields notes also that she gained previous experience with manipulating belching sounds electronically while assisting Sam Shepard in the radio play *Icarus* (1966), though she did not recall her involvement in that project until after *Apocalypse* was completed. Shields, liner notes to *Apocalypse*, 5.

[114] *Apocalypse* libretto, 52.

But it doesn't move.

They go up to the Phallus again and move it from side to side as if it were walking, making it jump up and down, stroking it, rubbing it, etc.

But nothing works: it doesn't move.[115]

Only the Woman-turned-Devi is able to awaken Shiva. After chanting an invocation in both English and Greek (III:9A), the fog parts and the God is revealed in Shiva's typical manifestation, sitting in silent meditation, "his skin covered with white ash, his long hair matted, his chest bare" (III:9B).[116]

Where the ignorant and bigoted chorus attempt to rid themselves of the God's sexual proclivities, the Great Goddess, who is more powerful than all of them combined, easily invokes Shiva, explaining, "Only by knowing thee, /do I pass over death."[117] Obviously one could interpret this metaphorically, that the Devi and Shiva's union will lead to procreation and thus yield a continuation of the her line, but Shields also hints at a less literal consequence—love's extemporal, intangible, unlocatable universality.

In Part IV of the opera, Shiva returns in a scene entitled "The Beginning of the End" (IV:10B). Commencing the courting scene in "Heat Drum" (IV:11A) the woman lays upon "a convenient couch which the Chorus push under her. The Chorus holds torches between the Woman's legs as she opens and closes her thighs in time to the music." Their job is to illuminate the shaded regions of the woman's body, to locate the "elsewhere" of female sexuality.[118] Shiva moves to approach the Woman, and arriving at long last he holds his phallus against the Woman's vulva, she "throws her thighs wide apart, her mouth wide open, and head thrown back, in ritualized ecstasy," here the two commence in "Organ Screaming" (IV:11B), "three choreographed, ritualized orgasms, one at the end of each verse of music."[119]

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[115] Ibid, 57.
[116] Ibid, 60.
[117] Ibid, 59.
[118] Ibid, 66.
[119] Liner notes to *Apocalypse*, 7.

The phallus, in many cultures, is the symbol of fertility and a vital sign of sexual conquest. But, returning to Irigaray's critique in the opening of this chapter, this universal symbolism has nothing to do with female sexuality. Shields cites this common symbolism but deliberately exaggerates the proportions of Shiva's penis to allude farcically to the size and virility of male genitals. It was rare to encounter a penis in opera in the cloistered conservatism of 1990s American society (or since?), and would have been a spectacle to present one of such magnitude. Paired with the Dionysian gestures and Greek language, the phallus becomes quite another apparatus, a tool with which to critique the history of its symbolic illusiveness.

The chorus's devotion to the phallus in *Apocalypse* is no doubt inspired by the traditional ancient Greek "Phallic Processions." As famously described in Aristotle's *Poetics*, the processions celebrated Dionysus, an alternate identity also bestowed on Shiva in the opera's "First Naming" scene (III:6C).[120] Like Aeschylus's tragedies, Shields's opera features no set design, and only minimal instructions for lighting. As the composer explains, "Geography plays no place in the opera. *Apocalypse* is a work for theater, and is meant to be universal; thus it is deliberately not situated in any one culture or geographic locale."[121] The absence of scenery and set grants *Apocalypse* a placial universality, which cuts across geographic locations and historical periods—at least this is what the composer says. I would take Shields's compositional vision one step further and argue that the over-the-top phallic procession references the "cock rock" manifesto by seizing its most potent imagery while reappropriating the phallic symbol toward feminist empowerment. Thus, one of the most recognizable signs of male sexuality (but sometimes a sign of dominance and violence) becomes a tool for illuminating—making present—women's sexual expression.

[120] In translation, Aristotle's attribution is to "the phallic songs," it should, however, be noted that Aristotle's original reads "*phaulika,*" meaning trivial business, and not "*phallika,*" of the phallic songs. Nevertheless, most English translations employ the latter, and this is likely the translation with which Shields was familiar. Aristotle, *Poetics*, IV:12, trans. S. H. Butcher (London: Macmillan and Co., 1902), 1449a10-13.

[121] Alice Shields, e-mail message to author, 27 December 2013.

6. Conclusion

The 1960s might be characterized in literature, in art, and in music, as a "reinvention of the question of Utopia."[122] As noted by Frederic Jameson, our world could not admit room for an "ambisexual" population until science fiction author Ursula Le Guin made space for this possibility in the "*other* world of *The Left Hand of Darkness*." Like the *science* of fiction, electronic equipment affords music a technical credibility, which for some composers in the 1960s meant a gradual phasing out of what was "human" about the work, its context, or the work's performance. The characters of science fiction, like the sounds of electronic music, do not exist in the world of the experiencing subject, only in some other, fabricated world. The utopic visage allows readers to approach the world at a distance, to admit its "irresistible reminiscences" without fully believing it exists.[123] In this way, the "new sciences" of the 1960s awakened a healthy fact-based speculation, while sustaining a suspension of disbelief in practice (in both literature and music). Unlike mythology, which is wholly entrenched in a devotion to the unknown or *never*-known, *science* fiction has the potential to be proven. In music, though the exacting execution of electronic equipment phased out the faults of human performance, it did not compromise the spectator's perception. Shields's colleague composer-theorist Milton Babbitt praised the incorporation of electronic equipment into musical composition, because for him these machines opened new musical possibilities.

> The precise placement of time points and their associated durations, though easily and exactly specifiable, takes one into the area of rhythm, which is not only of central concern in contemporary compositional thought, nonelectronic as well as electronic, but the most refractory and mysterious perceptually.[124]

[122] Frederic Jameson, "Of Islands and Trenches: Neutralization and the Production of Utopian Discourse," in *The Ideologies of Theory* (London: Verso, 2008), 386.
[123] Frederic Jameson, "World Reduction in Le Guin: The Emergence of Utopian Narrative," *Science Fiction Studies* 2/3 (1975): 221.
[124] Milton Babbitt, "Twelve-Tone Rhythmic Structure and the Electronic Medium," *Perspectives of New Music* 1/1 (1962): 51.

For Babbitt, the electronic medium was a way to break the glass ceiling suspended above the post-war avant-garde. On this limitation, Herbert Eimert, who mentored the European electronic music faction, similarly recounted: "In the history of the 'Music of our Time', electronic music might be regarded as a final chapter or even as a postlude." Electronic music was the music of the future.[125]

Alice Shields takes the electronic tools and the concept of a fictional "elsewhere," to move toward a yet unrealized utopia. Her *Apocalypse* confronts opera's typical gendered and sexual distanciation, where sex is relegated as the most extreme of human actions. It shows that intercourse can be beautiful, artistic, and enjoyable without all the negative repercussions of being a woman in opera. *Maithuna*, says Shields, is the culmination of the spiritual and physical journey. What Alice Shields sees in her everyday life, both in and outside the music profession, is a hyper-masculine attitude toward sex, but what she wants to see are fully formed women for whom sex is no special issue but one of life's many necessities. In *Apocalypse*, the Woman gains divine powers, which endow her with the ability to change the destiny of both earthly and divine characters. It is ultimately her performance that causes the narrative to unfold as it does. Where Irigaray critiques the invisibility of women's sexuality, Shields puts sex in the forefront. Shields views the Woman as an ideal or hollow representation, and as a hull filled with remnants of the "Great Goddess," the Woman is the woman of an Irigarian "elsewhere," brought before us.

Unfortunately, the opera's wild and diverse performance requirements make this piece difficult to stage. At the time of its composition, the opera's electronic components, though now widely in use, were viewed as an undue burden for performance. Few if any opera halls had the necessary equipment to realize such features, and operatic singers were uncomfortable first with learning by rote, and, second, with the amplification required to properly balance the voice and electronics. A second impairment to its staging is the opera's combination of classical dancing and operatic singing. Ideally Shields would like the opera to be fully choreographed, where the Woman is a trained singer experienced also in bharatanatyam. Realistically it may be difficult to find a performer who is skilled as both a singer and a dancer, but Shields nonetheless includes what she calls "intermittent choreography" in the libretto, the most essential movements that are basic enough that

[125] Herbert Eimert, "What is Electronic Music?" *Die Reihe* 1 (1965): 1.

anyone can perform. As she quips, "anyone can learn muhdras."[126] Like other works explored in the next chapters, Barry Truax's *Song of Songs* (Chapter 3) and Hodkinson and Rønsholdt's *Fish & Fowl* (Chapter 4), Alice Shields seeks to reformulate ideals of gender and sexuality beyond those represented in art, aiming in the process also to break the generic mold of what constitutes as "electronic music." Ultimately, however, Shields only partially succeeds since, first of all, the medium itself is restricting: *Apocalypse* exists only as a CD with Shields's voice. Without a written score, only a libretto, the opera atypically requires classically trained singers to learn by rote in order to sing along with the electronic part. These singers are then expected to dance in the highly specialized bharatanatyam style as choreographed according to Shields's reinterpretation of this style. In short, there is almost no foreseeable way to stage *Apocalypse*, as the composer's fixed approach leaves little flexibility for the live performers. Using a recording in performance would prove difficult, as shown in Shields's experience with *Mass of the Dead*, where, not only were the singers required to sing along with the restricting electronic accompaniment, but the entire performance relied on the inflexibility of Shields's fixed voice—although these challenges did not prevent the *Mass* from being performed.[127] Such a performance however stipulates either that the composer herself be present for a realization that is true to her vision or that we invent/train a new kind of performer for such an opera. New artistic media provide new opportunities, but in the meantime this opera's conception lingers only in abstraction.

Hindering the opera's performance is another unspoken point of resistance: Shields's unabashed confrontation with sexual politics, the blatant nudity, physicality, and uninhibited display of sexual imagery uncommonly (if ever) broached in Western classical music. "The whole point of shame is to *prevent* performance," reads this chapter's

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[126] Author in conversation with Alice Shields, 25 July, 2014.

[127] Shields met resistance in American Chamber Opera's staging of *Mass of the Dead* (1993), which, in addition to electronic devices, like *Apocalypse*, also included bharatanatyam dancing. She explains, "What I found with a couple of other electronic operas, including *Mass of the Dead*, even if you're dealing with opera singers with fine technique the separation coming out of the loudspeakers and the live performers on stage, even with the loudspeakers on stage not in the audience, they're coming from different acoustical spaces. So I found it necessary to convince—I wouldn't do it myself because it damages the technique—the singers, what I did was tiny amounts of amplification of the singers and put it into the loudspeakers and then it mixes just enough. It has to be extremely subtle, the singer must not hear it, nor must the audience hear it—[the sound] has to come from the singer on stage, but it has to be enough to overcome the separation from the electronic sound. This isn't just spatial, it seems to be psychological too." A gallery of photographs from the performance is available on the composer's website, http://www.aliceshields.com/massgallery.html.

epigraph.[128] As its author musicologist Paul Attinello explains, even in art one is always under obligation to perform (in Judith Butler's sense) in a manner that is consistent with the site of the performance.[129] Through Attinello's eyes, "The primary link between shame and performance is that performance is in its essence *exposure*, self-transformation into a sign for public examination and judgment."[130] Failing to replicate the correct gestures in the appropriate context, argues Attinello, is the source of shame. If made aware that one does not meet society's expectations of appropriate behavior, she or he will grow overly self-aware, self-conscious. In real life individuals may attempt to conceal obtrusive traits or enhance—that is, perform—alternately, but what is normal in musical and theatrical performances is far more exaggerated than the normal behaviors of polite society.[131]

Though Shiva propositions the Woman first, it is she who physically instigates their lovemaking. The Woman is not afraid to seize her desires, and though she appears in the insular realm of the diegetic stage, her creator, Alice Shields, does not. Where the Woman and Shiva perhaps consummate privately, Shields is all too aware that wide-eyed spectators are watching her unconventional ideas come to life. Though in a sense Shields is simply performing *in the guise* of these characters, as their creator she foresees their motivations and desires, and her controlling hand is ultimately responsible for realizing their actions. In turning the spotlight on the most sacred, and hence veiled of music's elements, Alice Shields faces her examining and judging public in a full-fledged performance of that which they are most ashamed. As in life, music also has its norms and ideals, whether in style or in content, and composers must adhere to these by meeting the expectations of a discriminate and discriminating public. If a composition does not meet what the audience believes a musical work to be, then, either the work has failed to replicate existing norms, or perhaps the work has boldly superseded them.

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[128] Attinello, 119.
[129] Judith Butler, "Performative Acts and Gender Constitution: An Essay in Phenomenology and Feminist Theory," *Theatre Journal* 40/4 (1988): 520.
[130] Attinello, 99.
[131] Liz Wood and Mitchell Morris, "Flirting with 'Theory,' Flirting with Music: A Discussion in Advance of ForePlay," *Gay and Lesbian Study Group (of the American Musicological Society) Newsletter* (1994): 3-7.

Chapter 3: Identity and Orientation in Barry Truax's *Song of Songs*

"It takes at least a duet, a calling and a responding—
or, better, a reciprocal intention to listen…"[1]

- Adriana Cavarero

"Granular [synthesis] gave me a renewed respect
for the acoustic sound of the environment and its complexity.
Never underestimate how complex the acoustic environment is,
as it has defied most scientific analysis and re-synthesis.
It is still a terra incognita."[2]

- Barry Truax

Computer music raises existential questions, questions of what it means for a sound to exist, of how a listener might intuit a sound as just that, one sound. At the most specific level of perception a sound may be intuited as an object, while, when considering the greater dimensions of this object's identifying criteria—its perceived source or cause—we may arrive at a perplexing realization that, perhaps, what we hear, more than mere object, is actually perceived as a "being," a subject like you or I. At this level of obscurity, the sound object moves from having a personal identity to having an identity politics.

In the early years of electronic music, theories of reality in the electroacoustic soundscape appeared to rely on the typical modernist dialectic between objectivity, on the one hand, and on the other hand, structure as a schematic organizing the criteria by which such objects become identified. In any music, structural components are identified as a means of understanding that music, of intuiting how it is organized. According to music theorist

[1] Adriana Cavarero, *For More than One Voice: Toward a Philosophy of Vocal Expression*, trans. Paul A. Kottman (Stanford: Stanford UP, 2005), 5.
[2] Randy Raine-Reusch, "Stretching Time Stretching Sound," *Musicworks* 79 (2001): 16, http://www.sfu.ca/~truax/MW79.pdf (accessed 5 November, 2014).

Edward T. Cone, a contemporary and acquaintance of Theodor Adorno, structuring principles dictate a work's value:

> The good composition will always review, on close study, the methods of analysis needed for its own comprehension. This means that a good composition manifests its own structural principles, but it means more than that. In a wider context, it is an example of the proposition that a work of art ought to imply the standards by which it demands to be judged. Most criticism today tacitly accepts the truth of this statement and sets about discovering the standards implied by a given work and testing how well it lives up to them. For investigation of this kind, analysis is naturally of primary importance.[3]

Depending on how one interprets "structural principles," such evaluative statements can appear to restrict the type of music one values as "good," as this type of thinking threatens to delimit the type of person qualified to identify these principles by their ability to determine the appropriate standards by which works of art ought to be judged. But this is not my concern here. I am instead interested in understanding *how* one identifies the structuring principles of music in the first place, however qualified they may be at doing so.

Cone's Princeton colleague from the 1940s onward, composer and electronic music enthusiast Milton Babbitt also advocates for an attention to musical formalism in both compositional and theoretical approaches. His idea of musical structure is described in his famous article, "The Composer As Specialist," as a "five-dimensional musical space determined by pitch-class, register, dynamics, duration, and timbre."[4] Babbitt decidedly states that an "inability to perceive and remember precisely the values of any of these components results in a dislocation of the event in the work's musical space, an alteration of its relation to all other events in the work, and—thus—a falsification of the composition's total structure."[5] This statement has led many to conclude that "the values"

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[3] Edward T. Cone, "Analysis Today," *The Musical Quarterly*, Vol. 46/2 (1960): 187.

[4] Milton Babbitt, "The Composer as Specialist" [first published as "Who Cares if You Listen?"], *High Fidelity* 8: 38-40, 126-7, reprinted in *The Collected Essays of Milton Babbitt*, eds. Stephen Peles, Stephen Dembski, Andrew Mead, and Joseph N. Straus, ([1958] Princeton: Princeton University Press 2003), 49.

[5] Ibid.

of "these components" are determined by Babbitt's habit of composition, but I would argue that it is actually the *perceived* magnitude of the event, determined by the orientation of a specific analyst/listener that determines the resulting identity of sounds within this imagined "five-dimensional musical space."

In 1967, seven years after Cone's remark on "structuring principles" and close to a decade after Babbitt's appeal to specialists, Cone declared the arrival of a "new" music that seemed, at that time, "Beyond Analysis."[6] This music posed new analytical challenges and threatened the music's "orientation"—his term for the necessary perspective from which a work should be approached, either analytically or perceptually. No matter which way the music presented itself, whether forward, backward, or upside-down, in analysis its structural components appeared to be interchangeable upon interpretation, and, for all intents, identical.[7] To prove this point, Cone presented a simple inversion or "mirror" of Schoenberg's *Klavierstück*, Op. 33a to show how (a poor) analysis could ignore the audible facets of listening. In distinction from such a simplistic interpretation, Cone envisioned "orientation" as "[resting] not on the internal consistency of the system, but on some connection between the axioms and rules of inference on the one hand, and the external world on the other—whether that world is represented by acoustics, psychology, physiology, or history.'"[8] That is, music on its own does not determine one's analytic orientation. Rather listeners intuit musical structure through a negotiation of the "axioms" intrinsic to the musical composition, simultaneously shaped by the situation within which one hears this music. Cone therefore asserts that analytical "conventions" tend to emerge after listeners receive enough reinforcement for certain tasks, through repetition of analytical actions or listening behaviors.[9] Responding to Cone, David Lewin drives the point home claiming that, independently of the manner in which a piece is composed, the point of analysis is to help *hear the music better*.[10]

Music theorists traditionally rely on musical scores to serve as visually "correlative evidence," but this method is thrown by the wayside when exploring electroacoustic music,

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[6] Cone, "Beyond Analysis," 34.
[7] Cone, "Beyond Analysis," *Perspectives of New Music* 6/1 (1967): 6; 35.
[8] Cone, "Beyond Analysis," 47.
[9] David Lewin, "Behind the Beyond: A Response to Edward T. Cone," *Perspectives of New Music* 7/2 (1969): 61.
[10] Ibid, 63.

which often does not employ a traditional musical score.[11] When analyzing music for which there is no score, those theorists who still rely on visual methods to bring about consistent or evidential analytical results tend to incorporate alternative visualizations that need not be condoned by the composer or geared toward performance. As electroacoustic composer and theorist Denis Smalley explains, there possibly exist for an electroacoustic work "three types of score which might contain perceptually relevant information": (1) a score used by a performer in mixed works of live electronic music, (2) a "technical" score, or a record of how the piece was produced, and (3) a "diffusion score," "often a free, sketchy, graphic representation of the sounding context," which would be useful as an indication of timing for engineers and composers diffusing the work in a concert.[12] But visualizations only reveal so much.

While the typical musical notation of the common practice period presents one rendering of events, we know, of course, that such representations also omit many facets: measures of micro-temporality, or the nuances of timing; standard notation does not discriminate among timbres; nor does it accurately convey sonic effects produced electronically. Now that I've said my piece on the first of Smalley's representations, the musical score, I'll move on to the second. The production or technical score informs its reader of how the music was created, describing the effects or mechanical techniques used, which in the electronic context often consist of numeric calculations of the frequency, amplitude, and duration for each "note" or sound event (see for example the detailed sketches used to document the process of creating Stockhausen's *Gesang der Jünglinge*[13]). More conscientious composers will include their desired manner of realizing specified techniques, complete with descriptions of the type of sounds to expect. But of course, says Smalley, when it comes to electronic or electroacoustic music the role of the "means of production—computers and technology…is mysterious and unknowable to most listeners."[14] And this brings us to Smalley's third type of score, the graphic score.

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[11] Judy Lochhead, "How Does it Work?" *Music Theory Spectrum*, 28/2 (2006): 233-254. For a more thorough discussion on using visual representations of music toward performance and analysis, see Chapter 3, p. 122.

[12] Denis Smalley, "Spectromorphology: Explaining Sound-Shapes," *Organised Sound* 2/2 (1997): 108.

[13] "Stockhausen," MMS. Da. 28.10.1956 für Sendung am 7. November 1956, WDR Musikalisches Archiv der Westdeutschen Rundfunks, Musikalisches Nachprogramm, cited in Katherine Kaiser, "Listening to Recorded Voices in Modern Music" (PhD diss., Stony Brook University, 2015), 186-7n7.

[14] Smalley, "Spectromorphology," 125.

Regardless of which images are presented in the graphic score, I believe that this form of representation is the closest to capturing how listeners actually experience musical events. Looking, for example, at the graphic score Rainer Wehinger created to accompany Ligeti's *Artikulation*, we see that each event, each sound object, has its own shape, color, and texture. Similar sounding events are represented with common visual elements.[15] And aptly, Wehinger calls his score a "*Hörpartitur*." Imagine with me, however, that instead of a note value implicit in Western musical notation, our object of analysis, the sound event as it were, is but a mere electronic blip, an "acoustical quanta," in the words of Dennis Gabor, or a sonic "grain," as it would later be more commonly termed.[16]

Curtis Roads's book *Microsound* (2001) defines "a grain of sound…[as] a brief microacoustic event, with a duration near the threshold of human auditory perception, typically between…(1 to 100 milliseconds)."[17] When composing with grains, sounds are digitally sampled at a very high rate to isolate between 1000 and 2000 grains per second. As with any sound, each grain is characterized by an envelope—attack, sustain, release. In granular synthesis, the composer reintroduces these click-length grains through various ramps and presets, the manner of interpolation determining the duration, pitch, amplitude, and timbre of the resulting sound. It is a perceived interpolation of the grains into significant events that a graphic score captures. Where often the process of synthesizing electronic sounds is concerned with the molecular particulates of sound, graphic representations convey the aural associations that emerge from interpolating grains of similar sound quality. In short, the graphic score described by Smalley is unable to capture the manner of composing music with granular synthesis, but it does its part in conveying the image of synthesis after the fact.

In electroacoustic music that employs granular synthesis, new sounds are generally produced for each piece and even recorded sounds are usually subjected to some processing to the point that they undergo a transformation of their sonic identity. As we learned in the

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[15] Rainer Wehinger, *Artikulation: elektonische Musik/ Ligeti: Eine Hörpartitur von Rainer Wehinger* (Mainz: Schott, 1970).

[16] D. Gabor, "Acoustical Quanta and the Theory of Hearing." *Nature* 159/4004 (1947): 591-4; Iannis Xenakis, *Formalized Music* (Bloomington: Indiana University Press, 1971); Curtis Roads, "Automated Granular Synthesis of Sounds," *Computer Music Journal* 2/2 (1978): 61-2; Curtis Roads, "Granular Synthesis of Sound," in *Foundations of Computer Music*, Curtis Roads and John Strawn, eds. (Cambridge, Mass.: MIT Press, 1985), 145-159.

[17] Curtis Roads, *Microsound* (Cambridge, Mass.: MIT Press, 2004), 86.

previous chapter, even when minimally processed, sounds are transformed to ensure that they can only be produced through electronic means.[18] What listeners hear in electroacoustic music therefore conflicts in many ways with what makes sense in the extrinsic, everyday world. One aim of much electroacoustic music is not to re-present the real world, but to present an aesthetic semblance of reality, mediated through the composer's organization of musical material and by way of the technology one uses both to collect this material and to play it back. That a sound can undergo "transformation," as Denis Smalley posits, would suggests that sounds are transformed from some original entity into an entirely new identity.[19] We might say that it is only by virtue of time that identity emerges. Indeed, sounds cannot be heard without the necessary duration of resonance—and this is not merely a Bergsonian metaphor. As we know, sound travels in waves, but while we might imagine a wavelike thread carrying itself through the atmosphere, it is more correct, from a physical standpoint, to say that sound travels in the absence of air. Particles of air, water, wax, plastic, or foam, are pushed to vibrate on account of sound's force, but without resonating objects to receive this wave, sound itself has no sufficient physical properties. It is therefore only upon reflection that a sound's identity emerges. Identity appears on account of who or what first senses sound.

Now moving from identity to orientation. A decade-and-a half after David Lewin, Christopher Hasty proposed a theory of post-tonal music premised on close, piece-specific listening. For Hasty, music analysis was a process of "conceptualizing and *re*-presenting musical relationships," of identifying significant musical correlations. Analysis was then defined as a process of "segmentation."[20] In Hasty's words, "an analysis or division of a musical object can proceed in countless ways depending upon what we choose to regard as its constituting elements or factors, how we choose 'to carve it up.'"[21] But how does one decide which associations are analytically useful; which associations help us *hear the music better*? Building on Lewin's and Hasty's theories, music theorist Dora Hanninen explains

[18] This has not prevented performers from attempting to replicate Schaeffer's electronic world in an acoustic context. Giuliano Obici and Alexandre Fenerich, "Symphonie pour un Homme Seul – de-acousmatized (SPHUS-d)," paper delivered at the Electroacoustic Music Studies Network Conference 13 June, 2014. Berlin, Germany.

[19] Denis Smalley, "Defining Transformations," *Interface* 22 (1993): 279-300.

[20] Dora Hanninen, "Orientations, Criteria, Segments: A General Theory of Segmentation for Music Analysis," *Journal of Music Theory* 45/2 (2001): 345.

[21] Christopher F. Hasty, "If Music is Ongoing Experience, What Might Music Theory Be? A Suggestion from the Drastic." *ZGMTH* Sonderausgabe (2010): 205.

that associations are formed through one's interests and perceptual habits, their interpretive goals and music context.[22] As she says, "Association is, essentially, an orientation to music analysis that concerns equivalence or similarity between events."[23] And elsewhere she writes, "Much of what we do as music analysts is predicated, in some way, on the recognition and modeling of repetition."[24] On the micro level, sound appears discontinuous or granular, and simultaneously at the macro level, music ex-tends from each point at an angle. Analysis is the complement to *synth-esis*. From the Greek *ana-luein*, analysis describes an *unloosening* of relations, a gradual despecification or granular "pulling apart." Indeed music analysis *must* account for music's patterned continuities in both the near and far perspectives, another description of music analysis being to observe music's "measure of change," in the words of music theorist Benjamin Boretz. If analysis loses perspective of the composition as a work, it comes also in danger of abandoning identity at the microscopic, contextual level.[25] Identity, from the Latin *idem* meaning same, implies that things, persons, objects, or grains are both identifiable and classifiable by associations and by disjunctions. In other words, there is, of course, a politics to identity.

Electroacoustic composer Barry Truax says that, "The basis of granular synthesis in the seemingly trivial grain" has not only changed how he conceives of composing, but it has changed the way he thinks of music and its larger social and historical functions.[26] He writes, "[Granular synthesis] clearly juxtaposes the micro and macro levels, as the richness of the latter lies in stark contrast to the insignificance of the former."[27] Interpolation then offers an intimate engagement with sound, getting somehow "inside" the sound, but it can also yield to greater abstraction, where previously recognizable sounds are displaced from their sounding sources or simply resituated. And, as with any digital process, there is always some indeterminacy involved. Listening to electroacoustic music can therefore be as disorienting as it is orienting. Truax therefore provides various anchors for listeners, so that

[22] Dora A. Hanninen, "Orientations, 355-6.
[23] Dora A. Hanninen, "Associative Sets, Categories and Music Analysis," *Journal of Music Theory* 48/2 (2004): 148.
[24] Dora A. Hanninen, "A Theory of Recontextualization in Music: Analyzing Phenomenal Transformations of Repetition," *Music Theory Spectrum* 25/1 (2003): 59.
[25] Benjamin Boretz "Meta-variations, Part IV: Analytic Fallout (I)," *Perspectives of New Music* 11/1 (1972): 158.
[26] Barry Truax, "Composing with Real-Time Granular Synthesis," *Perspectives of New Music* 28/2 (1990): 123; 132.
[27] Truax, "Composing with Real-Time Granular Synthesis," 123.

we don't get lost. These anchors provide what electroacoustic composer Leigh Landy calls "the something to hold on to factor."[28] "Something to hold on to" includes maintaining something constant in a musical work, something familiar, be it 1) in the musical domains, such as a recurring pitch, rhythm, or constant duration; 2) textural considerations, certain dynamics, timbres, or an inflection, and/or 3) programmatic or concrete elements, the so-called "extrinsic" factors listeners might recognize. Such a constant thread is maintained by the relationships formed between among various musical identities and the orientations among them.

In this chapter I propose that electroacoustic music challenges some societal presumptions of how we perceive and intuit gender and sexuality in sound precisely by the manner in which listening to electroacoustic music causes pause regarding the terms "identity" and "orientation." Pointing to some generalized conventions of contemporary Western society that reinforce gendered hearings, this chapter considers the inheritance of gender and sexuality within a genre of music represented historically as devoid of bodily markers. Using the example of Barry Truax's work *Song of Songs* for oboe d'amore (in A), English horn, and two digital soundtracks, I explore gender as a taxonomic category whose definition is construed by way of the concepts identity and orientation. Although biological sex is determined primarily by physiology, this physiological factor is not immediately apparent in the realm of electroacoustic music. And yet, because the recorded voice is always situated in relation to a human body, vocal music somehow clings to gender, whether we attend to it as meaningful for a given analytical orientation or not.

The sounds on the two digital soundtracks of *Song of Songs*—the voices of two speakers, a singing monk, and environmental sounds from birds, bells, crickets, cicadas, flowing water, and a burning fire—are all subjected in varying degrees to a technique known as time-stretching. In this analysis I focus on the voices of the two speakers as they inform the common definitions of identity and orientation in music theory, but also as identity and orientation have been defined in relation to gender and sexuality. The voices of the speakers, one male and one female, are at times processed to such an extent that they sound either ambiguously gendered, as if spoken through a vocoder, or, in more extreme

[28] Leigh Landy, "The 'Something to Hold on to Factor' in Timbral Composition," *Contemporary Music Review* 10/2 (1994): 49.

cases, the voices are stretched and filtered so far out of proportion that they are hardly recognizable as voices and may at times even be heard as environmental sounds.

If I recognize the voice at all, it is likely that I will attempt to understand, categorize, and parse it, whether I do this consciously or unconsciously. Though, given digital processing, I may never successfully identify its source or cause.[29] The voice presents ambiguity, particularly in the slippery categories of identity and orientation. As Judith Butler says, gender "identity [i]s a compelling illusion, an object of *belief*," and in the case of electroacoustic music, the voice is at the heart of this illusion.[30] Gender not only shapes the manner in which we intuit bodies individually, but, according to Eve Kosofsky Sedgwick, gender is also the primary means by which we explore relations between and among bodies. While gender is by no means the *only* consideration in a definition of one's sexual orientation, Sedgwick argues that it remains the most dominant dimension by which sexual orientation is determined in contemporary Western society.[31]

When it comes to the acousmatic voice there seem to be generally two competing, though not absolutely exclusionary, theories: the first being that once recorded the voice no longer serves as a referent to its original source and cause, to its originating body;[32] and the second that the voice can never be disembodied. On this second theory, recall Steven Connor claim that "dissociated voices always [seem] to summon in their wake a phantasm of some originating body, effect convening cause."[33] In the first case, it is tempting to explain the recorded voice as a sound "object" whose identity is open and unrestricted by the delimiting categories that organize actual bodies. And yet, a position that does not take into account such identifying factors as gender, however optimistic, potentially relies on a myth of music's or sound's absolutism, therefore perpetuating the long standing resistance of some to acknowledge that music contexts might not arise entirely from within a musical

[29] Recall Mladen Dolar's determination, "There is no such thing as disacousmatization," discussed in Chapter 1, p. 89ff. Mladen Dolar, *A Voice and Nothing More* (Cambridge, Mass.: MIT Press, 2006), 70, quoted in Brian Kane, *Sound Unseen: Acousmatic Sound in Theory and Practice* (Oxford: Oxford University Press, 2014), 150.

[30] Judith Butler, "Performative Acts and Gender Constitution: An Essay in Phenomenology and Feminist Theory," *Theatre Journal* 40/4 (1988), 520.

[31] Eve Kosovsky Sedgwick, *Epistemology of the Closet* (Berkeley: University of California Press, 1990), 8.

[32] Brian Kane, Conclusion in *Sound Unseen*, 223-226.

[33] See discussion in Chapter 1, pp. 90. Steven Connor, "Panophonia," lecture delivered at the Pompidou Centre, 22 February 2012, http://www.stevenconnor.com/panophonia/panophonia.pdf (accessed 24 November, 2014), 1. See also, Steven Connor, *Dumbstruck: A Cultural History of Ventriloquism* (Oxford: Oxford University Press, 2000), 353.

work. The second case, the opinion that the voice is never disembodied, implicitly accepts that we retain gender and sexual markers as structuring determinants even when no body is visible. But there is still a risk here in *insisting* on the "phantasm of some originating body," to recall Connor's description, and that is a risk barring potential freedoms offered by the electroacoustic realm. By insisting on proscribed gender categories, the second theory threatens to preclude voices from possibly sliding from one gender to another or anywhere in between, a fluidity of identity that is commonly encountered electroacoustically but not easily attained with actual bodies.

One question I seek to answer in the context of Truax's *Song of Songs*, is, if indeed listeners are attempting to explain or identify voices when they hear them, to what extent does gender play a role? In this paper I explore some ways that Barry Truax constitutes gender in his work, drawing themes from Judith Butler and Eve Kosofsky Sedgwick and some supporting evidence from psychoacoustics and empirical studies. Though Truax does not refer to any supporting literature from the sciences, his compositional intuitions in terms of gender and psychoacoustic identity very much support such informed hearings.

1. Barry Truax

Canadian composer Barry Truax works at the boundary of Western art music and electroacoustic music, such that, when composing, he carefully and conscientiously determines the manner in which these disciplines relate to one another. He is furthermore aware of several social preconditions that seep in and saturate the musical materials he uses, develops, and produces. As a gay-identifying composer, Truax finds himself at the margin of some mainstream social but also musical practices. In an article entitled "Homoeroticism and Electroacoustic Music: Absence and Personal Voice," the composer wrote, "Art is said to mirror society, but if you look in the mirror and see no reflection, then the implicit message is that you don't exist."[34] He therefore makes an effort to find representative ways of including identities—and primarily gender and sexual identities—

[34] Barry Truax, "Homoeroticism and Electroacoustic Music: Absence and Personal Voice," *Organised Sound* 8/1 (2003): 119.

rarely encountered in either western art music or the electroacoustic music tradition.[35] Many of Truax's works exhibit the composer's acknowledged "homoerotic" representations. These include *Androgyny* (1978), *Androgyne, Mon Amour* (1996-7) after Tennessee Williams, *Twin Souls* (1997), several pieces on the theme *Powers of Two* (1995-1999) including an operatic version (2004), and *Skin & Metal* (2004). But I haven chosen to focus on *Song of Songs* as an example that explores a wider *spectrum* of gender and sexual representations in addition to the homoerotic perspective.

The digital processing Truax employs causes the samples he uses to undergo "transformations," a term first applied to electroacoustic music by composer and electroacoustic theorist Denis Smalley. "Transformations," says Smalley, "concern changes in the state of sonic identity…. A transformation may be regarded as travelling a certain distance from its base, and the type of change may be defined in terms of its direction—whether the source-cause implications are specific, implied or free."[36] The idea of transformed identities relates also to the common musical-theoretical practice of segmentation. As Dora Hanninen explains, it is disjunction in "psychoacoustic musical dimensions such as pitch, attack-point, duration, loudness, timbre, and articulation" that serves as a rationale for segmentation, which she defines as "the formation of objects of analytic interest."[37] Additionally, the notion of transformation recalls a similar analytical interest in gender and sexuality invoked by Sedgwick's term "transitivity," which she recognizes as the "grounds [on which to find] alliance and cross-identification among various groups."[38] Sedgwick notes here a distinction between" transitive" and "separatist" tropes of sexuality on account of gender, where members of the latter group insist on separating men and women, while advocates for the former acknowledge some alliance between groups across genders on the grounds of homosexual affinity. By deliberately instituting disjunctions or transformations of textual, musical, and gender and sexual identities, I believe that Truax's method of composition transforms *a priori* assumptions

[35] Ibid.
[36] Smalley, "Defining Transformations," 279.
[37] Dora Hanninen, "Associative Sets, Categories, and Music Analysis," 149. "In short, the rationale for object formation in music analysis lies outside the notes one takes to be the object: much of what a musical object 'is'—many of its properties and all of its structural significance—is not to be found in the object proper, but dispersed in and permeable with aspects of musical context." Hanninen, "Associative Sets," 186. Dora Hanninen, *A Theory of Music Analysis: On Segmentation and Associative Organization* (Rochester, NY: University of Rochester Press, 2012), 4.
[38] Sedgwick, *Epistemology of the Closet*, 89.

and expectations listeners might bring with them to the piece.

2. *Song of Songs*[39]

On the soundtracks in *Song of Songs*, two speakers recite the biblical text of the same name. Although the voices are always manipulated with the time-stretching process, in the opening material of the piece Truax only minimally interferes with the samples, mostly retaining the sonic identities of the voices. Arguably, the voices of the two speakers, the man, recited by Norbert Ruebsaat, and the woman, recited by Thecla Schiphorst, are from the beginning identifiable with their representative genders. By having both speakers recite the text in its entirety with the gendered pronouns of the original text, already from the beginning of the piece the composer gives each speaker the opportunity to lovingly address either the opposite gender or the same gender. A threshold arises however at the point when digitally transformed voices become so far removed from the sonic characteristics of a given gender that the speaker evokes a lover whose gender identity is aurally ambiguous, and whose sexual orientation is therefore not easily reconciled within the typical straight/bi/gay categories.

Truax says that real-time granular synthesis enhances the sexual allusions of the text he sets:

> Granular stretching of a voice, by adding a great deal of aural volume to the sound with the multiple layers of grain streams…often seems to create a sensuousness, if not an erotic quality in the vocal sound. A word becomes a prolonged gesture, often with smooth contours and enriched timbre. Its emotional impact is intensified and the listener has more time to savour its levels of meaning.[40]

[39] *Song of Songs* can be heard on the commissioning website, "Soundstreams," accessible at http://www.soundmakers.ca/soundstreams-commissions/song-of-songs-barry-truax [last accessed 6 October, 2015].
[40] Truax, "Homoeroticism," 119.

Eroticism is enticing precisely on account of that which is left unspoken. It is implication and fantasy.[41] And so, although many interpretations of the Song of Songs text seek to find hidden meanings, overemphasizing the anatomical symbolism could distort the text's palpable allure. Song of Songs expert Michael V. Fox reminds us that, "Many things happen in love besides sexual intercourse, and we obscure the particularity of these experiences if we reduce them all to veils that conceal sexual intercourse or to symbols that 'really' represent coitus."[42] Fox's conclusions speak for the text as much as for the veil that separates recorded source from acousmatic sound.

In my hearing, Truax's setting first establishes binary categories, such as the normative male and female genders or homo- and hetero-sexual orientations so as to break away from these tropes as the piece later progresses. The composer's measured departure from normative constraints, I believe, functions to sever, blur, or confuse *a priori* categories—including the orientation each speaker takes toward their speaking partner(s) when reciting the erotic text. This blurring fragments and hence reorients the respective identities listeners might attribute to each voice.

2.1 Textual considerations

Of the many sensuous moments recorded in the Bible, King Solomon's Song of Songs is probably the longest, most detailed and celebrated portion. And remarkably, thousands of years after the scripture was first recorded in 2nd century C.E., Solomon and Shulamite's mutual desires continues to be recognizable to us today. Their love is described in vague enough terms to still be relevant, while the specifics of the story—the lovers' mutual descriptions of one another's physical bodies, their movements, and even details of their environment—remain alluring for new interpretations. The Song of Songs text is commonly interpreted in one of two ways. It can be read literally as a dialogue between King Solomon and his lover Shulamite, the two named characters in the poems, or in a metaphorical reading (as is the typical religious interpretation), the dialogue is exchanged

[41] Whereas sexuality is conceived historically as a biological impulse or sexual drive (though this definition is met with increasing resistance), eroticism is characterized by desire. On the distinction between drive and desire, see Chapter 4, pp. 213-216.

[42] Michael V. Fox, *The Song of Songs and the Ancient Egyptian Love Songs* (Madison, WI: University of Wisconsin Press, 1985), 299.

between God and the Israeli people. Identifying the characters one way or another of course changes what relationship we perceive among them, whether romantic love or mere companionship, and this is without mentioning alternative levels of meaning yielded by retaining both the metaphorical and literal narratives as separate interpretive registers.

Michael V. Fox convincingly argues against the solely metaphorical interpretation, arguing that metaphorical poetry from this time typically speaks of "love in generalities," but that the detail provided by the first-person accounts in the Songs read more like personal testimony than philosophical musings.[43] And furthermore, there is much to suggest that, more than mere companionship, these songs in fact depict erotic desire, as exemplified by the many physically descriptive passages, such as, "thy stature is like to a palm tree, and thy breasts to clusters of grapes" or "I sat down, under his shadow, and his fruit was sweet to my taste."[44] Fox explains that, although the characters sometimes refer to one another in the third person out of respect, they often also refer directly each to the other, something uniquely intimate for texts from this period. And although only two characters are named, Fox and other scholars have argued that one can read multiple personae in this text in addition to the named man and woman.[45] Though textual allusions in the Song of Songs are often confined to interpretations of either the covenant between God and the Israeli people or to heterosexual relations among human characters, Solomon and Shulamith, Truax employs various "blurring" effects to expand the meaning of "love" through metaphor.

Truax's setting of the text highlights a collection of personae by including a chorus of voices created by digitally layering numerous samples of the two speakers one upon the other—similarly to the technique Alice Shields employs in *Apocalypse*. Hearing each speaker recite the text in its entirety with the original gendered pronouns, and then layered with several more voices, may cause listeners to question the number of perceived characters in the work, their respective genders, and, given the erotic tone of the text, also the characters' various orientations toward one another. In this chapter, I introduce a few

[43] Ibid, 296. There is still some question of the identities of the authors of the Song of Songs.
[44] Times indicate overall running time of the piece according to http://www.soundmakers.ca/soundstreams-commissions/song-of-songs-barry-truax
[45] Fox, *Song of Songs*, 255.

representative examples from *Song of Songs*, highlighting Truax's compositional method as I feel it is informative of the manner in which gender is conceived intrinsically in this work.

2.2 Analysis

Song of Songs is an electroacoustic work for two digital soundtracks (produced in eight tracks), computer graphic images by Theo Goldberg, and oboe d'amore and English horn played by Lawrence Cherney. Cherney also commissioned the work for Soundstreams.[46] The work is in four movements titled after times of day suggested by the text the piece sets, "Morning," "Afternoon," "Evening," and "Night and Daybreak":

"Morning"

Return, return O Shulamite, return, return that we may look upon thee.
Who is she that looketh forth as the morning, fair as the moon, clear as the sun, and terrible as an army carrying banners.
Look not upon me because I am black, because the sun hath looked upon me.
I am my beloveds and my beloved is mine, he feedeth among the lilies.

"Afternoon"

I am the Rose of Sharon, the Lilly of the Valley. As the lily among the thorns, so is my love among the daughters.
A garden enclosed is my sister, my spouse, a spring shut up, a fountain sealed.
A fountain of gardens, a well of flowing waters, and streams from Lebanon.
Let my beloved come into his garden and eat his pleasant fruits.
I am my beloveds and my beloved is mine, he feedeth among the lilies.

[46] Lawrence Cherney is the artistic director of Soundstreams, "an international centre for New Directions in Music." http://www.soundstreams.ca/About-Us/Who-We-Are (accessed 17 November, 2014). *Song of Songs* can be streamed from Soundstreams at, http://www.soundmakers.ca/soundstreams-commissions/song-of-songs-barry-truax and the CD, whose cover features one of Theo Goldberg's graphic images, is available from Cambridge Street Records, *Song of Songs: Computer and Electroacoustic Music by Barry Truax* (CSR-CD 9401). The score is available at the composer's website http://www.sfu.ca/~truax/songs.html; and the composer has made the complete documentation of the piece, including source sounds, processing, production score, live score and spectrograms available on DVD-ROM. I thank Barry Truax for providing me with all of these materials.

"Evening"

He brought me to the banqueting house and his banner over me was love.

I sat down under his shadow and his fruit was sweet to my taste.

Thou art all fair my love, there is no spot in thee.

The joints of thy thighs are like jewels, the work of the hands of a cunning workman.

This thy stature is like to a palm tree, and thy breasts to clusters of grapes.

Until the day break and the shadows flee away, I will get me to the mountains of myrrh and the hill of frankincense.

I am my beloveds and my beloved is mine. I am my beloveds and his desire is towards me.

"Night and Daybreak"

Until the day break and the shadows flee away, be thou like a roe or a young hart, upon the mountains of Bether.

My beloved spoke and said to me: Rise my love, my fair one and come away.

Let us get up early to the vineyards, let us see if the vine flourish, whether the tender grape appear and the pomegranates bud forth: there I will give you my love.

And our bed is green.

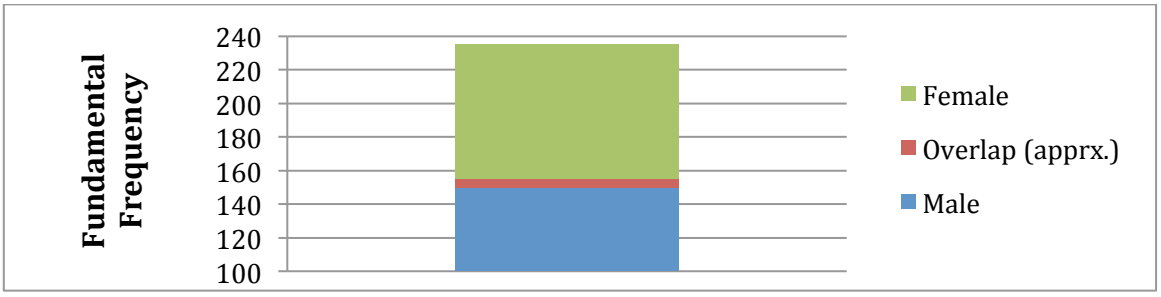
How fair is thy love, my sister, my spouse! How much better is thy love than wine![47]

The portions of the daily cycle are apparent not only in explicit references to "morning" in the first song or "until the day break and the shadows flee away," to signify evening and day break in the third and fourth songs, but the speakers' more subtle allusions to their environment also hint at the time of day and even the season, as evinced by references to shadows, light, sun, and to the time-dependent life cycle of flowers and insects. The composer reorganized the text so as to emphasize these environmental references.

[47] From the composer's website, Barry Truax, "Song of Songs," accessed 16 February, 2016, http://www.sfu.ca/~truax/songtxt.html. In interview I conducted with Barry Truax on 12 June, 2014, Berlin, Germany, the composer informed me that the text was adopted from the King James translation of the Bible.

Each movement in *Song of Songs* features sounds characteristic to the time of day indicated by that movement's title, with monastery bells and a monk's song for "Morning" and the hazy "Afternoon" adorned with the seasonal charms of singing cicadas, whose song is heard most clearly at the hottest hours of the day. As "Evening" descends and the heat disperses, in set the crackling fires that create a perfect setting for amorous activities. Soon enough, "Night" falls and a canopy of chirping crickets beckon sleep. "Daybreak" then brings back the familiar tolling bell that opens the work, and prepares for the beginning of yet another day.

All of the recorded sounds on the two soundtracks—so not including the oboe d'amore and English horn—are subjected to time-stretching, a process that turns recorded speech into what the composer refers to as "songlike pitch contours." At the time Truax composed this piece in the early 1990s it was presumed in psychoacoustics and psychology that pitch was the greatest determinant of gender perception in the voice. A study conducted by Wolfe et al (1990) demonstrated that without a visually corresponding figure, for example when speaking on the telephone, a speaker is generally recognized as female when she speaks at a fundamental frequency *above* 160 Hz, which translates roughly to E3 or E below middle C. Listeners will identify a male speaker when he speaks at a frequency *below* 150 Hz, or D below middle C (Graph 3.1).[48] The study also found that women tend to speak with greater (more frequent) spectral flux, suggesting that temporal and spectral factors beyond pitch influence how gender is perceived. As we will see, Truax's transformed voices often intersect at the ambiguous range around 155 Hz, particularly when the text takes on an erotically suggestive tone.

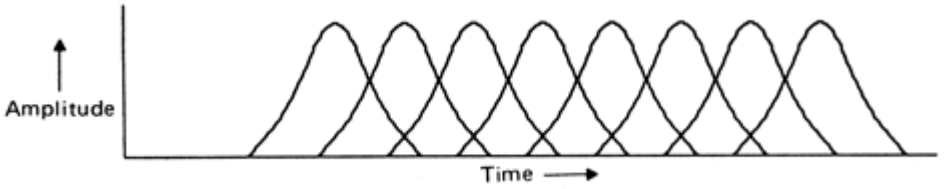


Graph 3.1 Fundamental Frequency and Gender Perception (Wolfe et al 1990).

[48] V.I. Wolfe, D.L. Ratusnik, F.H. Smith, and G. Northrop, "Intonation and Fundamental Frequency in Male-Female Transsexuals," *Journal of Speech and Hearing Disorders* 55 (1990): 43-50.

Building on the findings of Wolfe et al, in a 2015 study researchers found that, when given a choice between male and female genders, listeners correctly identified the gender of a speaker even when the fundamental speaking pitch was altered, so long as the spectral envelope remained unaffected by pitch-shifting.[49] Weston et al asked listeners to gauge a speaker's gender in three distinct sources of auditory stimuli. Listeners were introduced to unadjusted recordings of the speakers and also to two examples that had been digitally pitch-shifted to the ambiguous range around 160 Hz, one using "pitch-synchronous overlap" that *retained* the spectral envelope (Technical Example 3.1); and another that changed the pitch and *distorted* the spectral envelope using a "scalar factor" or asynchronous granular synthesis (Technical Example 3.2). Weston et al found that when the spectral envelope remained intact listeners could correctly identify the speaker's gender regardless of the pitch level at which they spoke.

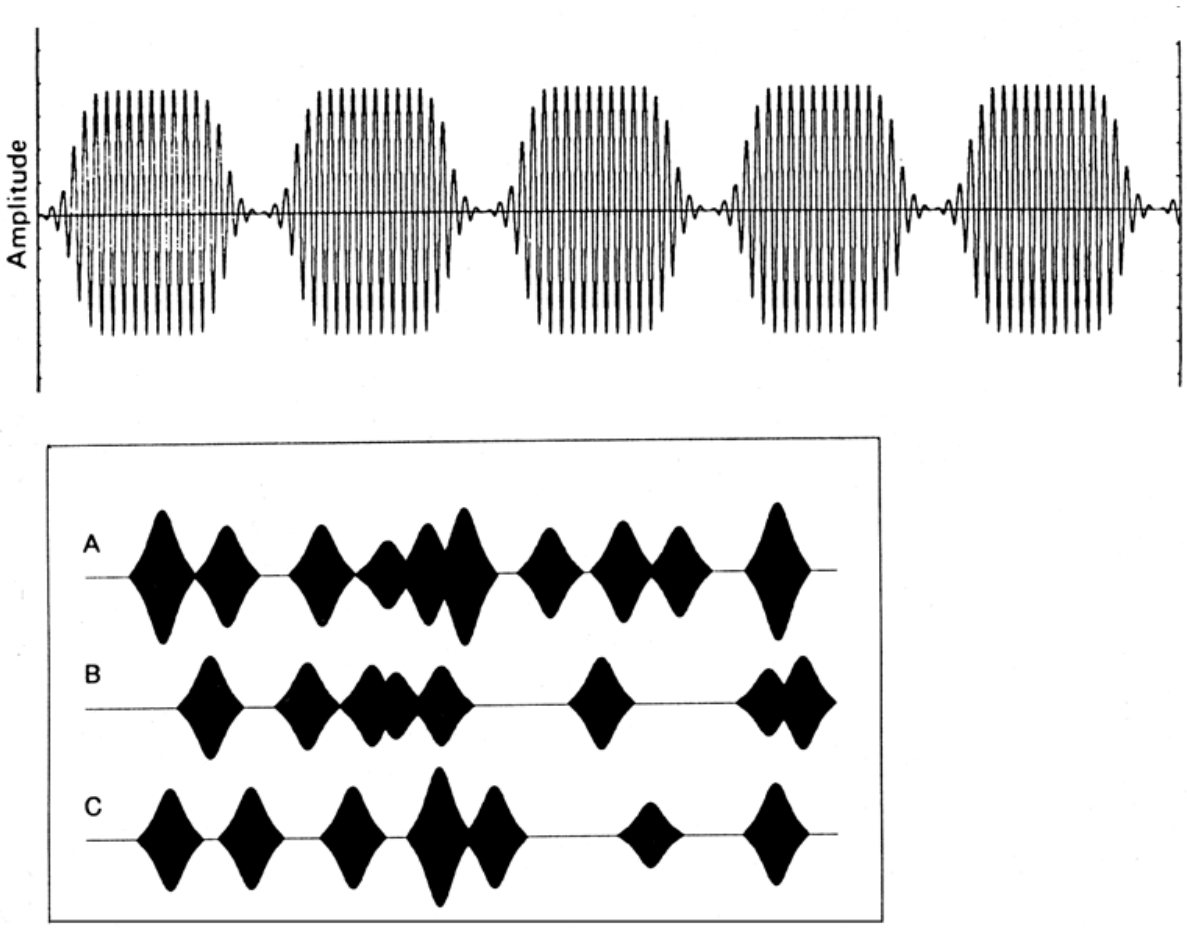
Similarly to the techniques employed in this study, in *Song of Songs,* Barry Truax plays with the fundamental pitch and spectral envelope of the two speakers to elicit various sonic effects. He does so as deliberate commentary on the relationship between the speakers. Truax does not employ any pitch-shifting in this piece, rather he uses pitch-synchronous granular synthesis—the first technique that preserves the spectral envelope of the sample—to variously extend sample duration mostly without altering pitch content. He does, however, alter speaking pitch through comb filters and harmonization, both of which inherently change the timbre and spectral envelope of a given sample.



Technical Example 3.1 Pitch-synchronous granular synthesis.[50]

[49] Weston, P. S. J. et al. "Discrimination of Voice Gender in the Human Audio Cortex," *NeuroImage* 105 (2015): 208-214. Other studies have shown that pitch does not necessarily determine the perceived gender of a speaker only that it becomes informative when the timbre of a given voice is perceived as ambiguous. Cyril R. Pernet and Pascal Belin, "The Role of Pitch and Timbre in Voice Gender Categorization," *Frontiers in Psychology* 3, Article 23 (2012): 1-11.

[50] Image taken from, "Granular Synthesis," Barry Truax's website, last accessed 12 February, 2016, http://www.sfu.ca/~truax/gran.html.



Technical Example 3.2 Quasi-synchronous granular synthesis.[51]

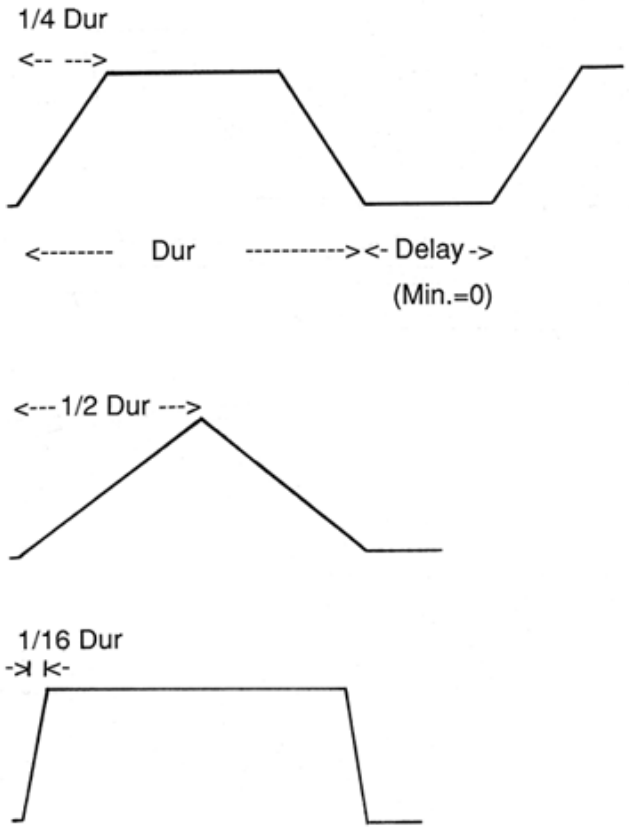
Truax is an electroacoustic composer who, since the 1970s, has worked almost exclusively with the granulation of sampled sound, or granular synthesis, as it is generally called. The possibilities of granular synthesis were conceived earlier already in 1947 by Dennis Gabor and implemented through analogue hardware by Iannis Xenakis (1971) and Curtis Roads (1978; 1985).[52] However, the complexity of granular synthesis made the technique difficult and inaccessible for many years until Barry Truax discovered how to implement the technique in "real time" via digital signal processing. Barry Truax's PODX system was the first digital platform to employ the technique in real time on readily available microprocessors, offering composers immediate feedback and a more cost-

[51] Ibid.
[52] See note 16 this chapter.

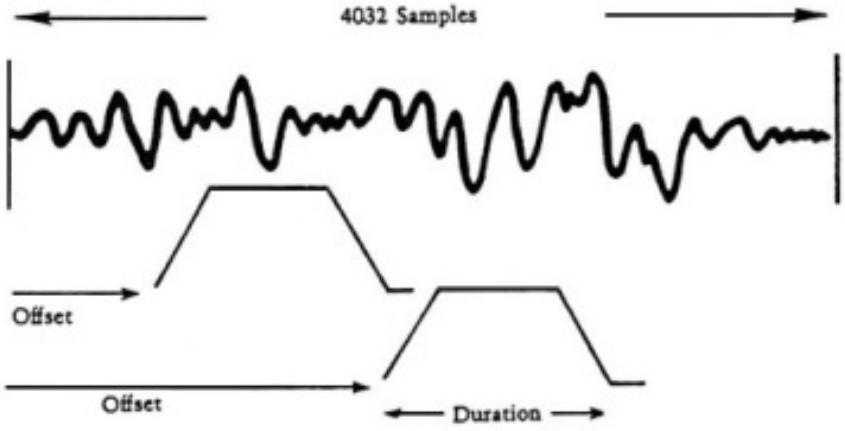
efficient means of composing than analogue hardware or the large industrial computers located in specialized university labs.[53] Through the PODX system processing became somewhat automated, while also leaving room for real-time composition (artistic expression/composer interference). By lessening the time spent with the hardware, Truax abated certain complexities while introducing others. First, as Truax notes, the relation between the grain and its resulting layered granular texture contribute to a new attitude toward sound and its construction. Whereas before, computer (tape) music relied on simple wave-synthesis or on the modification of long recordings, composers could now become invested in "microsound." Similarly to acoustic composition, focusing on the "grains" of sound afforded composers a minute, molecular point from which to develop new material.[54]

Granular synthesis is a process of time-shifting—of temporal drag. The grains are not merely extracted from the source material, but are manipulated according to the flexibility afforded by the time scale. Notably, temporal flux also contributes to differences in timbre. Truax says that the time-shifting he introduced in *Wings of Nike* (1987) and developed further in *Song of Songs* "[prolongs] the sounds into sustained timbral textures," which allow listeners to engage more closely with sound.[55] Granular time-stretching is one manner by which Truax "magnifies" the sound of his grains. When using a short fixed sample, Truax introduces grains in the same order as they sound in the originating sample, but he staggers overlapping grains, deliberately extending their offsets (the point from which the sample begins to play) and smoothing out their envelopes so as to give the impression of the sound in slow motion (Technical Example 3.3). Even if, for example, two adjacent grains are of the same aural quality, source, and envelope, one's perception of how a sound unfolds in time depends on how the reintroduced grains are staggered in relation to one another (Technical Example 3.4).

[53] For a more in-depth biography of Barry Truax, see Raine-Reusch, "Stretching Time Stretching Sound."
[54] Curtis Roads, *Microsound*, 86.
[55] "Granulation of Sampled Sound," Barry Truax's website, last accessed 12 February, 2016, http://www.sfu.ca/~truax/gsample.html.



Technical Example 3.3 Grain Envelopes with specifiable offsets between 1/4 to 1/16 the duration of the grain.[56]



Technical Example 3.4 Granular Time-Stretching Using a Short Fixed Sample.[57]

[56] Image taken from, "Granular Synthesis, Barry Truax's website, last accessed 12 February, 2016, http://www.sfu.ca/~truax/gran.html

In the next four musical examples, I introduce a few representative moments in *Song of Songs* that I recognize as employing granular synthesis to assert but also to transform gender identities and sexual orientations. Although my analysis refers to the musical score Truax provides for the oboe / English horn player, note that this score provides only limited notation for the electronic soundtracks. Following these brief analytical profiles, I reflect on some framing social and transcontextual considerations to take into account when listening to Truax's compositions and to electroacoustic music more broadly.

2.2.1 Spoken Pitch Level and Gender Identity

In the opening of *Song of Songs*, Truax establishes the respective identities of the two speakers by introducing the voices with minimal processing. But shortly thereafter, the composer moves to transform these identities. In line 5 (1:31),[58] a man speaks "Who is she that looketh forth," and we hear a corresponding interjection from a woman on the word "Fair" (Example 3.1). The prominent pitch of this word sounds around A below middle C, or 220 Hz, with a characteristically feminine upward inflection, as determined by Wolfe et al and subsequent studies.[59] The upward inflection of the "Fair" voice brings its fundamental frequency to D or 294 Hz, where this voice is met by the other voice at the word "Terrible," absent the "t" attack. Starting here, from the supposed female range (as determined by Wolfe et al.), and then gradually dropping in pitch by way of digital time-stretching, the "terrible" voice descends through A and G-flat to join the oboe for a moment before sliding progressively lower and out of the normative female range.

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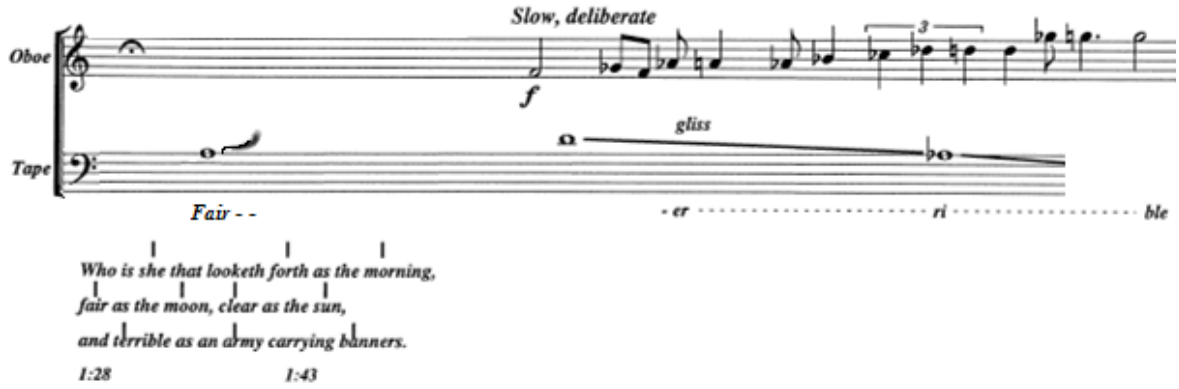
[57] Barry Truax, *Documentation DVD #3* (CSR-DVD 1001).

[58] In lieu of measure numbers, line numbers are enumerated according to the score, beginning anew with each movement. Times indicate overall running time of the piece according to http://www.soundmakers.ca/soundstreams-commissions/song-of-songs-barry-truax.

[59] In blind listening studies, upward inflection has been observed as a typically female trait, and is encouraged in "communication feminization therapy" for individuals transitioning to the female gender. Adrienne Hancock, Lindsey Colton, and Fiacre Douglas, "Intonation and Gender Perception: Applications for Transgender Speakers," *Journal for Voice* 28/2 (1997): 203-209.



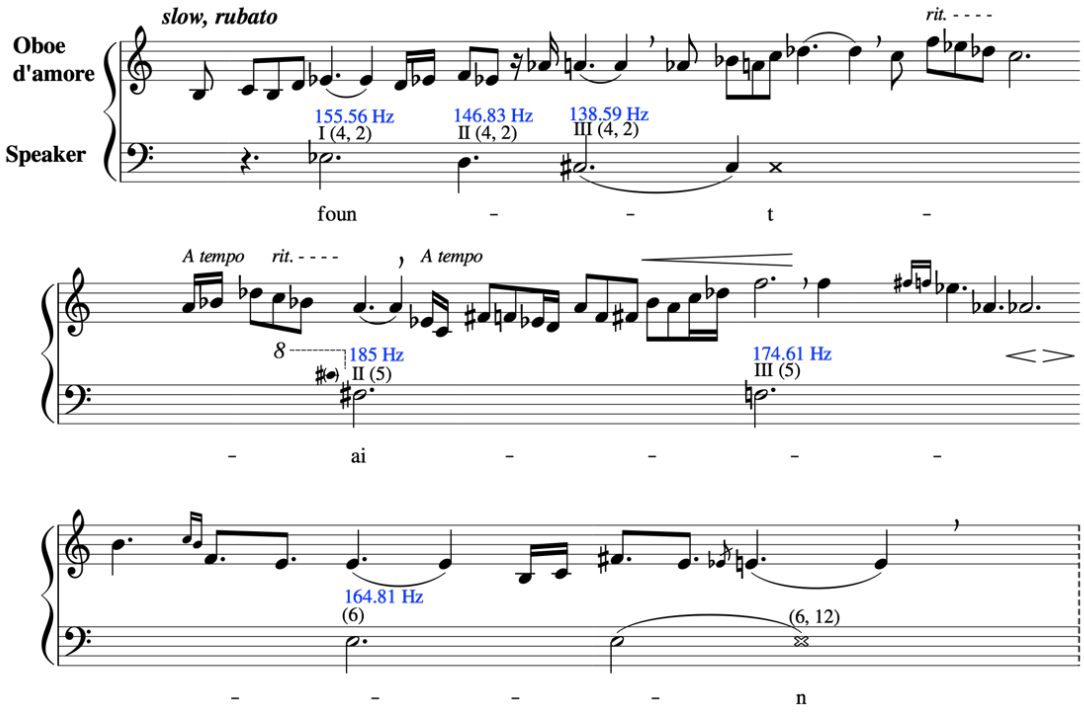
Example 3.1 *Song of Songs*, iv: "Night and Daybreak," lines 5.

The "terrible" voice descends from the female range through what could be inferred as the male range, but quickly departs from the human speaking range altogether. This gender ambiguity, brought on by a change in speaking pitch, leads to the first exclamation of the recurring phrase, "I am my beloveds and my beloved is mine." When the line repeats, the two voices are no longer time-stretched, meaning that they sound in their respective male and female ranges. After a few more declamations, the repeating untransformed voices begin progressively to offset one another until eventually a third speaker seems to join the duet—another male voice, the same speaker doubled. This additional male partner completes the sentence of the first two speakers, "I am my beloveds and my beloved is mine. He feedeth among the lilies." Given this doubling of male voices, it is clear here that this "he" is the man's lover.

2.2.2 Harmonization and Perceived Personae

In the second movement of *Song of Songs*, "Afternoon," we see another example of time-stretching that introduces a change of identity by modifying a sample's spectral envelope, and another instance fragmenting the perceived number of speaking personae. Norbert again enters first as a recognizable or determinately male voice reciting the text "A garden enclosed is my sister, my spouse, a spring shut up, a fountain sealed" (4:45). Here the sample is only minimally time-stretched to retain its spectral envelope. At the oboe

d'amore's entrance, however, the word "fountain" is repeated, this time by the female speaker, and subjected to heavy distortion, granulated and harmonized (both upwards and downwards) at a ratio of 100:1. Neither the production score nor performance score show the resulting harmony that emerges from stretching the voice in this way, so I've transcribed the strongest sounding fundamentals in the bass clef (Example 3.2). The oboe d'amore is notated at concert pitch. As we can see, the time-stretched "fountain" now sounds in the ambiguous register, in a range around E-flat3, or 155.5Hz. Interestingly, I discovered from close listening, that these pitches, which emerge through harmonic overlapping of Thecla's voice, are the same frequency as Norbert's initial recitation of the word "fountain" directly preceding the stretched passage.



Example 3.2 *Song of Songs*, ii: "Afternoon," lines 3-5.

When listening to this portion, notice how the two-part texture fragments occasionally into a chorus of many more voices, for example in line 4, when F-sharp in the lower voice is met also with C-sharp, a fifth plus an octave higher. Each pitch is provided with its frequency in Hz, in blue, and the added harmonic in black, where the Roman numeral indicates the harmonic series, and the Arabic numeral 4 indicates the fundamental

frequency. So the first note E-flat is in the first harmonic series, and sounds both at the fundamental, 4, and one octave below, at harmonic 2. I have not notated octave doubling. Listeners acquainted with granular synthesis and time-stretching will likely recognize the granularity of this accompanying or ambient background and may even recognize the stream's source as a human voice given some clues, such as the timbre and the aliasing caused by the consonants "t" and "n," which I've notated with X's on lines 3 and 5. However informative, this transcription should be taken merely as suggestion. From experience, the dominant audible frequencies change slightly depending on the hardware one uses for playback.

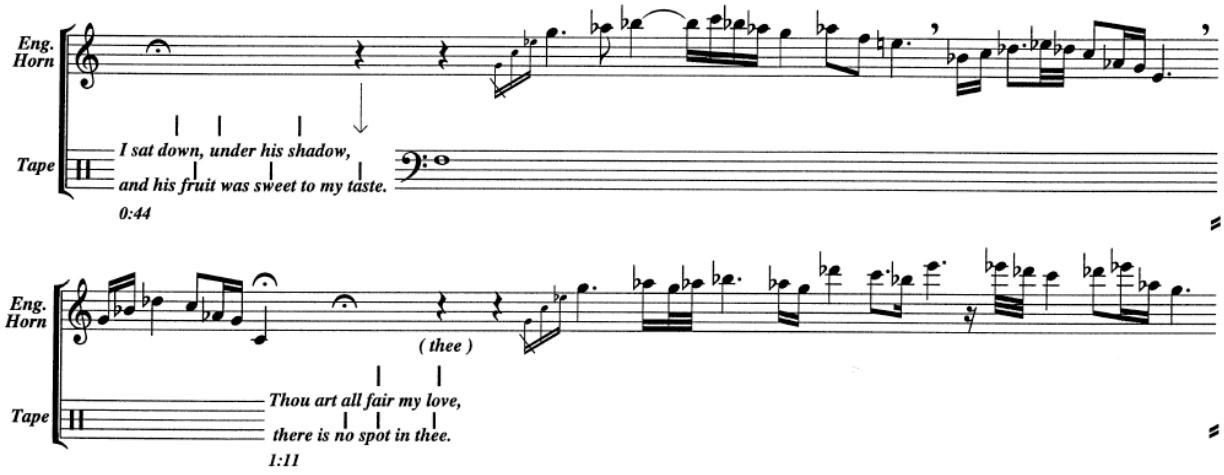
Truax employs this technique of harmonization frequently in the piece, in places where the text and voice are recognizable, providing attentive listeners with an opportunity to associate these more ambiguous background streams with time-stretched voices. It is important, however, to note that while added harmonics may enrich the sonic texture, they do at times distort the voice beyond recognition. In this example, Truax introduces timbral or pitch ambiguity precisely when the speaker's identity might determine their orientation toward a partner. The gender identities of the background voices in the example are ambiguous, such that the speaker who refers to their "sister" and "spouse" may not convey a certain gender identity. Neither an opposite-sex partner nor a same-sex partner can be fully ruled out.

The same techniques that contribute ambiguity to our perception of the speaker's gender identity also contribute to some blurring and overlapping among musical categories. For instance, the initial overlap and subsequent transformation of the two voices is an occasion when the prominent speaking voice drops into the background to take a supporting role. And something similar occurs when the "songlike pitch contours" shift from a melodic or *supported* role to a harmonic or *supporting* one.

2.2.3 Voice and Role

"Evening" is the movement the composer proclaims as the height of homoerotic sensuality in *Song of Songs*. Shortly after the opening of the movement, a (female) speaker recites the text "I sat down, under his shadow, and his fruit was sweet to my taste" (9:41). The

background consists of a sustained reverberating, almost metallic, sound on the pitches C and F. The background clearly serves to harmonically anticipate the oboe, which enters moments later with a C minor arpeggiation, C—F—A-flat—C. The prominent background F is notated in the score as a cue for the oboe (Example 3.3) and serves also to harmonize the main line. But the background is, in fact, even more deeply rooted in the music than what is perceived either in the score or in mere listening.



Example 3.3 *Song of Songs*, "Evening," line 3.[60]

More than a random electronically synthesized sound, we see in the composer's production score that the background is produced by magnifying the "ow" diphthong of the speaker's "down," and because the grains overlap (pitch-synchronous granular synthesis (Technical Example 3.1)) and are played in the same order as in the original sample, Truax is able to preserve the F from the speaker's original recitation. Through this time-stretching process, not only is the length of the sample extended, but the timbre of the original is somewhat altered by a manipulation of the harmonic spectrum such that overtones masked by the speed and timbre of the original sample are emphasized to function much as harmony does in tonal music.[61] The composer enriches the sound by overlaying many more grains than in

[60] Line numbers in the score start anew in each movement.

[61] Truax explains his use of harmony in granular synthesis: "Time-shifting is used to modify the rhythm of the spoken text subtly and make it more songlike, as well as to prolong the sounds into sustained timbral textures, frequently accompanied by multiple pitch shifting implemented with a harmonizing technique." Barry Truax, "Granulation of Sampled Sound," accessed 16 February, 2016, http://www.sfu.ca/~truax/gsample.html. Since the live performer needs to match the pitch, the

the original (60:1), thus adding to the harmonic spectrum, which he harmonizes at a ratio of 4:3 (a perfect fourth below), 4:2 (a perfect octave below), 4:1 (two octaves below), and 4:6 (a perfect fifth above), where 4 is the value of the fundamental or, in this case, the original pitch. The numbers 3, 2, and 1, are subharmonics, and those higher than 4 are harmonics above the original pitch.

2.2.4 Ambiguity and Function

Truax plays with a sound's resonance by adding to the harmonic spectrum of source sounds but also by subtracting from the harmonic identity of a sound through comb filters. A comb filter is often the result when a delayed version of the same signal is introduced to interfere with itself, causing a canceling out of harmonics as the like-waves interfere with one another. Following the romantic tryst in the third movement, in the fourth movement "Night and Daybreak" a gender ambiguous vocoder-type voice awakens their beloved calling: "My beloved spoke and said to me: Rise my love, my fair one and come away" (15:40). Here Truax notates the resulting time-shifted pitches to emphasize their musical importance to the English horn player reading from the score.

Though the vocoder voice (notated in the bass clef in Example 4) is a result of deliberate cancelation, Truax uses these digital modifications not merely as effect, but also toward musical means. The vocoder voice sounds alternately on the pitches E-flat and B-flat, where the impulse provides the music's rhythmic propulsion. Since E-flat is a recurring and culminating pitch in this section of the movement (from the indication "very slow, expressive," line 5 onward), these pitches outline a conventional cadential harmonic progression, I-IV-I-IV.[62] The modal cadential movement serves to emphasize the characteristic "lowered seventh" of the altered Phrygian or "Ahava Rabah" ("Great Love") mode of the Jewish prayer modes, as the melody repeatedly hovers between E-flat and D-flat.[63] The melody of the English Horn sounds here diatonically, since it draws on the

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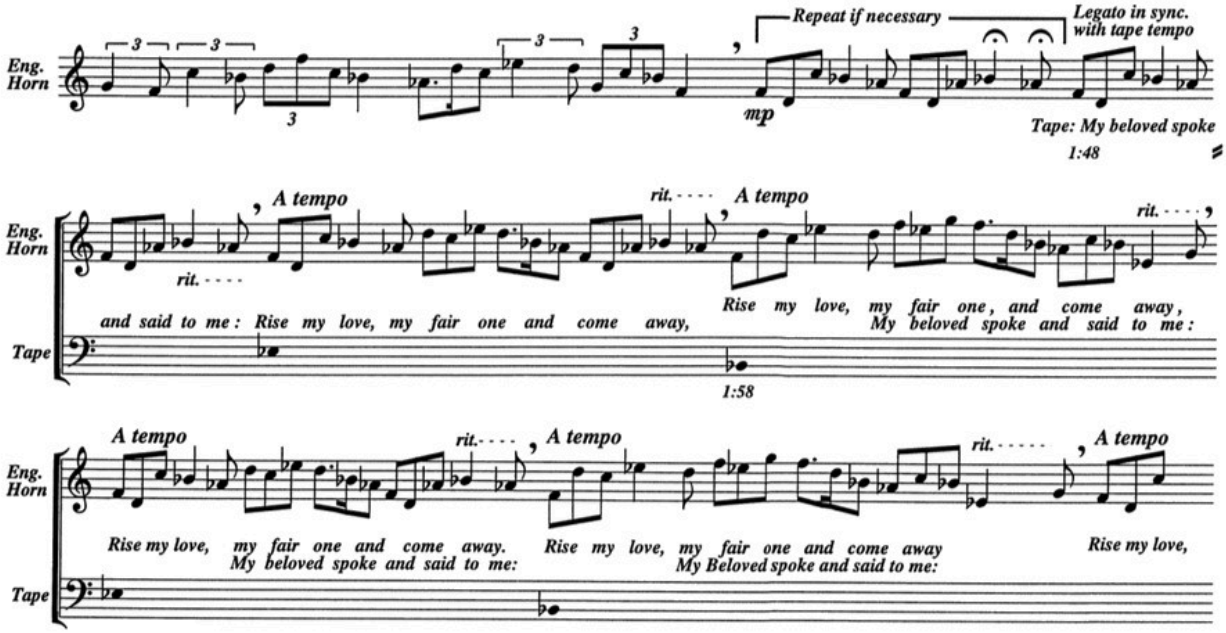
accuracy of the frequency is assured with a "Karplus-Strong" delay-line resonator.

[62] Incidentally, a similar vocoder timbral effect with accompanying harmonic progression is used in Lipps Inc's song "Funkytown" (1979), however, I doubt that their harmony was produced like Truax's, where the recognizable "foreground" voice is also the sounding source of the background accompaniment.

[63] *Song of Songs* commissioner Lawrence Cherney provided Truax with notation of the typical cantillation of

cantillation melody introduced in the first movement (i: 8-12), and yet the harmony does not function wholly in the tonal manner. While the melody of the passage concludes on E-flat, we do not hear I-IV-I as a plagal motion to cadence. Rather, this alternation is transparent and suspended without motion, not unlike the accompaniment in Laurie Anderson's "O Superman" (1981).[64] Throughout this passage, it remains unclear which harmony "I" or "IV" is primary and which secondary, contributing moreover to the uncertainty of their supposed binary identities.



Example 3.4 *Song of Songs*, iv: "Night and Daybreak," lines 7-9.

Truax's *Song of Songs* shares more than a few features with Laurie Anderson's "O Superman." Both respectively reinterpret biblical texts, but more than this, Truax's observations on personal voice and absence that opened this chapter compare easily to Anderson's familiar text from "O Superman," where she states in the opening line, "This is

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the Song of Songs (also used for the "Ruth" and "Ecclesiastes" scrolls). The Phrygian mode is explicitly noted and Truax includes the cantillation melodies in the order they appear. The composer does not know where this notation came from, though I have found it used in some Ashkenazy synagogues in the United States, including the reconstructionist congregation at West End Synagogue, http://westendsynagogue.org/sites/default/files/site_pdfs/Cantillation%20for%20Ruth%2C%20Kohelet%20and%20Shir%20Hashirim.pdf (last access 12 October, 2015).

[64] Susan McClary, "This Is Not a Story My People Tell: Musical Time and Space According to Laurie Anderson," in *Feminine Endings*, 142.

not a story my people tell. It's something I know myself."[65] Both Truax and Anderson seem to rewrite the history preserved in their retellings of biblical stories, as both see the need to push beyond these traditions. Anderson's recitation paraphrases the story of Adam and Eve from the woman's perspective, while Truax's *Song of Songs* preserves the original text, though its setting serves to subvert the hetero-normative assumptions preserved in its historical reception.

In addition to the textual considerations, both works elicit bodily concerns, as both use electronic means to challenge the performers' respective gender identities. Referring to Anderson's voice, Susan McClary's analysis of "O Superman" recognizes the importance of the perceived "physical source of sound" in this piece.[66] As the composer herself stands on stage to declaim the story as she has rewritten it, Anderson's work places the body actively and conscientiously in a performing role. But, according to McClary, although Anderson's female body appears to us on stage, she uses vocoders to perform vocal androgyny so as to resist the frequent scrutiny that often inflicts the female body as spectacle. McClary writes, "Laurie Anderson's music is multiply charged…It is electronically saturated at the same time as it insists on the body…"[67] This, she says, contrasts with the neutrality with which music is generally regarded—what she terms, its "neuter" enterprise.[68] In a similar-but-opposite tactic, I see Truax *denying* the visually corresponding bodies of his performers, so as to leave room for ambiguity. I see Truax's work, like Anderson's, confronting music's presumed "neuter" presence by simultaneously insisting on the gendered voice while also raising questions as to how categories of gender are typically defined in musical contexts. Like Anderson, Truax breaks away from the compositional mold typically assigned to his gender: he is a male composer who embraces sexual imagery, but not by way of the common misogynist representations all too prevalent in the Western musical canon.

[65] Ibid, 132.
[66] Ibid, 136.
[67] Ibid, 138.
[68] Ibid, 139.

3. Blurring Lines, Redefining Categories

Addressing gender in music can be a complicated task. On the one hand, we do not wish to reduce the complex relationships, both musical and erotic, that emerge in *Song of Songs* by identifying its sounds with either a female or a male speaker. But on the other hand, might we be losing some aspect of the experience by omitting a discussion of gender and its implications for musical listening? What I find compelling about Truax's music is the manner by which he draws attention to difference, to gender and sexual orientation, while simultaneously diminishing the centrality of normative categories, whether the binary man/woman, gay/straight categories or the typical musical oppositions between melody and harmony, and between timbral profiles and harmonic spectra. Perhaps we can take Truax as an example for how we might approach issues of gender and sexuality in musical composition, but we may also refer to his compositional approach as an *analytical* orientation that does not delimit these identities according to *a priori* assumptions.

In many cases, Truax disguises the process of transformation, such that the original and transformed sources sound simultaneously, and often with no immediately audible correlation. For example, frequently the voice resembles recorded environmental sounds, i.e. the cricket, cicadas, birds, and monastery bells which receive similar—or even the same—treatment. In the opening of "Afternoon" we hear two stretched bells overlaid with cicada song. We aurally recognize three of the four pairs of tracks—the bells and the voice reciting "the lily of the valley" text (tracks 1 & 2); the voice reciting "I am the rose of Sharon" (tracks 3 & 4); and the cicadas (tracks 7 & 8). However, one pair of tracks, the Monk's singing (tracks 5 & 6), is not immediately audible without the production score.

The Monk's singing, which opens and closes the first movement, continues to sound, stretched beyond recognition and bleeding over into the second movement. Whereas we recognize this singing *as singing* in the beginning of the piece, the stream thereafter is gradually stretched along with the sound of the stretched bells, and within a few seconds these sounds merge together and shift into the background.[69] Listeners may not easily identify the Monk's song, but, given an overlapping timbral similarity, they will easily

[69] Stephen McAdams and Albert Bregman, "Hearing Musical Streams," *Computer Music Journal* 3/4 (1979): 34.

associate his transformed voice with the bells and cicadas in the background. While the timbral streams are subtly distinguishable, all three sound as a vertical choir of sustained pitches for the polyphonic backdrop. All three streams—the monk, bells, and cicadas—have the unmistakable sound of granulation, almost like a continuous perforation in the sonic texture. The composer likens this "merging of sonic elements…[to] the extended metaphor of the original text which compares the Beloved to the richness of the landscape and its fruits."[70] By structuring the sonic environment according to textual descriptions, Truax ensures that the sounds "themselves" are inextricable from the overlapping intimacy conveyed linguistically by the adoring lovers.

Early in his career, Barry Truax grouped himself within the "soundscape composition" movement, a compositional approach which tries, as closely as possible, to be located *in place* and to build as close a placial relationship as possible between and among sounds. More recently, however, Truax has turned away from the broad philosophy of soundscape composition to consider a more narrowly defined "context-based composition," which seems to more accurately describe how his own homoerotic compositions fit into the socio-historical context within which they are situated. As he wrote in a recent Call for Papers for an issue of *Organised Sound* (22/1), "A key distinguishing feature of context-based composition appears to be that real-world contexts inform the design and composition of aurally based work at every level, that is, in the materials, their organisation, and ultimately the work's placement within cultural contexts." Thus sound itself becomes entrenched, and, indeed, drenched with context at every contextual register. Not only does context-based composition engage with contexts extrinsic to the work, it insists and relies on such a trans-contextual knowledge. "Perhaps most significantly," says Truax in this Call for Papers, "listeners are encouraged to bring their knowledge of real world contexts into their participation with these works." In context-based composition, musical structure is defined by parameters that extend beyond the "purely" formal. Such structuring parameters as gender and sexuality, for instance, if one looks to Barry Truax's many compositions.

[70] Barry Truax, "Granulation of Sampled Sound," accessed 16 February, 2016, http://www.sfu.ca/~truax/gsample.html.

4. Transforming Analysis

Truax's unique combination of granular compositional approaches and his own social commentary on sexual and gender considerations serves also to confront two philosophical positions regarding identity and orientation, specifically as these relate on the molecular level. According to Roland Barthes "the grain" is "a part of the vocal music (*lied* or *mélodie*): the very precise space (genre) of *the encounter between language and a voice*."[71] But there are varying kinds of grains, which become differentiated not least significantly by a metaphorical distinction Barthes borrows from biology, between the pheno-song and geno-song. He writes, the pheno-song

> …Covers all the phenomena, all the features which belong to the structure of the language being sung, the rules of the genre, the coded form of the melisma, the composer's idiolect, the style of the interpretation: in short, everything in the performance which is in the service of communication, representation, expression, everything which it is customary to talk about, which forms the tissue of cultural values (the matter of acknowledged tastes, of fashions, of critical commentaries), which takes its bearing directly on the ideological alibis of a perios ('subjectivity', 'expressivity', 'dramaticism', 'personality' of the artist).[72]

Whereas the significance of the pheno-song rests in language, and, above all, technique, the geno-song is readily perceivable, "It forms a signifying play having nothing to do with communication, representation (of feelings), expression…[or] the voluptuousness of its sound-signifiers, of its letters." It is, in short, "diction."[73] This description of the "grain," whether of the voice proper or of the ineffable character of sound on a broader scale, is clearly important to the sense of granularity Barry Truax also describes in his music.

Whereas the technical grains of the phono-sonic emerge by way of the acoustic envelopes of Truax's several samples, both declaimed and environmentally intoned, in the

[71] Roland Barthes, "The Grain of the Voice," in *Image – Music – Text*, trans. Stephen Heath (London: Fontana Press, 1977), 181.
[72] Barthes, "The Grain of the Voice," 182.
[73] Ibid.

more formal parameters of frequency, duration, and amplitude, the geno-sonic capacity of this music is left to convergences among sounds, to the blurred distinctions among significant sounds, and to the place where the voice meets the environmental and the acousmatic becomes ambient. Indeed, as Barthes says, "The 'grain' is the body in the voice as it sings, the hand as it writes, the limb as it performs," and where are gender and sexuality if not in the intoned body?[74] Although this body has no physical manifestation, aspects of its physicality are nevertheless presented through sound. Clearly then, the grain of "the voice" does not implicate any one voice *per se*, but only the semblance of a body in its abstracted essence. This is a Voice that belongs neither to speaker nor listener. As Barthes elaborates, "The voice is not personal: it expresses nothing of the cantor, of his soul; it is not original…and at the same time it is individual: it has us hear a body which has no civil identity, no 'personality', but which is nevertheless a separate body."[75]

Barthes's definition of the "grain" has been critiqued, especially by feminist approaches, as an objectivist approach that erases personal identity. In the words of Adriana Cavarero, Barthes's voice is "desubjectivated" such that while always indicating *some* body as its source, it always denies a specific identity for that source.[76] In this sense, the "grain" points to a materiality of the voice divorced from source and cause. Against this position, Cavarero argues that the sound of the voice is actually more uniquely privileged than vision in its referential specificity. The voice claims its speaker such that what is spoken becomes underdetermined in favor of the utterance itself. We might point to this divide between meaning and utterance in Truax's *Song of Songs*, where the text makes sexual allusions on its own account, but the sensuality of this music does not reside in the text. The sonic granularity of the spoken voices instead adjoin with the cicadas, crickets, water, and other environmental phenomena on a much smaller scale; at the level of the molecular.

Similarly to the criteria for source recognition in electroacoustic music, drag performance (performances of individuals dressed in drag clothing) works to constitute gender and sexual categories because of it repeats certain aspects of the categories without completely replicating the status quo of these categories. Were a male performer dressed in drag merely mimicking a woman, the mockery of the display would be sorely obvious as

[74] Ibid, 188.
[75] Ibid, 182.
[76] Cavarero, 199.

the mere feminine cloaking of a securely masculine man. Such a superficial coopting expresses itself imminently as a caricature of womanness that never realizes the ideal and a display that inevitably fails at this aspiration. Similarly but opposite, a post-operation transsexual female who fully "passes" does not fit the bill as a drag performer. Were drag performance truly an aspiration to duplicate and ultimately *become* woman, then presumably cis-gendered females would also be asked to compete, whereas the definitive measure of drag's "realness" is actually a question of how convincing one is in *performance*. That the competitions stabilize the norms on which they draw while also redrawing the supposed boundaries between and among conventions, is one way in which drag balls are actually subversive. For Judith Butler, it is precisely the failure of attaining womanness, a failure that ultimately confirms the performer's status as done up, so to speak. Drag's "realness" is a factor of repetition that necessitates new developments; it is an aspiration for "realness" that is not idealized.

A drag ball is only subversive when viewed as a performance within a certain domain of socially accepted behaviors. And what is perceived as subversive only comes to the fore when compared against the normative behaviors the performance is said to confront. Many expressions of this confrontation may emerge depending on the orienting theory through which the situation is assessed. Meaning, that theory has a way of interpreting performance. Whereas one sense of performance in music is obvious, i.e. the interpretation of a composer's notation, there can be other performative features in music, such as the composer's own performed habits in creating the composition or even the performativity of an observer's experience of the music.

Song of Songs does not attempt to erase gender, but, like drag performance, it succeeds in reorganizing the typically scripted norms by which gender is defined through a carefully sculpted method of varied repetition—both social and technological. Although *Song of Songs* presents the typical normative relationships, it also moves simultaneously to transform and enhance these relationships. Responding to readers who insist that drag is a quintessential "performance" of gender and hence merely a mimetic replication of gender norms, Judith Butler writes, "There is no subject who precedes or enacts this repetition of norms. To the extent that this repetition creates an effect of gender uniformity, a stable effect of masculinity or femininity, it produces and destabilizes the notion of the subject as

well, for the subject only comes into intelligibility through the matrix of gender."[77] Like drag, electroacoustic music is not a mere staging of sound that is in some way secondary to some "real" sounding world. Electroacoustic sound exists *only* in the electroacoustic musical realm, where it is neither a parody of some express truth nor representative (idealized replication) of some extrinsic "reality." According to Butler, "drag allegorizes some set of melancholic incorporative fantasies that stabilize *gender*," and Barry Truax banks on this stability, since without asserting a boundary between male and female voices there would be no way to cross over this boundary.[78]

Merely crossing over an established boundary does not necessarily mean that divisions have been subverted, such articulations only demonstrate that these categories do not acquire meaning independently, that, like gender and sexuality, musical meaning is fundamentally contextual. The homosexual perspective is a welcome entry into the predominantly sexless soundscape of electroacoustic music studies, yet there appears to be little discussion still of music that *may but does not necessarily* have sexual qualities; of music that arouses erotic sympathies, but not in people a specific sexual orientation at the individual level or even an arousal that necessarily hinges on one's anatomical response.

[77] Judith Butler, "Critically Queer," *GLQ: A Journal of Gay and Lesbian Studies* 1/1 (1993): 21.
[78] Ibid, 25.

Chapter 4: Beyond the Posthuman: Augmenting Performance

As we saw in the last chapter, the trends of sexuality studies and electroacoustic music converged in the 1990s on molecular aspects of identity and orientation, paralleling the postmodern impulse to fill in gaps left by modernism's rigidity. Ensuing critiques of postmodern negativity fueled a push toward human augmentation to bring music of the *concrète* tradition into the twenty-first century. Performance practice at the turn of the century moved toward digital augmentation of human (cap)abilities, particularly in live performance, while artists themselves were attracted to the mutual affordances of interdisciplinarity, particularly in the intersecting possibilities of visual and aural digital media. Technology had become an inherent part of art that was implicitly human. The agglomeration of technology, both visual and sonic, yielded an aesthetic semblance that was wholly virtual, entrenched equally in the mind of Bergsonian virtual ideation as in the immaterial virtuality of digital media. That virtuality performed an augmentation (of reality) would bear a human-to-technology relation of power that found much opposition in the twenty-first century. In a recent book, *Acoustic Technics*, philosopher Don Ihde continues his grief over aging, revealing that, with the increased medical intervention, crowns for his teeth, bypass surgery, knee replacements, and so on, he has, as he jokes, become a "cyborg emeritus." Implicit in the compulsion toward such enhancements, says Ihde is the notion that "bionic" replacements are actually "'better' than previous biology," a hype he deems a mere "technofantasy."[1]

One of the most popular and influential literary examples of the twentieth century to depict machines as inferior to humans was Karel Čapek's short story *R. U. R.* (short for Rossum's Universal Robots) from 1920. The story details an alternate reality where robots rise to power only to cause the extinction of humanity. The story's poignant message arrives at the story's culmination, when the absence of humans brings the subsequent decline of the robots who failed to adequately preserve their own commanding technologies. From this story we can deduce at least three beliefs about technology sustained throughout the previous century: 1) that technology is a product of humanity; 2) that technology is a tool of augmentation, granting power greater than humanity on its own;

[1] Don Ihde, *Acoustic Technics* (London: Lexington Books, 2015), 111.

and 3) that, unless controlled carefully, this power can surpass human command with dire consequences, but without lasting effects. From the vantage of music with electronic components, these three points are so self-evident that they basically obviate and seemingly underdetermine the motivations for this entire dissertation. And yet, what in these points diminishes electronic music's influence more generally will actually provide not a slight validation of erotic depictions in digital media in the twenty-first century. While digital art of the last 30 years claimed some independence from reality, by departing from the limitations of the human body, the "posthuman" conceptual philosophy instituted a human-centric view of artistic practice. Increasingly in the twenty-first century, artists and those who study art pushed against this assumed human priority, looking to influential nonhuman factors—or at least factors with unsubordinated agency to humans—in order to gain greater understanding of aesthetic expression and the experience of art.

Linda Dusman's chapter, "No Bodies There: Absence and Presence in Acousmatic Performance," marks a turning point in musicological writing on the representation of women's sexuality in electroacoustic music. And it is telling that Dusman's contribution is the closing chapter of a book published in 2000. Where in the 1990s Hannah Bosma would protest the prevalence of women's voices in compositions by men, and Barbara Brady would confront women's voices in dance music as a common cliché of "sampling sexuality," such anger and revulsion would seemingly die down in the 2000s.[2] No longer uncompromisingly critical, musicology's entre into gender and sexuality studies was becoming more exploratory, self-congratulatory and thus reassuring. While acknowledging the disadvantages of hiding bodies behind an acousmatic veil, Dusman moves to highlight additional freedoms that the digital realm could afford composers and listeners.[3]

As Dusman explains, music "performed via loudspeakers," did not, after Pierre Schaeffer's legacy, enjoy wide popularity for very long. Dusman attributes electroacoustic music's waning to its concert format, which, absent a live performer, discourages audiences from interacting and participating with music.

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[2] Hannah Bosma "Bodies of Evidence, Singing Cyborgs and other gender issues in Electrovocal Music," *Organised Sound* 8/1 (2003): 5-17. See this volume, Chapter 1, p. 79; Barbara Bradby, "Sampling Sexuality: Gender, Technology and the Body in Dance Music," *Popular Music* 12/2 (1993): 155-176.

[3] Linda Dusman, "No Bodies There: Absence and Presence in Acousmatic Performance," in *Music and Gender*, Pirkko Moisala and Beverley Diamond, eds., 336-345 (Urbana, IL: University of Illinois Press, 2000).

> Without a performer there to instruct my listening via facial expressions, body movements, and the shaping of sound itself—and then to smile at me at the end of the process—I have no idea whether I have successfully negotiated this sonic terrain. It is up to the listeners to know for themselves, a weighty responsibility for the average concertgoer.[4]

Absent the body of the guiding performer, only the true specialist could hear the structure of acousmatic music without further mediation.

Attendance at acousmatic concerts is often sparse, and these concerts provide a similar atmosphere to that described by Milton Babbitt in his appeal to "The Composer as Specialist." Not coincidentally, Babbitt was a composer of both serial and electronic music, which emerged around the same time. As Babbitt concluded in 1958, because performers shunned and resented contemporary music, "Consequently, the music is little performed, and then primarily at poorly attended concerts before an audience consisting in the main of fellow professionals. At best, the music would appear to be for, of, and by specialists."[5] This, mind you, was not a complaint; Babbitt's point in the article was in fact to encourage such segregation on account of this music's "advanced" status.[6]

Babbitt celebrated the role of the composer as an authority on music of his traditional and time. His stipulation that his music was "for…and by specialists" came from a desire to encourage listeners to learn the appropriate habits for appreciating his creations as both art and scientific endeavor. Like Babbitt's serialists, today's acousmatic composers belong to a relatively insular community with primary representation from the Francophone Electroacoustic Music Studies Network (EMS), founded by Leigh Landy and Marc Battier. While members of the EMS, such as Robert Normandeau (Chapter 1) and Barry Truax (Chapter 3) usually claim joint membership to other, more encompassing organizations,

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[4] Ibid, 339.

[5] Milton Babbitt, 2003 [1958]. "The Composer as Specialist" [first published as "Who Cares if You Listen?"]. *High Fidelity* 8: 38-40, 126-7. Reprinted in *The Collected Essays of Milton Babbitt*. Eds. Stephen Peles, Stephen Dembski, Andrew Mead, and Joseph N. Straus (Princeton: Princeton University Press), 48.

[6] Examples of such rhetoric abound, but one poignant instance is the Princeton Seminars in Advanced Music Studies, attended by Babbitt and organized by Paul Fromm and the Fromm Music Foundation 1959-60. Paul Henry Lang, ed., *Problems of Modern Music: The Princeton Seminar in Advanced Musical Studies* (New York: W. W. Norton, 1960).

such as the International Computer Music Association (ICMA) or the conference of New Interfaces for Musical Expression (NIME), the exclusivity boasted by societies like the EMS is, according to Dusman, part of the privilege of tape music. Persistent still in the year 2000, Dusman explains that new music is fated to this marginal position among "other" musics because, unlike the music of the common practice period, frequently performed by established orchestras and broadcast on the radio, new music performances "have rarely been heard and are seldom available on commercial recordings."[7] It would not be a stretch to trace electroacoustic music's marginality to an impulse similar to that motivating Babbitt's "arrogant" withdrawal from the general public to the university.[8]

Returning now to the enhancing problematic, Dusman believes, like Simon Emmerson, Steven Connor, and a number of other advocates for electroacoustic music, that music without a performer necessitates engagement with some performing body, whether real or imagined. In concerts of electroacoustic music, says Dusman, it is the composer's authoritative presence at the mixing board that comes to replace the body of the desired performing role. The listener's personal engagement, says Dusman, is what distinguishes tape or acousmatic music from prerecorded music, where the latter format allows listeners to redirect any embarrassing sensations they might experience from the "abstract" sounds onto the arousing body of a gesticulating performer (or composer). But failing to make this association to the composer, the desire for a performing body will cause listeners to put their own subjectivity in place of the performer, bringing listeners into an autoerotic or self-desiring engagement with music.[9] Such is a situation Dusman envisions in Pauline Oliveros' music.

In the same year that Dusman's essay appeared, Martha Mockus too turned to Pauline Oliveros as an example, but rather than remain muddied in the waters of an unfounded opposition between electroacoustic composition and recorded music, between the "art" context and the popular, Mockus brings her readers to a space in which Oliveros' works flourish. Mockus laments that Oliveros' name is typically only mentioned in electronic music textbooks, as "the lone woman in the 'company of men,' a company usually centered

[7] Dusman, 336.
[8] Arved Ashby, "Intention and Meaning in Modernist Music," in *The Pleasure of Modernist Music: Listening, Meaning, Intention, Ideology*, ed. Arved Mark Ashby (Rochester, NY: Boydell & Brewer, 2004), 37.
[9] Dusman, 340.

around the figure of John Cage."[10] However, categorizing Oliveros in this way neglects her important influence as a theorist and activist outside of this small, insular community. Oliveros' music and theories on listening deserve to be highlighted among feminist activists, Mockus explains: "If traditional texts about music and composers are notorious for muffling issues of gender and sexuality, then perhaps a change in context would allow for a more vibrant resonance."[11] In her analysis, Mockus compares the "allure" of the different sounds in Oliveros' music to Susanne Cusick's memorable thoughts on a "Lesbian Relationship with Music."[12] In Mockus's analogy, whereas "in most Western musical discourse, the composer/performer/listener/teacher/critic engages in a 'power-over' relationship with the music…she [Cusick] argues for a serious re-examination of that paradigm," a re-examination such as one finds in the compositions and music-theoretical approach of Pauline Oliveros.[13] It is worth noting that in the constellation of breathing and electronic composition, Annea Lockwood was dramatically influenced by Pauline Oliveros' meditations, Oliveros being the reason Lockwood eventually made it from New Zealand to the United States.[14] Though *Tiger Balm* was composed in 1970, the year their correspondence began, a compelling point for the long-standing friendship between the two may perhaps have been Lockwood's inclinations toward the liberating possibilities of sexual pleasure, allusion, and autoerotic satisfaction. Another mutual interest was surely the attraction to electronic media, and the new possibilities of a quickly changing soundscape.

Aside from her many innovations in the history of electronic music, as far as I know Oliveros is the only "art" composer to write music for a pornographic actress, stripper and former prostitute Annie Sprinkle.[15] Aversion to the pornographic body often emerges on account of what is visible. According to film theorist Linda Williams, the "body genres" of

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[10] Martha Mockus, "Lesbian Skin and Musical Fascination," in *Audible Traces: Gender, Identity, and Music*, eds. Elaine Barkin and Lydia Hamessley (Zürich: Carciofoli Verlagshaus, 1999), 51.

[11] Ibid, 52.

[12] Ibid, 53; 55. Suzanne Cusick, "On a Lesbian Relationship with Music: A Serious Effort Not to Think Straight," in *Queering the Pitch: The New Gay and Lesbian Musicology*, eds. Philip Brett, Elizabeth Wood, and Gary C. Thomas (New York: Routledge, 2006), 67-84. See Chapter 2 for a discussion of Cusick's essay.

[13] Mockus, "Lesbian Skin," 55.

[14] Martha Mockus, *Sounding Out: Pauline Oliveros and Lesbian Musicality* (New York: Routledge, 2008), 57-65.

[15] Pauline Oliveros, "eye fuck!" music to the Annie Sprinkle, *Sluts and Goddesses Video Workshop: Or How to Be a Sex Goddess in 101 Easy Steps*, Vhs, directed by Maria Beaty and Annie Sprinkle (Beaty/Sprinkle Productions, 1992).

horror, melodrama, and pornography are all meant to elicit physical responses from viewers, because, to recall Bernard Williams, pornographic arousal hinges on the anatomical detail of "organs, postures, activity, etc."[16] It is however usually male pleasure that is (or at least was in the 1990s) most commonly associated with what is visible, whereas, expanding on Williams' observations, John Corbett and Terri Kapsalis remark that, equal to the male propensity for the visible is an arousing soundscape dominated, for the most part, by female pleasure.[17] Annie Sprinkle's *Sluts and Goddesses* video workshop, boasting a soundtrack by Pauline Oliveros, draws on a pairing of sight and sound common to much pornography, but resituates this dynamic anew within a feminist paradigm of women's empowerment.

In one scene of *Sluts and Goddesses*, after presenting several graphs detailing the qualities of single and multiple orgasms, with orgasmic energy charted on the Y-axis and time on the X-axis, Annie Sprinkle proceeds to demonstrate what she terms the "megaorgasm," the type of orgasm that, when charted, is riddled with "peaks, valleys, rocky tops, and plateaus, like the high Sierras." The accompanying soundtrack to this scene is Oliveros' "Eye Fuck!" in which Sprinkle's visible pleasure is punctuated audibly by her shrieking and rolling vocalizations—a measure of her orgasmic energy—presumably enhanced by Oliveros' controlling hand at the mixer. At this moment in the video, Sprinkle's boisterous and extravagant expression—the quintessential sign of women's sexual pleasure—makes it difficult to concentrate on the tutorial, bringing this video into the genre of "edu-porn." Using videos that are as entertaining as they are educational, Sprinkle's campaign rests on a much more nuanced platform than the prototypical antagonism of vision and sound. Promoting quality over quantity, Sprinkle's "energy orgasm," as she instructs in videos and on her website, requires its (female) practitioners to concentrate and cultivate their efforts. Not your typical drive to climax, attaining orgasm becomes a moment of supreme concentration on the genitals, but also on the muscles of the pelvis, the knees, the belly, heart, and eyes, and overall concern for the tension and

[16] Linda Williams, "A Provoking Agent: The Pornography and Performance Art of Annie Sprinkle," in *Dirty Looks: Women, Pornography, Power*, eds. Pamela Church Gibson and Roma Gibson (London: BFI, 1993), 176-91; Bernard Williams, ed. *Obscenity and Film Censorship: An Abridgement of the Williams Report* (Cambridge: Cambridge University Press, 1982), 8.2.

[17] John Corbett and Terri Kapsalis, "Aural Sex: The Female Orgasm in Popular Sound," *TDR (1988-)* 40/3, special issue on "Experimental Sound & Radio" (1996): 103.

relaxation that adjoins the mind and body in attaining sexual satisfaction.[18] This appeal to the qualitative union of the senses reveals an affinity with Oliveros' well-known "Deep Listening" campaign, positioning Oliveros as a collaborator among sexual activists. Although perhaps not immediately apparent, there is remarkable resonance between Annie Sprinkle's "energy orgasm" tutorial and the "sonic awareness" Oliveros describes in her writings. Take, for example, the first of Oliveros' *Sonic Meditations* from 1974, entitled, "Teach Yourself to Fly":

> Any number of persons sit in a circle facing the center. Illuminate the space with dim blue light. Begin by simply observing your own breathing. Always be an observer. Gradually allow your breathing to become audible. Then gradually introduce your voice. Allow your vocal cords to vibrate in any mode which occurs naturally. Allow the intensity to increase very slowly. Continue as long as possible naturally, and until all others are quiet, always observing your own breath cycle. Variation: Translate voice to an instrument.[19]

It is no wonder that Oliveros names Annie Sprinkle as an influential collaborator. Both advocate that participants close their eyes to become attuned physically, mentally, and sensually to their environment through breathing; both cultivate a profound awareness of the cooperation between mind and body, using sound and listening as a primary method of attaining such consciousness.

Sprinkles observes that "Breathing during sex is something people are aware of, but often not very conscious of."[20] In another scene of *Sluts and Goddesses*, Annie Sprinkle appears dolled up in a conservative suit with beehive hairdo and pearls, declaiming instructively: "Perhaps the single most important key to sex that I've yet discovered is conscious breathing. Yes, breathing. See the more you breath, the more you feel and the more you come alive." Cut scene to Annie and a companion attired in "goddess" robe. The

[18] Annie Sprinkle, "Energy Orgasm," accessed 22 April, 2016 http://anniesprinkle.org/energy-orgasms/.
[19] Pauline Oliveros, "On Sonic Meditation," in *Software for People* (Baltimore, MD: Smith Publications, 1984), 149. See also "Sonic Meditations XII – XXV," which includes the subheading, "All of these Sonic Meditations are intended to begin with observation of the breath cycle," Pauline Oliveros, *Sonic Meditations* (Baltimore, MD: Smith Publications, 1974), 2; 8.
[20] Annie Sprinkle, "Sex and Breath," accessed 25 April, 2016 http://anniesprinkle.org/sex-and-breath/.

women demonstrate the panting breath characteristic of Annie's goddess demure, which she describes as the "subtle energy and spiritual side of sex. The goddess part is more full-bodied, it's more heart-centered, and the goddess clothes are more sensual and colorful." Sprinkle's workshops use goddess breathing as a group activity. Several women stand in a circle, panting in unison, while Sprinkle passes from one to the next exchanging pulsing rhythmic breathing and complementary physical gesticulations with each. The breathing eventually intensifies to vocalizations as the women begin moving around the room their arms trembling, torsos gyrating. "It's possible," Annie says at one point, "to have an orgasm just from breathing alone."[21] Interspersing front-facing tutorials in which Sprinkle addresses viewers directly with vivid demonstrations and group exercises, edu-porn does not allow the viewer to assume the role of passive spectator, though the videos do likely facilitate the autoerotic engagement Dusman attributes to some forms of electroacoustic music. By not merely identifying with the actors/participants, but partaking in the educational benefits of the workshops, rather than augment by some distant virtual realm, members of Annie Sprinkle's audience engage in a technology whose use brings new knowledge to their *own* sexuality. To return to Don Ihde's observations on the "cyborg emeritus," once embodied, technologies "become taken for granted and lose their fantasy mystique." Perhaps it's fair then to say that, with the educating and embodying benefits of Sprinkle's videos in congruence with porn's current pervasiveness, pornography has practically lost its hype.[22] But has the technological invasion uncompromisingly altered the human countenance? To ask along with Don Ihde, "Are We *Post*human?"[23]

With the twenty-first century proliferation of audio-editing software, recorded music has become increasingly subject to digital enhancements, some of which were afforded already by tape, such that the impasse between electroacoustic and recorded musics has waned.[24] Rampant in critical theory at the cusp of the millennium, a posthuman outlook meant that literature, the arts, medicine, masturbation, and, indeed, a host of our daily

[21] Sprinkle, *How to Be a Sex Goddess in 101 Easy Steps*.
[22] Ihde, *Acoustic Technics*, 112.
[23] Emphasis added.
[24] As an example, we might point the Oistrakh/Yampolsky recording of Prokofiev's Second Violin Sonata from 1955, in which the repeat of the first movement's exposition is audibly spliced in, made obvious by the momentary silence at 1:49. David Oistrakh, "Prokofiev Violin Sonata No. 2," CD 8 of *The Complete EMI Recordings*, EMI Classics / Warner Classics - #5099921471, 2008, compact disc. The recording is available on YouTube, here https://www.youtube.com/watch?v=PZCis9f4who, last accessed 11 January, 2016.

human activities could no longer be undertaken without the aid of digital tools to enhance human abilities. Recorded sound and music nowadays is generally very heavily processed, whether or not this processing is accentuated as something departing from some original source. However, as I will argue, the types of sounds one encounters in digitally manipulated music are no longer suspect and foreign—they've lost their hype. What's more, the sounds themselves no longer serve to distinguish the electroacoustic tradition from popular music or even other traditions of art music.

The posthuman turn can be described as a move toward new definitions of how human nature is construed within contemporary thought bringing also a desire to study and understand how this nature has changed with the advancement of various technologies. According to Katherine Hayles, "in the posthuman, there are no essential differences or absolute demarcations between bodily existence and computer simulation, cybernetic mechanism and biological organism, robot teleology and human goals."[25] Such a sentiment grew from statements like Donna Haraway's now famous "Cyborg Manifesto," in which the author describes the compounded cyborg as a manifestation of the confusing relationship humans and machines developed at the end of the twentieth century.[26]
In joining the human subject with computers, artists construct avenues for new forms of expression, yielding to what musicologist Joseph Auner calls "posthuman ventriloquism."[27]

Auner characterizes the posthuman paradigm in music as the uncompromising convergence of the technological and the human. Drawing on postmodern theorist Fredric Jameson, Auner posits that the mutual convergence of human and technology is represented by a "cyborg persona…[which] becomes a way of reconstructing expression and moving beyond the 'flattening of affect' characteristic of postmodern art."[28] He even goes so far as to declare that "the penetration of the human by machines" has been "more complete" in music than in any other aspect of our lives.[29] What the posthuman attitude has taught us is

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[25] Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago: University of Chicago Press, 1999), 3.
[26] Donna J. Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), 149-181.
[27] Joseph Auner, "'Sing It for Me': Posthuman Ventriloquism in Recent Popular Music," *Journal of the Royal Musical Association* 28/1 (2003): 110.
[28] Fredric Jameson, *Postmodernism, or, the Cultural Logic of Late Capitalism* (Durham, NC: Duke University Press, 1991), 15, quoted in Auner, "Sing It For Me," 110-111.
[29] Auner, "Sing It for Me," 99.

that, in today's cultural climate, there can be no separation of human and machine, of digital and analogue, despite observable distinctions therein. To conclude, the original performer of a composition with concrete elements is perceived today as the performer of an acousmatic work. Indeed, we can recall Steven Connor's retort that the blurring effect between the actual performer and the virtually perceived performer—the Janus-faced character encompassed by his term the "voice-body"—is inevitable.[30] But does Connor's assessment stand true for "concrete" samples of musical instruments or electronically synthesized sounds? What erotic allusions are possible in musical works that do not feature the voice at all?

We can trace the trend of sexual provocations in sound art in the twenty-first century to a collaboratively written work *Fish & Fowl* by Juliana Hodkinson and Niels Rønsholdt, released on CD in 2011 and performed live throughout 2012. Coupled with clicking heels and a cracking whip, the CD version of *Fish & Fowl* is an electroacoustic work rife for suggestive inferences.[31] The sexualized breathing of what Rønsholdt terms the female "protagonist"—the work's perceived performer—is an allusion to a territory typically, if tacitly, forbidden as an expression of sonic "art," but it is precisely in this transgression to normative hearing that *Fish & Fowl* is potentially interesting for analysis. Unfolding with temporal and spatial changes in the music are variable structures of listening that mediate our perceptions of, for example, the instrumentation, performance space, and semantic meaning of what we hear.

Ultimately, works like *Fish & Fowl* show that musical recordings and acousmatic works are not mutually exclusive performative traditions. Compactly packaged for easy distribution, the recording whatever its origins, like a popular music album, masks the effort put into creating it. *Fish & Fowl*'s complex recording and performing history is an example of music's slipperiness. For this reason, this work is exemplary of the enormous difficulties facing musicologists, and its various avenues of reception exemplify a shifting attitude toward experiencing acousmatic music in the twenty-first century.

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[30] Steven Connor, "Panophonia," lecture delivered at the Pompidou Centre, 22 February 2012, http://www.stevenconnor.com/panophonia/panophonia.pdf (accessed 24 November, 2014), 1. See also, Steven Connor, *Dumbstruck: A Cultural History of Ventriloquism* (Oxford: Oxford University Press, 2000), 353 and Chapter 1, p. 90, in this volume.

[31] Juliana Hodkinson and Niels Rønsholdt, *Fish & Fowl*, Dacapo 8.226550, 2011, compact disc.

1. The Making of *Fish & Fowl* (2011)

Juliana Hodkinson (b. 1971) is an English born composer who first gained prominence in the early-2000s, while she was pursuing a PhD in musicology at the University of Copenhagen in Denmark. As artistic director of the Copenhagen-based contemporary music collective Ensemble2000, Hodkinson formed ties with musicians all over Europe. In its later inception, Ensemble2000 became Scenatet Ensemble for Art & Music under the guidance of Danish composer Niels Rønsholdt (b. 1978) and art curator Anna Berit Asp Christensen (b. 1971). Throughout this time, Hodkinson had several works performed and recorded by the ensemble, and in 2010, Scenatet had the idea of releasing an album of the composer's back-catalogue works.

As I have learned from five years of studying Hodkinson's music, rather than pride herself in a complete record of finished works, she seems constantly compelled to improve and build upon previous materials. It is therefore not surprising that she did not wholly comply with Scenatet's desires. Instead of simply releasing completed works on an album, Hodkinson invited Niels Rønsholdt to contribute works of his own to the project, and together they came up with the idea to create an entirely new composition from the eight works drawn from each composer's respective catalogue. Their studio collaboration over three days in Berlin resulted in *Fish & Fowl*, an acousmatic work consisting of samples from existing recordings of Hodkinson and Rønsholdt's compositions.

Although originally these eight works, three from Rønsholdt ("Torso" from *Triumph; HammerFall; Die Wanderin*) and five works from Hodkinson (*Harriet's Song; sagte er, dachte ich; In Slow Movement; what happens when; Why Linger You Trembling In Your Shell?*), were performed mostly on acoustic instruments without amplification, the digital mixing of these recordings in ProTools (a popular Digital Audio Workstation) resulted in a new, wholly electronic musical work. The listed instrumentation, which can be found in Tables 4.1 and 4.2, defines the pitch and timbral space that each work occupies, but when combined electronically, the original instrumentation of each piece becomes less informative. Having been electronically modified, these instruments no longer conform to their anticipated real-world behaviors, and, without a corresponding visual image, listeners are free to interpret the music within a reality of their choosing.

Table 4.1a. Works by Niels Rønsholdt.[32]

Composition	Instrumentation
"Torso," scene from *Triumph*, a micro opera (2006)	female voice, clarinet, double bass, percussion, electronics, in collaboration with Signe Klejs [9 minutes]
HammerFall (2006)	piano, saxophone, percussion (including horse whip, hand thrown fire crackers, wine glasses for breaking, small balls made of paper, small stones/pebbles), w. optional lighting [8'30 minutes]
Die Wanderin (2007)	violin, piano, percussion, audio playback (footsteps and ambient chords), w. optional video [10 minutes]

Table 4.1b. Works by Juliana Hodkinson.[33]

Composition	Instrumentation
In Slow Movement (1994)	flute, clarinet, violin, cello, piano, guitar, percussion [14 minutes]
sagte er, dachte ich (1999)	flute, clarinet, viola, cello, piano, guitar, percussion [10 minutes]
what happens when (1999)	soprano, bass recorder, guitar [6 minutes]
Why Linger You Trembling In Your Shell? (1999)	violin and percussion with egg-shells, down feathers, and table-tennis balls [10 minutes]

[32] Scores and sound files available at www.nielsroensholdt.dk/ and through publisher Edition•S.

[33] Scores available through publisher, Edition Wilhelm Hansen. Juliana Hodkinson's originals scores, sketches, project folders, and digital documentation of all the works are scheduled to be archived at the Royal Library in Copenhagen beginning in 2016.

Harriet's Song (2001)	(singing female) viola and percussion (hanging objects such as chimes, keys, a transparent freezer-bag filled with milk, a small music box, metal chains) [10 minute]

Tables 4.1a and **4.1b** The works incorporated in *Fish & Fowl* listed with instrumentation and approximate duration, and organized chronologically.

2. Perceptual Multitudes

Listeners may attempt already from the opening of *Fish & Fowl* to trace the music to sound sources with actual "real-world" identities. Yet, when attempting to assign an extrinsic representation to specific sounds we find that, though these sounds are "real," in the sense that listeners hear their agglomeration as music (and quite pleasing music at that), outside of the work, these electronic sounds have no "actual" equivalent. Well, this is not entirely true. To echo Steven Connor, the sounds of *Fish & Fowl*, entirely electronic whether synthesized or not, need neither be assigned to a totally encompassing persona nor should or could the sounds be heard as entirely absolute or abstract; that is, these sounds are not simply sonic but, just as any music, they are heard contextually.[34] Hearing music somewhere in the balance between these two extremes allows listeners to intuit new meaning from what they hear each time they hear it. The music might stimulate sensations of intimacy, desire, or fear, or it might pique interest or curiosity, all while remaining always in contact with the work. Indeed, the sounds that are most stimulating in this work, by which I mean most striking and memorable, serve also as formal designators. In the following analysis, I begin by presenting the work's formal organization, to demonstrate how digital processing facilitates but also compromises the work's structural unity through the repetition and slight variance of sound samples. The analysis shows how the source recognition of sounds is repeatedly affirmed and denied, inviting listeners to identify and identify *with* the sounds of the instruments and the human body, to encourage embodied engagement with this music.

[34] See my Chapter 1, and Chapter 3, p. 127ff.

2.1 Analysis

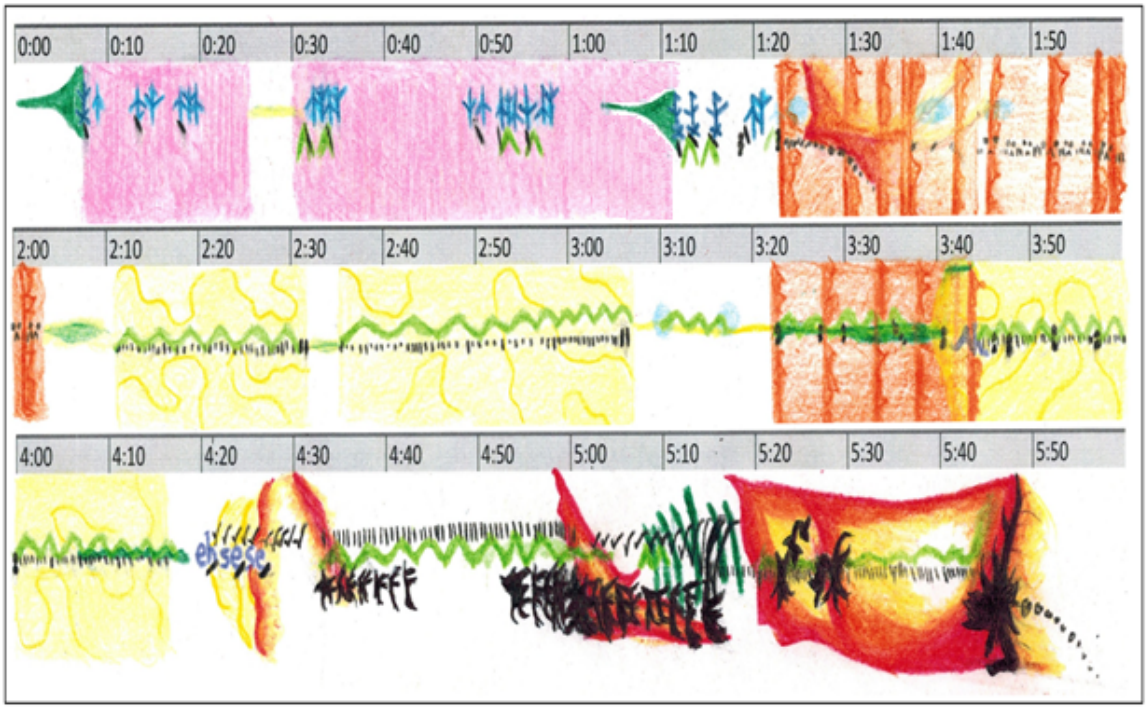


Figure 4.1 Graphic map and key detailing formal structure of *Fish & Fowl* (0:00-6:00).

Fish & Fowl opens with a clarinet playing a long sustained tone (0:00-0:08). This opening utterance is almost immediately thematized when a distant electronic sound enters with a similarly sustained tone, absent the dynamic build up of the clarinet (0:25-0:32). The

clarinet then reiterates the "sustained motive" again (1:05-1:11), joined this time by the viola, to complete the first phrase. I identify the end of the phrase here as I would in a traditional tonal context, by a change in character. By this distinction, there are three phrases in the first section of the piece, each with its own character.

As shown in Figure 4.1, the first phrase is characterized by an atmospheric texture shown in pink (see Key), a "subdued" rhythmic propulsion given by bowed strings and blown winds, the second phrase (1:24-2:04), in red, is characterized by more percussive, plucked or hammered, rather than bowed or "breathed," instruments. A short transition then brings a third phrase (2:11-3:07). The atmospheric texture of this phrase (in yellow) develops from the sustained ambiance of the electronic sound from the first phrase, this time in a more encompassing background role to parallel that of traditional harmony. In this yellow atmosphere, what was a single melodically present tone in the first phrase is now split into the simultaneity of several sustained supportive tones. Atop this sustained background, the third phrase is characterized by clicking heals and a "breathing" instrumental sound (green zigzag) to recall the breathing soprano of the first phrase (blue).

With this analysis of the first three phrases, we already identify some salient features of the piece. First, melodic motives often shift roles to serve as harmony or support for later music, such as when the electronic tone in Phrase I becomes the background for Phrase III. Second, motives like the clarinet's sustained tone in dark green recur throughout the work to signify important formal events, such as the beginning and end of the first phrase. Third, two iterations of the same motive may share their duration, timbre, rhythm, or pitch, but need not present all of the same features to be identified as similar. For example, the color black is used to depict both the percussive Ping-Pong balls of the second phrase and also the clicking stilettos of the third phrase because both possess a rhythmic regularity and cracking timbre; also the clarinet's sustained motive in dark green is related to that instrument's "breathing" figure represented by light green. My choice to shape the instrumental breathing as a forward  and backward  facing slash for inhale and exhale takes inspiration from the notation of vocal breathing in one of the pieces sampled in *Fish & Fowl,* Rønsholdt's *Triumph*. More on this work later.

Continuing with this first section, we see that, like the exposition of a sonata, after the initial statements of the themes (complete with transition), the themes return again to close

the first section, but this time slightly altered, where Phrase II (3:20~3:40) is truncated and elided with the return of Phrase III (3:40-4:15). Such elisions feature importantly throughout *Fish & Fowl*, since, as mentioned, samples that functioned motivically often come elsewhere to serve as accompaniment to samples that may or may not have sounded before. One such "mishmash" occurs in the conclusion of the first section (4:20-6:00), in which the familiar features of the three previous phrases are joined by a clanging chain, shattering glass, and a bass drum. The conclusion of this section builds to climax with an increased tempo (heard in the quicker pace of the clicking stilettos) and amplified dynamics (the scratching viola) only to rupture into a sudden absence of sound, a sublimation culminating in a stream of decelerating Ping-Pong balls.

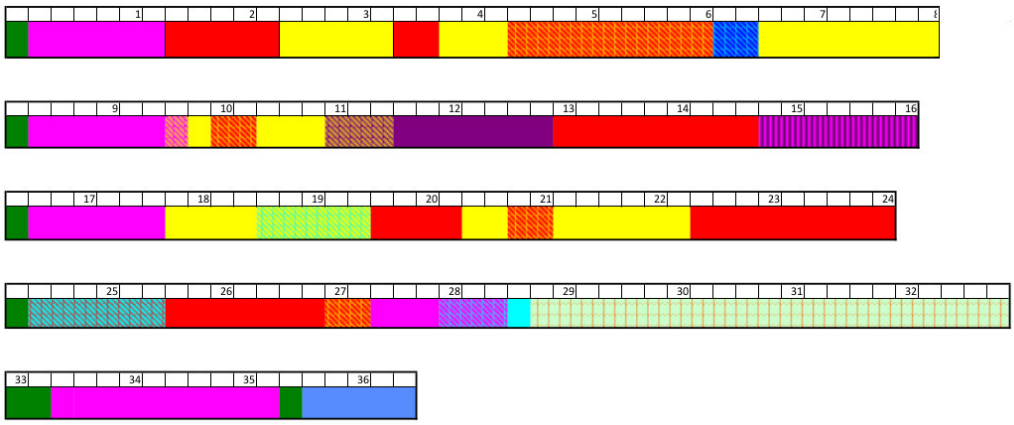


Figure 4.2 Map of *Fish & Fowl*. Numbers indicate Time in minutes. Colors correspond to key in Figure 4.1. Multi-colored regions indicate a mixture between phrase characteristics.

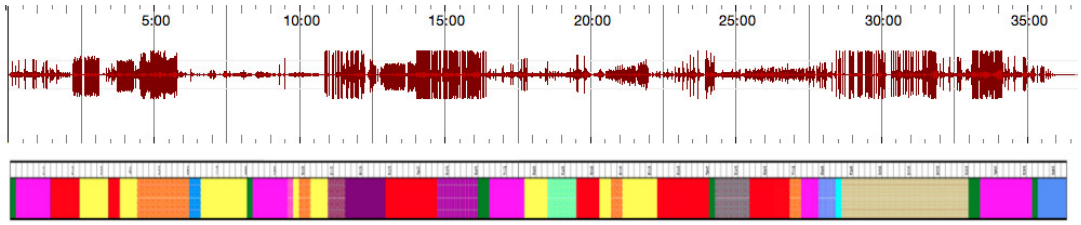
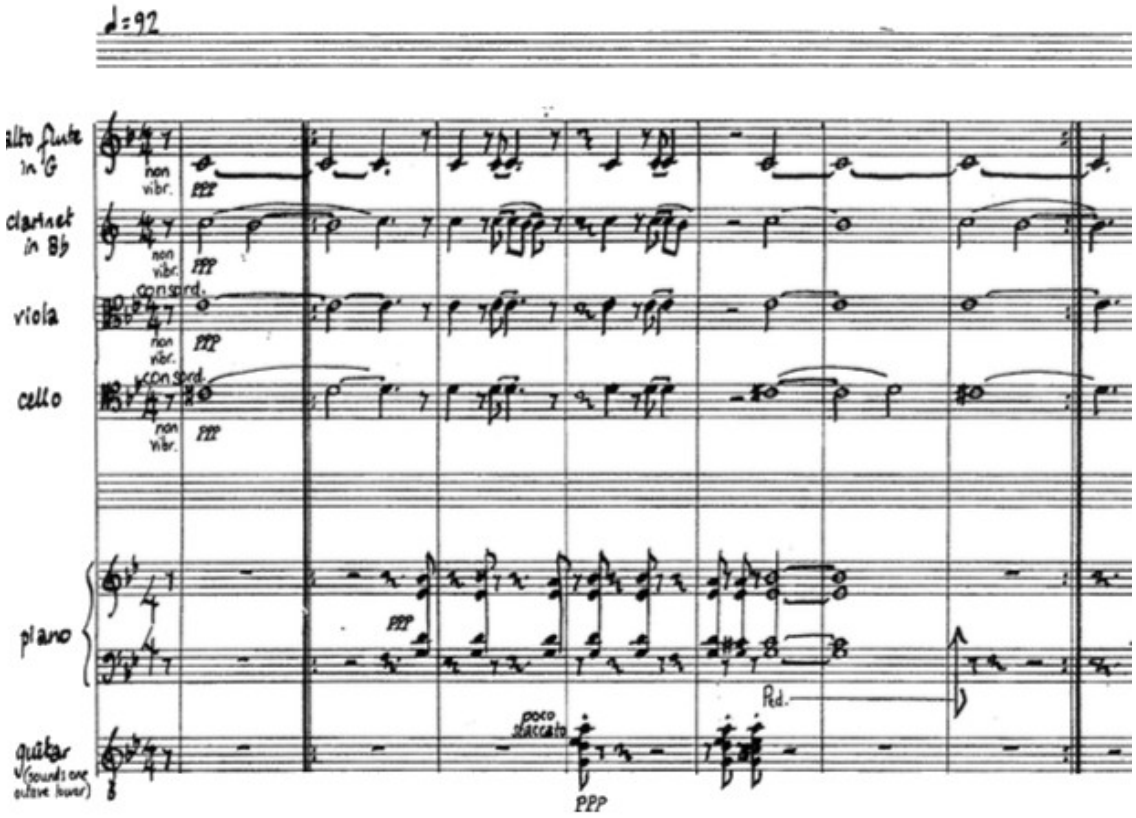


Figure 4.3 Waveform diagram of *Fish & Fowl* depicting activity and dynamics with corresponding map of *Fish & Fowl* (Figure 4.2).

The map in Figure 4.2 shows that the first section of the piece opens with a clear statement of the "sustained motive" marked in green at its first statement by the clarinet. The first pink phrase is characterized by bowed and breathing instruments in a particular rhythm—the rhythm of the opening of Hodkinson's *sagte er, dachte ich* shown in Example 4.1. In fact, almost every time the clarinet's sustained motive sounds it is followed by the pink phrase, which is then succeeded by some combination of either a red or yellow phrase—again, the red phrase recognizable by its percussive sounds, usually a piano or plucked guitar, and the yellow characterized by sustained ambient tone(s). Figure 4.2 shows a color scheme of the piece with each new line beginning from an iteration of the "sustained motive," lending variably to a "mishmash" that may or may not include new material. In total, this formula returns four times in *Fish & Fowl*.



Example 4.1 Excerpt from Hodkinson's *sagte er, dachte ich*, mm. 1-8.

Figure 4.3 shows this color scheme as a continuous string, accompanied by a waveform diagram to show that each of the four sections builds in activity and in dynamics. Solid pink, red, and yellow colors correspond to the atmospheric textures in the key from Figure 4.1, while purple, teal, and blue represent new material. Transitional material and the "mishmash" of previous material appear as patterns with colors corresponding to the agglomerated sections. For example, looking at Figure 4.2, between 4:10-6:00 listeners will hear the ambient backdrop and clicking heals of the yellow section, but also the percussive elements of the red section.

Each return of the opening material is differentiated from our hearing in the beginning of the piece, and this differentiation—our awareness *in the present* that this is an event reminiscent from our past—is further augmented by its obvious dissonance with the interrupted climax that directly precedes the motive's iteration each time. Beginning at 6:43 the clarinet's sustained motive enters together with a wispily bowed viola and development of this motive ensues. Here, the viola sounds increasingly opaque, until its final iteration at 8:11, when the pink atmospheric texture enters. At 15:58, the sustained motive returns again, and after seven repetitions that grow in dynamics and opacity, the pink atmosphere once again greets the figure. At this, the third refrain, the breath does not enter as "early" as it did in the beginning. Delayed by 8 seconds from its proximity to the clarinet in the opening, only at 17:02 are hesitant, amplified breaths gasped, now with the accompaniment of a faint drone (the yellow ambient tone).

2.2 Theories of Repetition

The vulnerability of identity in *Fish & Fowl* is brought to the fore at moments when the sustained motive echoes throughout the imagined ensemble, in ambient electronics (6:25), pulsating from clarinet to viola (6:57), eventually finding itself in the bowed vibraphone (7:22), and returning once more in the viola, this time gliding over several pitches in a flurry of *flageolette* (7:51). Multiple articulations in succession such as occur in this moment, recur throughout the piece in varying opacity (12:50; 19:08; 21:58; 24:08; 32:02; 33:42; 35:16), but none of these restatements is more recognizable than the refrain of the opening material at 15:58. The clarinet's initial cry is heard repeatedly and continuously

throughout *Fish & Fowl*, contributing also to some semblance of form in the work. But, while documenting the iterations of the sustained motive allows a structure for this particular recording to emerge, one should ask to what extent each iteration of this motive is truly repetitive.

Since the sounds of the clarinet and human breath are not so alike that we cannot distinguish between them, we recognize this relation as repetition toward an ideal, as what Gilles Deleuze might call an imminent multiplicity of "intensive differences."[35] Envisioning Bergson's *durée*, or sustained experiential field, "as a type of multiplicity," in Deleuze's later collaboration with Guattari the philosophers describe duration as "in no way indivisible, but [a]s that which cannot be divided without changing in nature at each division."[36] Pitch levels, duration, and timbre are imagined in graduated difference, as referential, relative, co-dependent events unfolding in time. With each supposed repetition, a newly generated difference is created, and together these elements are combined and intuited by the manner in which we as listeners orient ourselves. A single sound may be discussed in terms of pitch, duration, meter, timbre, and intensity, all of which are retained, yet each is articulated anew with each iteration. Thus, the blue breathing voice (Figure 4.1) recalls the green breathing woodwind, which is in turn reminiscent of the bowed vibraphone or the bowed viola that join soon after. When the breath enters alone at 17:42, again the winds, vibraphone, and strings are called to mind. This is the work's "protagonist," but "she" is not human. The body is a becoming never actualized; it is a limit, a becoming-ideality that is never become. *Fish & Fowl*'s erotic *phonopoiesis* is ever-productive, mobilized and resounding, always familiar and at once immanently defamiliarized.

Where Deleuze and Guattari aspire toward becoming-woman, *Fish & Fowl* begins with woman to move beyond such a rigidly abstract body. And while the philosophers echo Darwin's distinction between kin and resemblance, in the digital world such divisions are nearly impossible.[37] Kin means to be of the same DNA—the same creative matter—so what is a sample if not a relation of kinship? Much like two human beings are of the same

[35] Gilles Deleuze, *Difference and Repetition*, trans. Paul Patton (New York: Columbia University Press, 1994), 233.
[36] Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987), 483.
[37] Deleuze and Guattari, *Thousand Plateaus*, 233.

species, the clarinet and the viola are both musical instruments, though neither is from the same family. And yet, their expressions nevertheless resemble one another. Unlike Pierre Schaeffer's "Erotica" movement, which features a cooing woman atop an unrelated musical tapestry, or Normandeau's *Jeu de Langues*, which simply removes any semblance of the instrumental, *Fish & Fowl* insists on a reciprocal relation between sounds of the "natural" human body (breath, heartbeat, footsteps) and the aesthetically shaped sounds of music.

Thus far this analysis has pertained mostly to the music's "absolute value," its sonic markers devoid of any presumed semantics. However, such an analysis, while informative of a structure and contributing to an understanding of how the music unfolds temporally and even of how it may have been constructed, does not really provide very much information about the music as a product of contemporaneously developing social, historical, political, and philosophical trends. If music and meaning are experienced simultaneously by the perceiver, then it stands to reason that time-domain representations or spectrogram visualizations of music are somehow remiss of a large portion of our musical experience. A spectrogram realization of *Fish & Fowl* strips the protagonist of her moaning, whipping, and pleasurable exclamations, leaving behind only a residue of strong and weak impulses. In the visual realm, absent these timbral qualities, the semantic meaning—though conveyed easily through audible utterances—is all but lost. In short, such analyses do not address what is plainly obvious to any listener, this music's apparent sexual allusions.

3. Embodying Sound

Though audible breath may be heard merely as another track or line in the music, it is likely, as I have already remarked in previous chapters, that listeners will attribute additional meaning to sounds of the human body. Music critic Martin Nyström deems the *Fish & Fowl* album as what happens when composers are asked to remix their own music.[38] He describes *Fish & Fowl* as "a fascinating dialogue between two temperaments, between written composition for acoustic instruments and electronic sound art, where the

[38] Martin Nyström, "Dagens Nyheter," 9 February, 2011, last accessed 20 January 2016, http://www.dacapo-records.dk/en/recording-scenatet--fish---fowl.aspx. The review is written in Danish, English translations are the author's.

actual breathing, muffled pulsing, groaning and sometimes excited moaning, is the cohesive link." The only way the acoustic and electronic communicate for this listener is by way of associatively human sounds: breathing, groaning, and moaning. This is not to say that the vocalist is the sole focus of such a hearing, indeed, the instruments all contribute various forms of breathing and moaning. In fact, if we isolate both vocal and instrumental breathing, as I have done in Figure 4.4, audible breath sounds provide a constant thread throughout the work. Despite the relative artificiality of instrumental breathing—the clarinet not requiring respiration to exist, to "live"—the significance imbued in vocal breathing is easily evoked also from the musical instruments if the intonation is perceived with a similar breathing semblance. For example, looking at notated Example 4.1, the clarinet's tottering from C to B and back again to C recalls the ragged exhale/inhale pair, where the relaxation of the exhale causes the pitch to fall, and the tension of inhaling to rise.

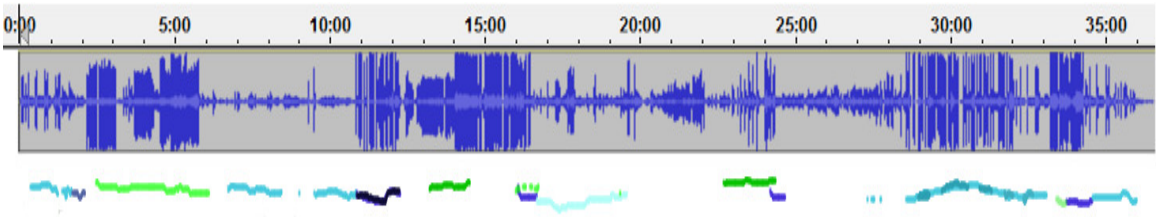


Figure 4.4 Map of audible breath *Fish & Fowl*. Vocal breath is marked in blue and instrumental breath in green. The opacity of the colors indicates intensity, indicated by a change in volume and higher periodicity.

The added significance of breath serves as a guiding compositional principle for *Fish & Fowl* composer Niels Rønsholdt. As he explained in our correspondence: "Musicalized breathing is a basic element of my music. I consider breathing to be a musical ground stone a) because of the elementary musical 'phrasing structure' of breathing and b) because of the emotional and dramatical connotations that are so easily activated when you listen to human breathe."[39] Though musical instruments can also embody this structural breathing in music, as is evinced by Salvatore Sciarrino's various works for flute, Rønsholdt grants more semantic weight to human actions, which serve as the ground stone from which the

[39] Niels Rønsholdt, e-mail to the author, 10 April, 2011.

semantic significance of the instruments is attained.[40] In an interview with Zach Herchen, Rønsholdt describes the "protagonist" he envisions in his works as a "small, nervous girl," but one who lives inside all of his listeners, regardless of gender. His compositions *Die Wanderin* and *Hammerfall* are two works sampled in *Fish & Fowl*:

> I use "protagonist" as a word for the main character in a piece. It's not a character in the sense that they have a name or a specific history. It's not a character to identify with very pragmatically, but in a more general sense. So, the girl walking down the street in *Die Wanderin*, or the blind man by the table in *Gloomy Room*. I see the protagonist in *Hammerfall* as the same one in *Die Wanderin*. It's the same small, nervous girl. And in some way I think that we all have a small, nervous, insecure, teenage girl inside. The protagonist is representative of all of us. It is a character, but it's not a specific character. It's representative of all of us in specific situations.
>
> What I like to do is to take some psychological tendencies or things that are common to us all, at least that I feel are present, and then amplify it so that we can watch it. Like in a microscope. It's not interesting for me to tell everybody how I feel. It has nothing to do with my own story or feelings as such. I detect something in other people, in myself, and then I try to sort of dig it out or amplify it a bit. To brush the dust off. To sort of magnify these tendencies I detect in order for us to look at it. Just to look at it. Like a mirror of some sort. I have no agenda for what to get out of it. I just present it. I find it most interesting to seek out the dark sides because all of the fun stuff is out there already. It's like digging out hidden things that we all know are there, but need to be dug out a bit to be looked at.[41]

Rønsholdt's desire to project an idealized image of woman reflects a long history of such musical portrayals, for example, Pierre Schaeffer's "Erotica" movement in *Symphonie pour un homme seul*. But even before the possibilities of including electronic samples,

[40] In several of Salvatore Sciarrino's works for flute, including *All'aure in una lontananza* (1990) and *L'orizzonte luminoso di Aton* (1990), tempo is dictated by the rate at which the performer breathes.

[41] Zach Herchen, "Interview with Niels Rønsholdt," 21 September, 2010, last accessed 16 February, 2016, http://www.zachherchen.com/tag/niels-ronsholdt/.

composers were long concerned with constructing idealized representations of women's sexuality. One could think for example of Erwin Schulhoff's Dadaist *Sonata Erotica* (1919), "a piece in which a solo female vocalist performs a carefully notated orgasm," or, perhaps less overtly, of Alban Berg's opera *Lulu* (1935).[42]

Let me first recall the plot of Berg's opera briefly before providing my commentary. After murdering her caretaker and eventual husband Dr. Schön, Lulu seduces his son without a second thought in the very spot the father bled out. In the third act, Lulu is brought to prostitution but not without the undying devotion of her lesbian lover Countess Geschwitz—the last of her admirers to remain faithful. In the final scene, Lulu's suitor, London's infamous Jack the Ripper, murders the two women.

It is no coincidence that opera would serve as fodder for sexual allusions in electroacoustic music. After all, the majority of electroacoustic works proclaimed as erotic by their composers feature the voice. Plot and stage directions make explicit that which is implicit in "absolute" music, and lyrics make no small contribution toward semantic meaning. A coincidence of musical intonation and text or action imbues music with added significance, but not without uncertainties. As mentioned in Chapter 2, the composer's choice of language plays greatly into the audience's understanding of the plot. Yet works like Schaeffer's "Erotica" movement or *Fish & Fowl* do not rely on language at all, these works do not even attempt to bloat vocal sounds with onomatopoeic allusions. No, the vocal sounds are universally and directly human. It is perhaps for this reason that music with sampled moaning and groaning has such a base reputation.[43] But without words, one cannot be entirely sure what the scene betrays. After all, exclamations of pleasure and pain are not so distant; this much is evident in the horror film genre's frequent and parallel appeal to sex.

Opera, even when complete with lyrics, also has moments in which meaning is conveyed beyond the limitations of text. Leon Botstein argues that, were it not for the music, Berg's *Lulu* would not have enjoyed the success it did later on in the twentieth century, after sexual liberation. He claims that it was through Berg's enthralling music that

[42] Danielle Sofer, Preface to Study Score "Erwin Schulhoff, Symphony No. 5" (Munich: Musikproduction Jürgen Höflich, 2014).

[43] Corbett, John and Terri Kapsalis. "Aural Sex: The Female Orgasm in Popular Sound." In "Experimental Sound & Radio," special issue, *TDR (1988-)* 40/3 (1996): 102-111.

the opera maintained its popularity after attitudes toward sexual fidelity and even prostitution tempered in the middle of the twentieth century, so much so that "nonconventional sexual behavior," though still "an object of recurring fascination," became little more than "banal" in the late twentieth century.[44] Given the history detailed in Chapter 2, however, I am not convinced that this normalization persisted through the latter part of the century, but am willing to entertain Botstein's assessment.

Judy Lochhead's analysis of *Lulu*'s closing scene—the murder of the two women—concurs with Botstein that music is not extraneous, that it does not serve merely as enhancement or augmentation of the existing text and stage directions, but rather that music functions within a trifecta of signification, on equal footing with text and directions. In this constellation, multiple recurrences of the same music will acquire and transform meaning according to contextual circumstances, but variations on music (music perceived as similar) will retain and gain additional meaning in its altered occurrences. More than intrinsic signification, Lochhead argues that "the sound of the music plays a crucial role in critical assessment, and the critic's historical and intellectual perspective plays an equally crucial role in how the music *sounds*."[45] If the critic should be in search of the "right" hearing of a work, this hearing should not yield original insight but only "reveal" something bestowed by the music and its creator. But if instead a critic should choose to make *Lulu* relevant for listeners not contemporary with the work's creation, then "*What* the music 'means' must be qualified by *for whom* and *when*."[46] From this line of thinking Lochhead contends that, despite changing social mores, when music is one's object of study, criticism remains in part bound to the work.

Lochhead compares the music of the opera's two death scenes—1) the murders of Lulu and Countess Geschwitz at the hands of Jack the Ripper, and 2) the death of Schön—to argue against critics who have frequently dismissed Lulu's character as the music-dramatico pitfall of the opera. Such criticisms argue that Lulu causes the opera to fail on two accounts, owing jointly to her overly emotional music (in Donald Mitchell's 1954 assessment) and to her function as "the 'natural, and therefore, innocent, woman who

[44] Leon Botstein, "Alban Berg and the Memory of Modernism," in *Alban Berg and His World*, ed. Christopher Hailey (Princeton: Princeton University Press, 2010), 342n103.
[45] Judy Lochhead, "Hearing 'Lulu'," in *Audible Traces: Gender, Identity, and Music*, eds. Elaine Barkin and Lydia Hamessley (Zürich: Carciofoli Verlagshaus, 1999), 251.
[46] Ibid, 252.

represents for all men the ideal fulfillment of sexual desire' (in George Perle's mid-1960s characterization)."[47] Whereas such portrayals dismiss Lulu's agency in favor of a masculine purview (perhaps even espoused by Berg), the music recurring at these moments, what Lochhead terms the "Coda Music," does not retain constant meaning. Rather, this music's multiple occurrences gain nuance throughout the opera up and until the very final scene, what she identifies as "*the* tragic event of the opera."[48] The music's changing meaning serves also as evidence against arguments that prop the opera's women up as mere representations of socially devious character traits (and not multidimensional characters), e.g. Lulu as either wife or whore ever a slave to the men around her, or Geschwitz as token lesbian. For Lochhead, like the changing nuance of the music, *Lulu*'s women are multifaceted individuals entrenched in the variable circumstances within the opera.

The "Coda Music" first appears at the end of the Sonata Exposition in Act 1, sc. 2 (mm. 615-24) when Lulu professes her love to Schön. Lulu's, Schön's, and Schön's son Alwa's singing, according to Lochhead, are personified through the occurrence of a representative pitch-class respective to each character, accompanied each time by a progression of two triads a tritone apart.[49] Given that the music is intervallically the same, and only transposed, each character retains their representative pitch-class while also maintaining a connection to subsequent iterations of the music. For Lochhead, with each occurrence, this music gains nuance such that it "absorbs and transforms the meaning of the first."[50] For instance, Lochhead hears the music as a symbol for the sense of security and control exchanged among the characters.

The music is first heard in Act I, when Lulu first professes her love and debt to Dr. Schön for taking her off the streets; she now belongs to him. In Act II, sc. 2, the two have a falling out, and Dr. Schön tries to convince Lulu to commit suicide, placing the gun in her hand. A struggle ensues, and eventually it is the Doctor who is shot. Just after Schön's death Lulu sings the Coda Music, in this instance alluding once more to her love but also to her triumph and her gained control over *him*. When the music returns in Lulu's final exchange with Jack the Ripper, Lochhead proposes that her control over Schön is now

[47] Ibid, 235.
[48] Ibid, 252.
[49] Ibid, 243.
[50] Ibid, 248.

transferred to her murderer. If the tension of musical dissonance is interpreted as a means of wielding control or abandonment of that control, the music remains an inseparable part of the interpretation, but absent the tragic consequences of character/istic representation.[51]

At times when Lulu's music is characterized as overtly emotional, it is often described in tonal language. But Lochhead is not content with the implication that, as a female character, Lulu's music is tonal and hence emotional, while the otherwise typically Bergian nontonal music is not. She asks rhetorically. "Given Berg's history, why isn't the nontonal music heard as emotionally charged since it could be construed as his legitimate (and hence authentic?) mode of musical expressivity?" The unfounded dismissal of Berg's opera on the basis of Lulu's emotional tonality exemplifies a greater cultural phenomenon beyond this work, that "Critics of the opera implicitly and partially take over strategies used to denounce the 'new music' of the early twentieth century: it has none of the emotional force of the prior, Romantic tradition."[52] In essence, Lochhead is saying that what masquerades in music criticism as a misogynistic denunciation—the dismissal of Lulu's emotion—in fact reveals a more complicated musical ideology of the time: the early seeds of a movement against "new music" that would plague the remainder of that century and beyond.[53]

Were we to define desire within a Lacanian framework, as longing for an unattainable object, then Lulu epitomizes the antithesis to desire. Interpretations that present Lulu as an embodiment of the idealized *femme fatale*, both seductive and destructive, paint the title character as easily attainable, she is possessed in every manner possible, by wedlock, sexual slavery, and lesbian obsession. As an ideal representation, it is easy to envision Lulu as an object rife for the taking, and the same goes for the protagonist in *Fish & Fowl*. The protagonist is not real but only an illusion, a fantasy if we call again on Lacan, and as an *allusion* to woman—after all no semblance of this woman exists anywhere in reality—she is never actually attainable. *Fish & Fowl* could in this way serve as the quintessential example of the Lacanian *objet petit a*. This conclusion is Brian Kane's verdict of the acousmatic, that, no matter the musical content, acousmatic sound is doomed to

[51] For the gendered implications of "representation," see my Introduction, and for its racial implications see Chapter 2.
[52] Lochhead, "Hearing 'Lulu'," 236.
[53] Douglas Jarman, *Alban Berg: Wozzeck*, (Cambridge, UK: Cambridge University Press, 1989), 79.

sublimation.[54] But this brings me to two questions. First, although music has the capacity to stir the imaginations of its listeners, must it raise impressions beyond, i.e. outside the music at hand? And, while music may also arouse our desires, could it also not fulfill them?

4. On Banality

Implicit within Leon Botstein's assessment of *Lulu* is a belief that banality doesn't sell, that music must sustain the interest of its listeners, and even the implication that, in order to succeed, music must be continually stimulating. But there is also something to be said about banality in music, about what is enticing in the commonplace.

As we have seen, sex-scenes are common enough in music, the common or obvious characteristics of this music, so much so that a moaning woman and the drive to climax are generally dismissed as cliché, or worse, simply redundant of the "real" sexual act. In his rubric for the art of rhetoric, Aristotle describes banality (*ταπεινεν*) as one drawback of clarity; banality is merely a normative and familiar form of speech (or writing) that does little to interest the listener (or reader). Against banality, Aristotle argues for interspersing familiarity with (limited) ornamentation.[55] Aristotle's praise of the balance between the florid and the familiar carries well to the discussion of eroticism in music—too literal and the recorded sexual encounter becomes boring, too many theatrics and the work moves to the realm of farce. If we take Aristotle's rhetorical definition of "banal" in the sense of merely "the mean," as flat (the word here is the same Aristotle uses for banal), sex scenes exemplify banality precisely *because* they seem inevitable, because this music's message is immediately apparent to practically *anyone*.[56] But, arguably, sex scenes in electronic music only *seem* inevitable because the constructed scenarios of this music are so underwritten in the human encounter with technology in the twentieth century. For the banal to appear as such requires the semblance of history or tradition.

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[54] See Chapter 1, 60.

[55] Aristotle, *On Rhetoric: A Theory of Civic Discourse*, trans. George A. Kennedy (New York: Oxford University Press, 1991), 197.

[56] Aristotle, *On Rhetoric* III.2, 1404b1. Translation of ταπεινεν according to Christof Rapp, *The Stanford Encyclopedia of Philosophy* (Spring 2010 Edition), Edward N. Zalta (ed.), s.v. "Aristotle's Rhetoric," accessed 16 February, 2016, http://plato.stanford.edu/archives/spr2010/entries/aristotle-rhetoric/.

In the musical context, composer Francis Poulenc famously wrote "In Praise of Banality."[57] He explains that, while some composers feel the constant need to innovate—implicitly pointing the finger at Schoenberg and his followers (among them Milton Babbitt)—there is something to be praised in the banal: "Being afraid of what's been heard already," writes Poulenc, "is quite often proof of impotence."[58] To explain this sentiment, Poulenc invokes the example of Schubert, whose "simple inflection of the melodic line personalize an anonymous landler at a stroke."[59] In this remark, Poulenc positions himself within a resilient twentieth-century dichotomy between the manifestos of the modernist avant-garde and the historicist's clutch on tradition. But also implicit in his assessment is an analytical question. Indeed, Schubert's landler is not praised for its replication of tradition, as an exercise in redundancy, rather it is the composer's personal touch upon which Poulenc remarks. The traditional song is of course included as a necessary part of stylistic nuance as a form of innovation.

Fish & Fowl draws similarly on the banality of erotica, on the clichés of the climax mechanism, but the woman's moaning and heavy breathing are only the beginning of the analysis. Instead of divorcing the banal from the innovative, *Fish & Fowl* confronts our ears with a highly complex interweaving of instrumental music and sounds of the human body, such that the piece is a novel expression within a tradition with a long history. *Fish & Fowl*'s structure is somewhat formulaic—though what is musically formulaic is not necessarily heard as recurring semantically. Whereas Walter Benjamin described cliché in opposition to both the "serious" and the "innovative," there is something novel about repetition; such is the process of citation.

Complementing Poulenc's mid-century appeal with a postmodern twist, philosopher Giorgio Agamben writes that "To repeat something is to make it possible anew." Like memory, repetition does not restore what was, but restores only its possibility. "Memory is, so to speak, the organ of reality's modalization; it is that which can transform the real into the possible and the possible into the real."[60] Though Agamben explores repetition within

[57] Francis Poulenc, "In Praise of Banality," in *Francis Poulenc: Articles and Interviews: Notes from the Heart*, ed. Nicolas Southon, 27-30 (Surrey, UK: Ashgate, 2014).
[58] Poulenc, "In Praise of Banality," 28.
[59] Ibid.
[60] Giorgio Agamben, "Difference and Repetition: On Guy Debord's Films," trans. Brian Homes, in *Guy Debord and the Situationist International: Texts and Documents*, ed. Tom McDonough, 313-319

the realm of cinema, his observations carry over easily to music. He lauds creations that are "worked by repetition and stoppage," works that do not mask their medium in service of their ultimate expressivity.[61] Repetition is a "pure means," it is not visible in the work, but only in the concepts that bind the work as such. Explored within the current context, Agamben's concept of "pure means" says that the perceived "image" of the protagonist in *Fish & Fowl*—the body responsible for producing the sounds we hear—is not a distinctive being performing as *part* of the work, but that the protagonist is in fact indistinct from the medium, from the sounds themselves. There is not first a performer and then the sounds s/he produces, there is both and neither, always. Agamben notes that pornography and advertising "act as though there were always something more to be seen, always more images behind the images…" whether or not there truly is.[62] This would be the effect of cinematic "framing," of presenting an image as if it were part of a vaster landscape. Were *Fish & Fowl*'s moaning protagonist received as pornographic, listeners may be provoked to imagine a scene unfolding within an intrinsic netherworld to what they hear. The woman's cries, and the accompanying whipping and lashing percussion, and the clicking heels, are only part of a story. In conjunction with the instrumental samples, the clarinet's motive and that performer's subsequent breathing into the instrument would serve merely as fodder for some titillating scene limited only by our imagination. But what if there is nothing more?

Turning to Rønsholdt's mini-opera *Triumph* (2006), in Example 4.2 we see that the scene opens diegetically, with the woman moaning, much like the soundtrack to a pornographic film. Rønsholdt introduces a scene rich with sonic inference: a whip spurring a vocal reaction from a woman, inhale/exhale. And though diligently notated, nothing of this opening suggests that what we are about to hear is music. The staged theatricality of this opening becomes apparent only after several repetitions, as if to stabilize and hence normalize what we hear. As the instruments join the woman, the piece gradually succumbs to more atmospheric sounds of music. That is, the nondiegetic sounds set the stage, so to speak, for the concert hall. *Fish & Fowl*'s diegetic boundary then lies at the crossover between the so-called natural sounds of the body and the sounds made by musical instruments. When the woman is audibly in the forefront, she is the complete soloist—a

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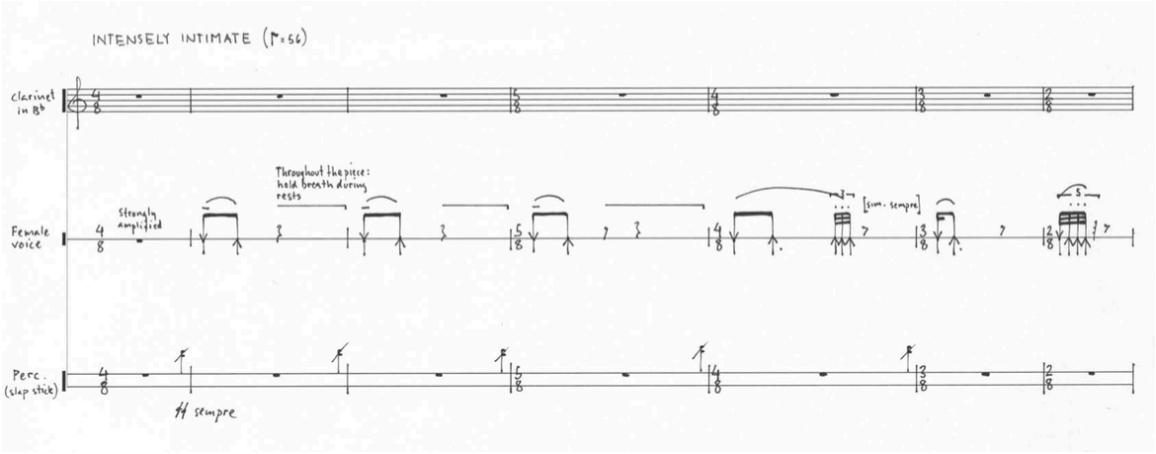
([1995] Cambridge, Mass.: MIT Press, 2004), 315-6.

[61] Agamben, 318.

[62] Agamben, 319.

character, but when her utterances recede to and interact with the atmospheric background, becoming essentially indistinguishable for the ensemble, we experience a blurring of the woman's surroundings and the musical canvas (mute to the woman).



Example 4.2 Excerpt of "Torso" from *Triumph* by Niels Rønsholdt, female voice inhale/exhale with whip (slap stick), mm. 1-7.

Sound artist Richard Maxfield recognized the terminality of the sound recording and used performance as one manner of instilling liminality in his compositions. As Michael Nyman recalls, "for each of his pieces he [Maxfield] composed a vast 'library' of materials out of which he could make a new realization for each performance, or each time he distributed a copy."[63] Juliana Hodkinson and Niels Rønsholdt's *Fish & Fowl* exemplifies precisely this kind of library. The work indexes a host of compositions from its creators' back catalogue, encompassing nearly twenty years of productivity. The *Fish & Fowl* project, while related to the previously recorded compositions of its respective composers, is something entirely new, existing in the past as in the present of both human and technology, and this much is clear from the work's triumph as an independent composition, a success boosted by the CD's various accompanying materials.

The 2011 CD includes an intriguing booklet, complete with photographs and textual material in excess to what we hear on the recording (that is, these are not translations or transcriptions, but original texts). The photographs, by Anka Bardeleben, depict the two composers in their assumed roles specific to the work (Figure 4.5). And the texts that accompany the photographs were commissioned of Ursula Andkjær Olsen, who conducted

[63] Michael Nyman, *Experimental Music: Cage and Beyond* ([1974], Cambridge, UK: Cambridge University Press, 1999), 89.

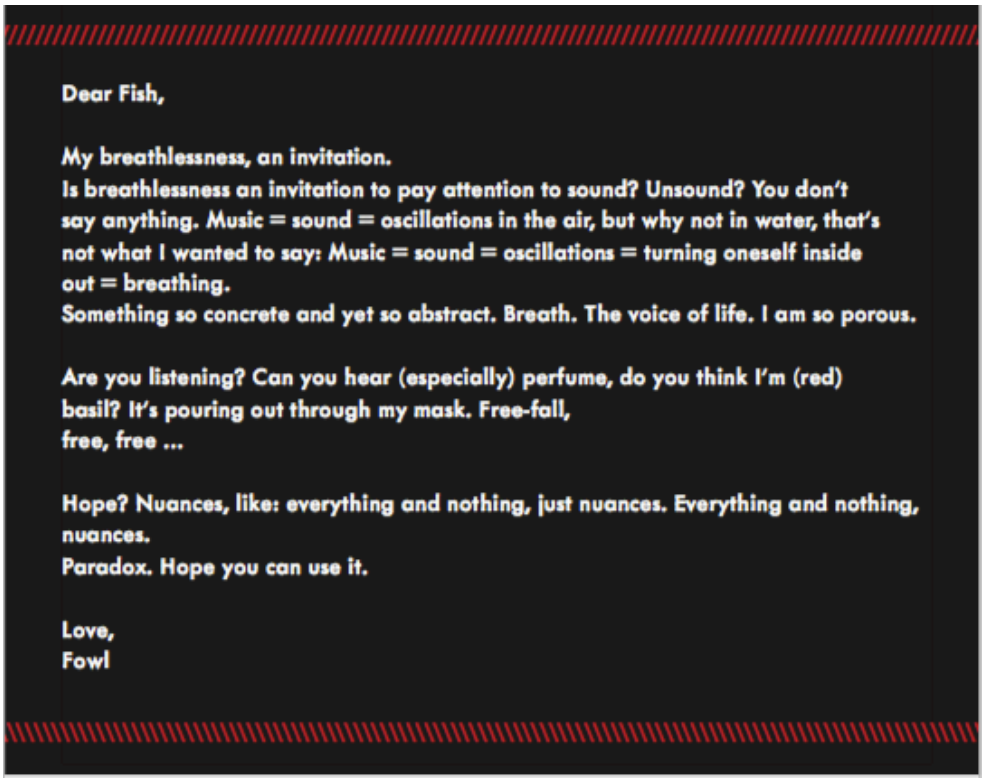
interviews with the composers and the performers of the eight previously recorded works to compile several free-form fictitious communications from fish to fowl in both Danish and English (Figure 4.6). Presenting the metaphorical fish and fowl characters as literal subjects leaves room for interpretation of an object that is, as the saying goes, "neither fish nor fowl," neither here nor there. The animals' written exchange sets them apart from one another, while their communication remains an intimate linkage to bridge this distance.

Figure 4.5 Hodkinson and Rønsholdt in assumed roles for *Fish & Fowl*.[64]

The idea for the booklet letters likely takes inspiration from Rønsholdt's opera, "Inside Your Mouth, Sucking the Sun," which envisions an affair through correspondence between Napoleon and Josephine either through written word or portrayed through instruments—the clarinet and the trombone—to represent the two figures.[65] Unlike a conventional opera, which features the voice always in the forefront atop the orchestra, Rønsholdt's "Inside Your Mouth" often interchanges the role of the voice between forefront, "as extreme anima," as supportive atmosphere to recall Jens Voigt-Lund's review.[66] Such exchanges are common in Rønsholdt's music, and are particularly palpable

[64] Juliana Hodkinson and Niels Rønsholdt, liner notes to *Fish & Fowl*, 2-3.
[65] A video of excerpts from the opera is available on YouTube, Niels Rønsholdt, "Triumph" [filmed Copenhagen 2007], YouTube video, 5:43, posted 3 November, 2008, https://www.youtube.com/watch?v=M8LPYimkoho. The second scene in the video is from "Triumph."
[66] Jens Voigt-Lund, "The Demon of Intimacy: About the Music," trans. Barnabas Wetton, *Parergon* (2005), last accessed 15 December, 2015, www.nielsroensholdt.dk/uploads/2/3/2/1/23214662/demonofintimacy.rtf.

in the "Torso" movement from *Triumph* sampled in *Fish & Fowl*. Example 4.3 from "Torso" features the entire ensemble, where the breathing figure of the clarinet, notated in open note heads, feeds into the voice's hesitant inhale- and exhalations. Growing increasingly active as it does, the voice begs to be heard in a narrative role, where its stuttering breath in measure 32 evokes a troubled frantic gasp that spills into a reflexive pant in thirst for air. The figure is repeated (in inversion) this time at an accelerated pace, contributing to a building suspense at the *Poco meno mosso*.


Dear Fish,

My breathlessness, an invitation.
Is breathlessness an invitation to pay attention to sound? Unsound? You don't say anything. Music = sound = oscillations in the air, but why not in water, that's not what I wanted to say: Music = sound = oscillations = turning oneself inside out = breathing.
Something so concrete and yet so abstract. Breath. The voice of life. I am so porous.

Are you listening? Can you hear (especially) perfume, do you think I'm (red) basil? It's pouring out through my mask. Free-fall,
free, free ...

Hope? Nuances, like: everything and nothing, just nuances. Everything and nothing, nuances.
Paradox. Hope you can use it.

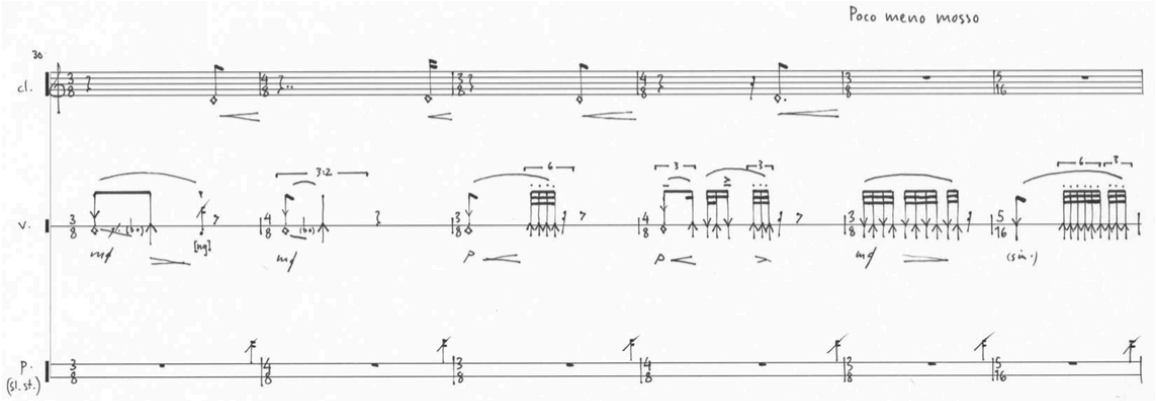
Love,
Fowl

Figure 4.6 Letter from *Fish & Fowl* CD booklet.[67]

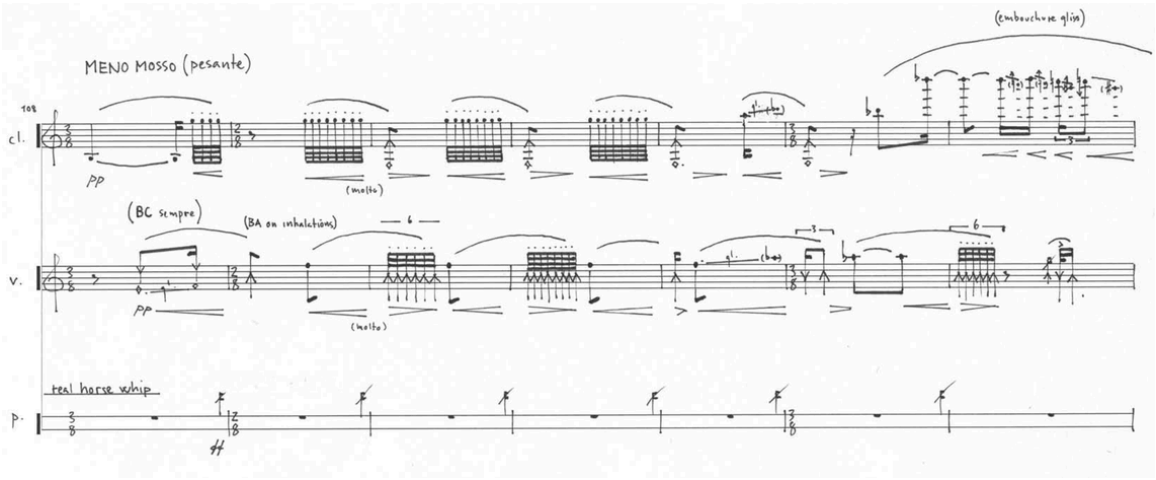
After some time (Example 4.4), the breathing figure becomes more pronounced in both voice and clarinet, moving from hushed gasps to fully voiced exclamations, but with the familiar rhythmic inflection of belabored panting. This kind of development is instructive for listeners; it guides them associatively through the piece. As discussed in the previous chapter and elsewhere in this chapter, Rønsholdt employs a common

[67] Hodkinson and Rønsholdt, liner notes to *Fish & Fowl*, 13.

compositional technique of first assigning and then transforming meaning through repetition and a slight alteration of musical associations.



Example 4.3 Excerpt of "Torso" from *Triumph* by Niels Rønsholdt, clarinet and female voice "breathing" with whip (slap stick), mm. 30-35.



Example 4.4 Excerpt of "Torso" from *Triumph* by Niels Rønsholdt, ensemble, mm. 108-114.

Because of the clarinet's typical association as an instrument of music, its entrance in measure 29 confirms the framing of this piece within a musical performance. The extrinsic significance of the clarinet as a musical symbol transforms the entire structure of the scene, bringing it from the pornographic to the concert stage. Eventually, when the voice and clarinet both become "vocal" (after the *meno mosso* at m. 108), the voice is confirmed in its

typical instrumental role, at least in the role the voice has typically occupied since Berio's *Sequenza* for female voice (1965). But rather than isolate and design the voice entirely according to the aesthetic of musical composition, Rønsholdt's music is also driven by impulse. Jens Voigt-Lund ascribes Niels Rønsholdt with "A fearlessness that is signaled through…sensuality. A sensuality that one doesn't find elsewhere in the genre of art music." Rønsholdt's compositions thaw "the chill of academia…through the sheer will of expression."[68] And once again we see a mounting tension between academic, or what was once termed "serious," music and that of the Other, the popular, the vernacular, the sexual, the banal.

Hearing sexual allure in *Fish & Fowl* is somehow telling of a particular bias on the part of listeners. Of note is the complete lack of any semblance of paranoia, fear, or angst in the CD's accompanying letters from Fish to Fowl, compiled by Ursula Andkjær Olsen from interviews with performers and various individuals involved with the project. Actually, the letters are quite sweet. In contrast to those individuals involved in the project, Dean R. Brierly, an active and avid Amazon reviewer of recordings from Liszt to Oscar Peterson, imagines *Fish & Fowl* in a horror scenario. It may or may not be significant here to mention that the reviewer checks in from Studio City, Los Angeles, California.[69] Anyone who's seen a horror film can attest to the genre's compelling combination of sex and violence. Moments of austere stillness are palpable, beckoning to the inevitable tense buildups that follow. The quickening pace of the high-heels at select spots in *Fish & Fowl* pairs well with the hesitant breathing of the female protagonist, and together these sounds may suggest a scene that is less-than-friendly to women.[70]

In our personal correspondence Rønsholdt seemed to encourage hearings like Brierly's, writing: "Obviously, the emotional atmosphere becomes dark and sexualized when using breath i[n] this way, especially when presented together with whip sounds...That's the underlying drama of F&F [*sic*], the woman and the things that are happening to her (real or not)."[71] As if in response to Rønsholdt, Kathryn Kalinak's

[68] Voigt-Lund, "The Demon of Intimacy."
[69] Dean R. Brierly, "Darksness [*sic*] in Denmark," 7 June, 2011, last accessed 20 January 2016, http://www.dacapo-records.dk/en/recording-scenatet--fish---fowl.aspx.
[70] The sexual thrill of violence is not the same as enacting such violence. Like those who watch *50 Shades*, viewers do not necessarily want to enact such things themselves.
[71] Niels Rønsholdt, e-mail to the author, 10 April, 2011.

analysis of Otto Preminger's film *Laura* (1944) points to the "double-bind of female sexuality in film *noir*: it attracts and threatens; allures and repels…," but whereas some may characterize a desire to combine sex and violence as doing a disservice to women, I would argue that such a hearing falls within the personal purview of each viewer or listener.[72] After all, could not Lulu, like Rønsholdt's "protagonist" have served as fodder for any imaginative audience member notwithstanding gender?

In their monumental *Thousand Plateaus*, philosophers Gilles Deleuze and Félix Guattari imagine a philosophy of becoming, wherein the world is an assemblage of continuous plateaus imminently unfolding. Deleuze and Guattari outline a number of possible realizations of this philosophy, from the abstract, "Becoming-Intense, Becoming-Animal, Becoming-Imperceptible," as is the title of their chapter detailing this philosophy, to more concrete or worldly instantiations of becoming-rat, becoming-dog, becoming-whale, becoming-child, becoming-woman, becoming-vegetable or –mineral, and becoming-minority.[73] Their point with these many becomings is to envision the imminent possibility of all things and the simultaneous interconnectivity among things.

In Alice Jardine's summary, "D+G want to denaturalize Bodies of all kinds—and especially the 'human' one. To do that means denaturalizing sexuality and especially its polarized genders, a process the philosophers began already in *Anti-Oedipus* with the terms 'desiring machines.'"[74] While in *Anti-Oedipus* Deleuze and Guattari insist on the gendered dichotomy embodied by the psychoanalytic metaphor of the oedipal mother, in their later conceptions, they came to term this assemblage the Body without Organs (BwO) after Antonin Artaud's "war on the organs."[75] The BwO is a denaturalization of the human body; it is "what remains when you take everything away."[76] The "osmosis," as Jardine calls it, "maintains no identities, no images. For example, to be caught up in a 'becoming animal' means not that one will resemble either Man or the Animal, but, rather, that each will

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[72] Kathryn Kalinak, *Settling the Score: Music and the Classical Hollywood Film* (Madison: University of Wisconsin Press, 1992), 168.

[73] Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987), 233; 244; 272.

[74] Gilles Deleuze and Félix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia*, trans. Robert Hurley, Mark Seem, and Helen R. Lare (New York: Viking, 1977), quoted in Alice Jardine, *Gynesis: Configurations of Women and Modernity* (Ithaca, NY: Cornell University Press, 1985), 211.

[75] Deleuze and Guattari, *A Thousand Plateaus*, 150.

[76] Ibid; Ibid, 151, quoted in Jardine, *Gynesis*, 212.

'deterritorialize' the other."[77] And yet, the absence of identity—actually simply the possibility of removing identity, or in other words, the potential for *deterritorialization*—implies that there exists already a territory from which to take away. Deleuze and Guattari aspire through their de-body-fication toward a gender-inclusive philosophy, writing that "all becomings are molecular [as opposed to molar], including the *becoming-woman*, it should also be said that all becomings begin and pass through the becoming-woman. It's the key to all other becomings." But, as a constant state of becoming ("becoming-woman," "becoming-child," "becoming-animal," "becoming-molecular"), feminist philosophers, Irigaray, Jardine, and others, recognize that the BwO prioritizes the masculine as the state *from which* to become.[78] After all, there is no becoming-man, for man is assumed. Thus becoming-woman has practically nothing to do "with women *per se*…. 'Woman'…is the closest to the category of 'Man' as majority and yet remains a distinct minority."[79] This is what Simon de Beauvoir meant when she wrote, "One is not born, but rather becomes, a woman," perhaps a phrase of inspiration for Deleuze and Guattari.[80]

When woman is delimited by the properties of an ideal or when defined in relation to what she is not, the being that emerges is not of this world, though she is nevertheless made real by collective imagination. Indeed, her existence, her image as a presence—as the "protagonist"—emerges from a collective desire. But were we to envision desire not as a Lacanian yearning for the unattainable or non-object, but as the longing for an effigy of the "protagonist," complete with snippets of *sagte er, dachte ich* and *Triumph*, of moaning and Ping-Pong balls, then, although the guise construed is of the individual's mind, as Lochhead's analysis of *Lulu* makes clear, such an appellation is not outside of music; it is neither removed nor reactionary. The guise is necessarily shaped by the constraints of the music. Desire comes therefore *in excess* to the sounding "material," and not from a compulsion of something lacking. Having a space or void requires something to have been in the first place taken away, but with music there is nothing *a priori*.

In Lacan's framework, we yearn for the "protagonist" we cannot quite grasp and for a tradition of music *Fish & Fowl* does not quite meet. Lacan's definition of desire rests on

[77] Jardine, *Gynesis*, 215.
[78] Deleuze and Guattari, *A Thousand Plateaus*, 277, quoted in Jardine, *Gynesis*, 216.
[79] Jardine, *Gynesis*, 216.
[80] Simone de Beauvoir, *The Second Sex* (New York: Vintage Books, 1973), 301.

the "primacy of identity," to borrow the words of Gilles Deleuze, for whom "identity" is always linked to a foundation, a ground, in other words, to a hierarchical constitution.[81] Lacan would have us believe that the object of desire exists outside one's self, as a mirrored other (*autre*), the object therefore a projection of one's desires, but irreconcilable and hence secondary to the primary existence of the perceiving subject. Lacan's understanding of desire as reactionary rests on an imposed duality of the given and the constructed, on the age-old separation of nature and culture. For the psychoanalytical model would have us believe that the subject, as given, is not in control of impulses and thought. Hence, what is desired by Lacan is always at odds with the subject. This is precisely the definition of the drive, a concept Lacan borrows from Freud, which takes its aim always toward a certain goal of being fulfilled.[82] When the goal is unmet, desires remain unfilled, always in lack. But this is not how Deleuze and Guattari envision desire.

Psychoanalysis has historically purported *jouissance* as the insatiable desire to fill a void, to voice silence. In contrast, Deleuze's later philosophy *a*-voids the psychoanalytic emphasis on lack and veils. For philosopher Elizabeth Grosz, Deleuzian desire is productive and connective:

> Instead of aligning desire with fantasy and opposing it to the real, instead of seeing it as a yearning, desire is an actualization, a series of practices, bringing things together or separating them, making machines, making reality. Desire does not take for itself a particular object whose attainment it requires; rather, it aims at nothing above its own proliferation or self-expansion.[83]

We might trace Deleuze's later notion of desire back to his reading of Proust, whose theory of "transposition," as Deleuze interprets it, results in constant and continuous exchanges between and among various identities. Identity as a contextually defined concept emerges through this continual transposing of signs, and yet, definitions of concepts such as gender or sexuality, which rest on tensions strewn among many identities, also incite instability

[81] Deleuze, *Difference and Repetition*, xix.
[82] Jacques Lacan, *The Four Fundamental Concepts of Psychoanalysis: The Seminar of Jacques Lacan Book IX*, ed. Jacques-Alain Miller and trans. Alan Sheridan (New York: W. W. Norton & Co., 1981), 165.
[83] Elizabeth Grosz, *Volatile Bodies: Toward a Corporeal Feminism* (Bloomington: Indiana University Press, 1994), 165.

and perpetual *re*-definition. Thus Proust's slippery signs leave identity, and relationships among identities, somewhat open. Deleuze uses Proust's example (in *Proust and Signs* from 1964, expanded in his later *Difference and Repetition* from 1968) as a homosexual norm from which to extract a generalizable theory of the erotic not premised in an antipodal gender binary. The point here is not to show homosexuality as forming an alternative relationship to the dominant heterosexual norm, but rather to admit that such substitutions or transpositions are an inevitable facet of loving in the space of a philosophy such as Deleuze's, within a constantly changing, temporally dependent, perspectively determined reality.

One recognizes the beginnings of posthumanism in the philosophy of Deleuze and his joint collaborations with Guattari. Again, the posthuman is typified by a move away from the merely human and progressively toward something beyond humanity. Thus, momentous acts of becoming invigorate man toward new outcomes, new lines of thought. Like Jardine, one might be compelled to ask what in the world should stimulate such becomings, in order to discover from whence desires first originate. Jardine's search for the origins of man's drives parallels Brian Kane's admittedly futile search for the source and cause of acousmatic effects. It was man's construction of reality, of which women and other minorities were a part, that wed the minority to the masculine majority, subsequently preventing minorities from ever gaining independent agency. Within the progressive posthuman outlook, men retain a primacy of identity that always-peripheral minorities could never hope to overcome. But the search of the organic seed to deliver us from ever plummeting into the spiraling rabbit hole of marginalization creates its own fictitious paths. Indeed, the virtual goes both ways, it extends both to the future and the past.

5. A Transhuman Existence

Trained academically as a composer, at Cambridge and then at the University of Copenhagen, Juliana Hodkinson was confronted mostly with acoustic, academic compositional practices for her first years as a composer. Without much support beyond this tradition, it was up to the composer herself to pick up on new trends and to gain facility in emerging creative practices, such as digital audio sculpting. It was through this

uninhibited self-discovery, says Hodkinson, that she gained the "fluidity" to integrate digital audio into composition for live and acoustic instruments and voice, which freed her compositional process while also affording new professional opportunities for her to express and, ultimately, to perform her music. One of these opportunities came in the form of *Fish & Fowl*, which, after the initial release of the album, and despite its erotic eccentricities, claimed no few live performances from 2011 to 2012, at Berlin's Ultraschall Festival, the Spor and Fri Lyd Festivals in Denmark, and Huddersfield Festival. Again, these live performances reflect a form of performance in the tradition of Richard Maxfield, for whom tape pieces often limited the theatricality of performance. In the 1960s, Maxfield composed a series of works he deemed as an "a kind of 'opera for players instead of singers' in which specific 'performers, most ideally, would play themselves.'"[84] The sound 'library' for pieces dedicated to David Tudor and La Monte Young, for example, included prerecorded improvisations from the performers, and live performance would then include these samples in the mix to become a "freely improvised…montage" unfolding for the first time.[85]

In the vein of Maxfield's *Piano Concert for David Tudor* or *Perspectives for La Monte Young*, *Fish & Fowl*'s multiple performances include some live mixing of the existing soundtrack (the CD) with additional performers on stage, some times those who first recorded the catalogue pieces, but also members of the Scenatet Ensemble who may never have played any of the previously recorded works. Even more intriguing, at these events Hodkinson and Rønsholdt—the composers themselves—stood facing the audience on stage, equipped with mixers and microphones, and various paraphernalia, from Ping-Pong balls, whips, and high heel shoes. Where traditionally composers of electroacoustic works were subsidiary to live performances, situated among the audience at the audio desk and thus taking a secondary role to the prerecorded artwork, *Fish & Fowl* introduces an aspect of improvisation into the compositional process, an aspect that today is quite common. By sharing the stage with the musicians who first recorded the works sampled in *Fish & Fowl*, the composers accede authorship of the work, which becomes newly defined with each subsequent and alternatively choreographed performance.

[84] Nyman, *Experimental Music*, 90.
[85] Ibid.

More recently, Rønsholdt and Hodkinson have gone their separate ways compositionally, but Hodkinson has not given up her thirst for a fluidity of musical expression. She summarizes her notion of composition as "sonic writing," which she defines as the ubiquitous ease with which today's composers oscillate between musical composition for instruments, voices, and electronics.[86] The word "writing" referring of course to the physical notation of musical composition, but Hodkinson uses the term to also evoke its metaphorical meaning of inscription as described in Hélène Cixous's concept of *écriture feminine*. The main points of this movement I've summarized already in my analysis of Alice Shields's *Apocalypse*, in Chapter 2, but I will recapitulate these briefly.

Representations of women, and particularly representations of women's sexuality, have been historically subordinated in music, art, and literature (and elsewhere) to a typical phallogocentric symbolism. According to Cixous, Luce Irigaray, and others, the emphasis on the dominant heteronormative, masculine prerogative has subsequently led to an apparent absence of symbols representing sexuality outside of these norms. To challenge these norms, *écriture feminine* moves to make room for representations that belong uniquely to women. Though these feminist thinkers did not explicitly exclude other minorities, given the movement's origins in France in the 1970s and 80s, advanced primarily at the hands of white women, it was later critiqued for placing too stringent an emphasis on women's difference, subsequently implying an inherent femininity among all women and once again reinforcing women's positions as Other while also erasing the struggles of other minorities, marginalized by race, economic class, and/or physical (dis)abilities. In abandoning the "feminine" modifier, Hodkinson relinquishes women's inherent difference while insisting that *écriture* set off the sonic from other modes of writing. But still, in using a term associated with the feminist thinkers mentioned above, Hodkinson nevertheless references a gendered resistance to normative representations.

Contrary to any assumed precedence, the recent nonhuman turn has moved to resist humanity's priority and the impasse between human nature as given and its enforcing and compelling secondary constructions. "Practitioners of the nonhuman turn," writes Richard Grusin, "find problematic the emphasis of constructivism on the social or cultural constructions of the human subject because, taken to its logical extreme, it strips the world

[86] Juliana Hodkinson, "Sonic Writing: A Vibrational Practice," *Seismograf/DMT*, 31 March, 2014, last accessed 9 February, 2016, http://seismograf.org/node/5502.

of any ontological or agential status."[87] It is not that man first acts and the world responds, put simply, the nonhuman persists regardless of our collective desire as a species or of any one faction therein, irrespective of any one race, sex, gender, or nationality. This is not to say that certain privileges do not extend to particular groups, but these advantages extend only so far. These are not universal systems of power but only different "modalities" of control.

Interhuman and transhuman elements are expressed in what Erin Manning terms "artfulness." "The art of participation," says Manning, is "not a question of subject and object, of artist and participant, but a question of how the work calls forth its own potential evolution."[88] I already summarized the consequences of this notion of art in connection with Deleuze and Guattari's philosophy in my first chapter, but Manning's contribution to this line of thought proves useful in artworks like *Fish & Fowl*, which do not easily define themselves as what Deleuze and Guattari recognize as self-standing "monuments." Where Deleuze and Guattari speak of an artwork as an assemblage of creative and multiplicitous percepts, their answer in response to the question, *What is Philosophy?* remains entrenched within philosophical discourse, within the human-centric perception of art. In their philosophy, without the human element to continually reconstruct it, the artwork loses its temporal and historical motility. Conversely, Manning updates the notion of an artwork to include a "relational field" that "touches an ecology which is more than human," not progressively so, but immanently beyond what is given only by humanity. Such "worlding," according to Manning, articulates the politics of art in the twenty-first century.

As an installation artist, Manning's fascination with light informs much of her philosophy, but instead of giving priority to the visual, Manning "reads" light through what might be considered this medium's sensory opposite, touch. There is commonly a conceptual mental distance construed between the plastic or visual arts and their receiving subjects (inclusive of any human creator), so Manning uses the haptic to bridge this gap between human and nonhuman. After all, without air particles, energy, and the physical

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[87] Richard Grusin, *The Nonhuman Turn* (Minneapolis: University of Minnesota Press, 2015), https://www.upress.umn.edu/book-division/books/the-nonhuman-turn.

[88] Erin Manning, "Artfulness: Emergent Collectives and Processes of Individuation," keynote address delivered at the conference "Re-Claiming Participation: Technology, Mediation, Collectivity," 7 May, 2014, Zürich, Switzerland, https://reclaimingparticipation.files.wordpress.com/2014/03/keynotes_abstracts.pdf (accessed 9 February, 2016).

forces, light would not be useful as an artistic medium. Such a conception of art translates easily to the sonic world. Sound, always in motion, sets the coexistence of human and nonhuman beings. Such a notion of music also avoids delimiting music by what is heard only through the ears, as a privileged hearing only of certain listeners. Manning's *Politics of Touch* is a mode of contact.[89] Indeed con-tact, translated literally from Latin, *with touch*, in mutual convergence of the multiple modalities with which music resonates. And where music falls on untrained ears new possibilities of musical creativity emerge, from the skill- and rule-based practices of academic musical composition, to crossovers between acoustic and electro-digital practices, to more experimental transmodal constellations.

6. Conclusion

No longer a process owing to strict formal structures, musical composition in the twenty-first century has become as much determined by the choices the composer makes as by the medium in which the composition unfolds. But in today's world, not a small percentage of folks are equipped with a novice understanding of computer programming languages. Now more than ever people associate the mechanically (re)produced with human action—whether visible or not. Take for example the viral videos claiming to be surviving tracks of artist *blank* "without autotune." The most famous of these being Lorde's "Royals," a YouTube video given the semblance of authenticity with the subtitle "Grammys 2014."[90] As the video begins we see the actual video of Lorde's performance at the Grammys: the singer brightly illuminated, a video projection from behind, holding a microphone to her mouth, her band dressed in all white, poised and ready. Just as in the original, applause ensue, maintaining the semblance of authentic performance. Then, unlike the original performance, which begins with the polyphony of prerecorded and heavily processed voices greeted subsequently by a snappy backbeat, the "without autotune" rendition begins with *a capella* singing that could be likened at best to the voice of the Swedish chef from The Muppets. In fact, the entire track is *a capella*, one give away of the gag.

[89] Erin Manning, *Politics of Touch: Sense, Movement, Sovereignty* (Minneapolis: University of Minnesota Press, 2007), 134.

[90] John Swan, "LOURDE WITHOUT AUTOTUNE – Royals – Grammys 2014," created 26 January, 2014, last accessed 15 January, 2014, https://www.youtube.com/watch?v=7uzR0ZoZPjU.

As is typical of YouTube, some of the comments come in the form of hesitant provocations, "is this real?! wtf," but the majority contribute outright dismissals, from "FAKE FAKETY FAKE FAKE!" to "lmao [laughing my ass off]." At last count, the spoof video had over 1.7 million views—more than the original performance (though nowhere near the view-count of the official "US video," which has over 550 million views)—and this popularity attests to at least two phenomena. First, the video's success reflects the public's curiosity and desire to hear the "true" voice of the recording artist, but second, and more importantly, the video's viral status proves that the majority of listeners assume already that Lorde's voice has in the first place been digitally enhanced with autotune. This public is not troubled, bemused, or deceived by technological manipulation. Quite the contrary; that music is an agglomeration of human and machine is already taken for granted.

Indeed, current culture is, perhaps more than ever before, enamored with androids. Joseph Auner's 2003 article, "'Sing It for Me': Posthuman Ventriloquism in Recent Popular Music," argues that throughout the twentieth century film and literature have portrayed androids as doomed to melancholy. Providing examples of Mary Shelley's Frankenstein and Marvin, "the clinically depressed robot in *The Hitch-Hiker's Guide to the Galaxy*," Auner explains that the most pathetic trait of such despicable characters is their "flawed and imperfect voice," that despite the content of their words, androids are doomed to unemotional droning.[91] Conversely to this pre-2000s image of technology, the decade of the 2010s saw more and more positive, loving, and emotive portrayals of not only androids, but also of symbiotic human/computer relations. One recent example is Spike Jonze's film *Her* (2013), which details the love affair of Theodore (Joaquin Phoenix) and Samantha, his intelligent computer operating system. The film was actually criticized for its overly enthusiastic encouragement of such relations. However, for the human-operating system romance to be believable, the voice of the computer was not actually spoken by a machine at all, but by Scarlett Johansson. In fact, Johansson seems to have developed a knack for such roles, given that the following year she would play Lucy, the central role in a film of the same title. In that film, Lucy, a human, is tricked into taking a synthetic drug that alters her perception of time and space. The drug is so powerful that it augments her mind to such

[91] Auner, "Sing It For Me," 113.

an extent that she acquires telepathic and telekinetic powers, which, beyond an expansion of mental capacities cause a physical augmentation that transform her from human female into an octopus-like cyborg supercomputer, whose ultimate aspiration is to help humanity realize its full achronic and aspatial interconnected existence.

So where the first wave of technological innovations in the twentieth century might have been characterized by human confrontations with the mechanical, a second wave between 1980 and the early 2000s (the period Auner treats and when the Sprinkle/Oliveros collaboration appears) could be described as man's benefit from machines, or simply a time of human augmentation. More recently the relationship between human and computer has come to be understood more broadly as a mutually beneficial relationship, whereby technology and humanity not only coexist but they are essentially inseparable.[92] I would argue then, that in our current relationship with technology, the "trauma" of the skipping record, which Joseph Auner identifies in his notion of posthuman ventriloquism, is not jarring because it snaps us out of the illusion of the virtual world, but because it draws attention to the nonhuman interference in what was presupposed as mere human enhancement.[93]

This dissertation envisions concepts of sexuality in flux, as emerging from musical contexts that incite normative signs so as to comment on, reshape, and inform new categories of sexuality. While my first chapter explored the authoritative composer's voice, surveying the typical historical perspective of the male gaze as conceived within the electroacoustic tradition, the second chapter conversely presented an example of how women have redefined the typical normative symbols of sex, such as the phallus, by reinventing the symbol within new contexts. Composer Alice Shields does away with the psychoanalytic predisposition that women's sexuality is defined by absence, silence, and lack (replicating the void of the female genitalia), by giving voice to her desires through an electronically enhanced operatic staging of her fantastic desires. In the following chapter, I turned to representations of homosexuality in computer music to provide an example that,

[92] The three eras correspond to "The three paradigms of Human-Computer Interaction" outlined by computer scientists Steve R. Harrison, Deborah Gail Tatar, and Phoebe Sengers in a paper delivered at the Special Interest Group on Human-Computer Interaction (SIGCHI) conference on Human Factors in Computing Systems in 2007 in San Jose, CA. I would like to thank Visda Goudarzi for pointing me to this paper.

[93] Auner, "Sing It For Me," 212.

rather than confront or subvert normative conventions, transforms accepted societal assumptions of gender, and hence also sexual orientation by way of textual, technical, and technological means of musical composition. And finally, in this chapter, I returned to Deleuze's fascination with eroticism, as aroused in his writings on Proust and Janet, to point outside the dominant electroacoustic genre toward works that break the boundaries of what is humanly possible, extending beyond the confines of musical "works" to realize practical expressions of transhuman sonic writing. This chapter revisited a narrative of command and control that haunts the history of twentieth-century innovations. Drawing connections between electroacoustic music, staged music, and film, I highlighted a rationale for erotic depictions that do not directly yield from digital technologies, but which resonate, if preemptively, with other perceived innovations of the current century. Providing such a rational explains the assumed inevitability of erotic electronic music in reception while determining that its habitual manifestation is anything but simplistically motivated.

Conclusion

"It's just a theory…" – Tracy Chapman

We often hear how our social and economic reality shapes our cultural creations, but rarely do we attempt to explain how culture, and particularly music, shapes our everyday experience. Over the past sixty years, at least, we've had a great influx of sexually explicit music using concrete and recognizable sounds to simulate or draw attention to certain aspects of reality. Such constructions clearly influence the manner in which listeners then attend to these sounds within instances outside of music. From the perspective of the perceiver, the erotic electroacoustic work, the pornographic film, and sex itself share in their associations to the sensual, though these circumstances may or may not actually arouse the participant as a reflective observer.

Erotic art in the 20th century sprung to new life through the advent of recording technologies, film, tape, computer software and hardware, and various interpenetrations of these media. No longer hitched to the perceiving subject, the erotic lingers in the space between concrete and abstraction as a concept with a life and breadth of its very own. Through works like Pierre Schaeffer's "Erotica" or Hodkinson and Rønsholdt's *Fish & Fowl*, the erotic in the twentieth century has become an object in and of itself. As Deleuze and Guattari said, "Art preserves, and it is the only thing in the world that is preserved…. What is preserved—the thing or the work of art—is *a bloc of sensations, that is to say, a compound of percepts and affects*."[1] Sound cannot be held or captured outside of affect, but it seems that even material media are no more concrete than that. While Deleuze and Guattari argue about the material of art and its preservation, we are all still asking ourselves, what is the material of acousmatic music? Is it the recording medium (tape, CD, soundfile)? Or is it in the sound itself? These two facets of the art object, both material and at once perishable, lead distinctive paths. More dire than the state of its notated, instrumental counterpart, electroacoustic music has no performer to memorize the music and its creative development. Where what is erotic about music is preserved only in sensations, evoked in the moments of artistic realization, this privilege is not merely

[1] D&G, *What is Philosophy?* 164.

bestowed upon the work's author. Deleuze and Guattari maintain that art lives beyond its creator, that it even persists with affect and percepts beyond the feelings aroused in individual viewers/listeners/receivers. Art is becoming, and hence, art is *opinion*. And what is an opinion if not something that causes, something that effects? It is art itself that becomes the being from whence acousmatic sound is heard, and no ambitions for or to the contrary would allow us to intuit otherwise. The woman moaning is not captured by the recording, but she *is* the recording, her environment is sculpted by a creator that relinquishes control already from the moment that world comes about.

Jacques Attali has argued that the work as a musical object is borne through the distinction of music from noise, but such a separation reflects a political ideology extending well beyond the sounding world.[2] Since the aspiration to replicate the sound of the studio within a domestic setting—the high fidelity aesthetic that emerged circa the 1950s—Canadian media scholar Keir Keightley argued, any imposition between music and noise has gendered repercussions. Domestic technologies came to be marketed and branded primarily toward men, one reason for men's predominance as composers of electronic "art" music.[3] On the heels of third wave feminism, from the 1990s onward the international community—and particularly the Canadian faction of media scholars—became increasingly critical of the "masculine aesthetics" of electronic music. For Andra McCartney the masculine ambition toward high fidelity aspired to create a blemish-free perfection somehow more pristine than any musical source, an idealized substitute for the musical composition.[4] But the gender-antagonistic musicological scholarship written between 1990 and the present contains its own biases and institutes its own erasures of people, places, and ideas, not least of these are the multiplicitous erotic aesthetics of music. Music scholarship can be just as culpable as the recording industry in asserting a division between mainstream and marginal musical activities.[5]

Reflecting on the past sixty years of electronic music, composer Beatriz Ferreyra, at one time an assistant to Pierre Schaeffer, claimed that electroacoustic music often features

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[2] Jacques Attali, *Noise: The Political Economy of Music* (Minneapolis: University of Minnesota Press, 2009).
[3] Keir Keightley, "'Turn It Down!' She Shrieked: Gender, Domestic Space, and High Fidelity, 1948-59," *Popular Music* 15/2 (1996): 149-177.
[4] Andra McCartney, paper delivered on the panel "The Gendered Soundscape," at the meeting of the American Musicological Society 2013, in Pittsburgh, P.A.
[5] Susan McClary, afterword to *Noise: The Political Economy of Music*, by Jacques Attali, 149-160 (Minneapolis: University of Minnesota Press, 2009).

the "same kind of sound," not least because composers are all more or less using the same machines.[6] While the machines have hardly changed, it seems, however, that ideas are changing, that our collective attitude toward technology is becoming more enthusiastic if not more tolerant. People are forming new relationships through a changed awareness of how we encounter sound every day, even in the last 15 years, since the beginning of the twenty-first century. Some pessimistic philosophers such as Deleuze-inspired Ian Buchanan, see technology as an encroaching threat to artistic inspiration, because it has caused what previously were high-level tasks like constructing a medium for art (the canvas, the musical instrument, or even the human body) to become manageable and somehow mundane.[7] Admittedly, I am over-simplifying Buchanan's plight that we occasionally look up from our iPhones to perhaps avoid running into traffic, but I also don't think such actions arise from any hindrance owing to new technology; even Einstein admitted that genius's limits distinguish it from stupidity. I am not content by the negative posthumanist rhetoric that positions us humans against the machines that pacify, even nullify us. Instead, I believe it is precisely this simplification of the medium that poses the greatest room for innovation in the substance of art. The time is rife for a transhuman artistic philosophy; indeed, the time is upon us.

[6] Kim S. Courchene, "A Conversation with Beatriz Ferreyra," *Computer Music Journal* 25/3 (2001): 19.
[7] Ian Buchanan, "Art as Schizo Society" (paper presented at The Dark Precursor: International Conference on Deleuze and Artistic Research, Ghent, Belgium 10 November, 2015).

APPENDIX A:
List of Electronic or Electroacoustic Compositions with Erotic Elements

	Composer	Title	Year	Country
1	Pierre Schaeffer (and Pierre Henry)	"Erotica," *Symphonie pour un homme seul*	1951	FR
2	Kuniharu Akiyama	"Imprisoned Woman"	1951	JP
3	Luciano Berio	*Visage*	1961	IT
4	Toru Takemitsu	"Ai"	1956/ 1964	JP
5	Annea Lockwood	*Tiger Balm*	1970	NZ/GB/US
6	Luc Ferrari	"Unheimlich schön"	1971	FR
7	Luc Ferrari	*Les Danses Organiques*	1973	FR
8	Fred Lerdahl	*Eros*	1978	US
9	Jean-Paul Curtay	*Body Music 1*	1981	BEL
10	David G. Lindsay and John Wells	*The Beautiful Assistant*	1983	CA
11	Luc Ferrari	*Presque rien avec filles*	1989	FR
12	Barry Truax	*Song of Songs*	1992	CA
13	Alice Shields	*An Bean Rua* [Irish. *The Red Woman*]	1993	US
14	Alice Shields	*Apocalypse: an electronic opera*	1993	US
15	DJ Spooky	"Asphalt (Tome II)" feat. Carl Hancock Rux and Pauline Oliveros	2002	US
16	Barry Truax	*Skin and Metal*	2004	CA
17	Jack Body	*Intimate History no. 1 (Yono)*	2005	NZ
18	Tanya Tagaq	*Sinaa*	2005	CA
19	Niels Rønsholdt	*Triumph*	2006	DK
20	Niels Rønsholdt	*Die Wanderin*	2007	DK
21	Tanya Tagaq	*Auk/Blood*	2008	CA
22	Robert Normandeau	*Jeu de langues*	2009	CA
23	António de Sousa Dias	*A Dama e o Unicórnio*	2009	PRT/FR
24	José Luís Ferreira	*Trópicos*	2009	PRT
25	Cândido Lima	*ERÉTYICA-ai Deus i u é?*	2009	PRT
26	Beatriz Ferreyra	*Pas de 3... ou plus*	2010	ARG/FR
27	Miguel Azguime	*L…*	2010	PRT
28	Juliana Hodkinson and Niels Rønsholdt	*Fish & Fowl*	2011	DE/DK
29	John Cousins	"Songs my mother taught me"	2013	NZ

APPENDIX B: Alice Shields, *Apocalypse*, Track List

Scene (Liner Notes)	Title	CD Track	Page in Libretto
Part I			
1	Sacrifice	1	1
2	The Land of the Dead	1	3
3A (3)	Conception	1	5
3B (4)	On the Dark Plain	1	5
3C (5)	Push	1	7
Part II			
4A (6)	The Sea	2	9
4B (7)	Approach	2	11
4C (8)	First Greeting	3	11
4D (9)	Dialog 1	3	13
4E (10)	Sea Dance 1	3	14
4F (11)	Second Greeting	3	15
4G (12)	Dialog 2	3	16
4H (13)	Sea Dance 2	3	18
4I (14)	Third Greeting	3	19
4J (15)	Dialog 3	3	20
4K (16)	Sea Dance 3	3	21
4L (17)	Looking	3	22
4M (18)	Corpse	3	23
4N (19)	Here	4	24
4O (20)	The Flower	(omitted)	25
4P (21)	Truth	5	26
Intermission			
Part III			
4P-2 (Continuation)			28
5A	The Forest	(omitted)	28
5B	This is Good	(omitted)	28
5C	Prince of Rain	(omitted)	29
5D	Mantra 1	(omitted)	30
5E	Supplication 1	(omitted)	30
5F	Mantra 2	(omitted)	32
5G	Supplication 2	(omitted)	33
5H	Mantra 3	(omitted)	35
5I	Supplication 3	(omitted)	35
5J	Undulating 1	(omitted)	38
5K	Forward 1	(omitted)	38
5L	Undulating 2	(omitted)	38
5M	Forward 2	(omitted)	39
5N	Undulating 3	(omitted)	39

5O	Forward 3	(omitted)	39
5P (21)	Shiva	(omitted)	40
6A (39)	On the Dark Mountain	6	41
6B (40)	Dialog 1	6	41
6C (41)	First Naming	6	43
6D (42)	Dialog 2	6	44
6E (43)	Second Naming	6	45
6F (44)	Dialog 3	6	46
6G (45)	Third Naming	6	47
6H (46)	Final Question: Aeon	7	48
7A (47)	The Approach	(omitted)	49
7B (48)	Soliloquy	(omitted)	50
7C (49)	The Arrival	7 Retitled: “The Great Mother’s Revenge”	51
7D (50)	Dismemberment Dance	8 Retitled: “Dismemberment and Eating”	52
8A (51)	Regrets	(omitted)	52
8B (52)	Someone, I Say, Will Remember Us	9	58
9A (53)	Invocation	(omitted)	59
9B (54)	The Epiphany of the Clouds	(omitted)	60
9C (55)	Someone Spoke of Your Death	10	61
Part IV			
10A (56)	Reactions	10	64
10B (57)	Beginning of the End	(omitted)	65
10C (58)	Apocalypse Song	11	65
11A (59)	Heat Drum	12	66
11B (60)	Organ Screaming	13	66
Epilogue			
12 (61)	The Dawn Wind	14	79

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