



Sacred Technologies

Numinous and Grotesque Symbolism of Electronic Music Devices in Instrumental Theater

CHARLES QUEVILLON



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Devices in Instrumental Theater

Charles Quevillon

Sibelius Academy, University of the Arts Helsinki

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Abstract

This artistic research thesis investigates how music performance with electronic music devices, such as the loudspeaker, electric guitar, and amplifier connects to ideas of the sacred. It combines theories from anthropology, religious studies, musicology, and the history of technology with my artistic practice as a composer.

In my research, I introduce a new concept of Symbolic Sound-Producing Gestures, inspired by composer Mauricio Kagel's instrumental theater. This concept serves as a compositional tool for shaping symbolic meanings that emerge from the physical interaction between performers and instruments. C. G. Jung's symbolic framework and Antonin Artaud's vision of theatrical gestures as powerful symbolic forces guided my exploration of sacred symbolism in the instruments, sounds, and expanded techniques used in my works.

I draw on sociologist Émile Durkheim's sacred/profane dichotomy, Erik Davis's book *Techgnosis*, and consumer researcher Russell W. Belk's theory of Sacred Consumption to examine the paradoxical entanglement of the sacred and the profane in contemporary consumer culture. In this context, although electronic music devices are inseparable from the profane world of tools and consumption objects, they remain rich in sacred associations because of their long history and diverse cultural manifestations. Moreover, through their capacity to channel vast amounts of energy, they can evoke the emotional intensity of the numinous: awe, dread, and mystery.

I analyze three of my artistic works that exemplify how the staging and use of electronic music devices in music performance can articulate the entanglement of the sacred and the profane. These artistic processes ultimately led me to the concept I call Grotesque Numinosity: an aesthetic lens that embraces both awe and absurdity, finding intense experiences where the sacred and the profane fuse in the raw energy of electronic sound.

Tiivistelmä

Tämä taiteellisen tutkimuksen väitöskirja tarkastelee, miten esiintyminen elektronisten musiikkilaitteiden, kuten kaiuttimen, sähkökitaran ja vahvistimen kanssa kytkeytyy ajatuksiin pyhästä. Tutkimus yhdistää antropologiaa, uskonnotutkimusta, musiikkitiedettä ja teknologian historiaa taiteelliseen työskentelyyni säveltäjänä.

Tutkimuksessani muotoilen uuden käsitteen säveltäjä Mauricio Kagelin instrumentaaliteatterin inspiroimana: *Symbolic Sound-Producing Gestures*. Tämä konsepti kiteytyy sävellystyökaluksi, joka muokkaa esittäjien ja instrumenttien välisestä fyysisestä vuorovaikutuksesta muodostuvia symbolisia merkityksiä. Konsepti nojaa jungilaiseen symboliikkaan ja Antonin Artaudin näkemykseen teatterillisistä eleistä, jotka toimivat voimakkaina symbolisina voimina. *Symbolic Sound-Producing Gestures* tukee pyhän symboliikan tutkimista teosteni instrumenteissa, äänissä ja laajennetuissa soittotekniikoissa.

Hyödynnän sosiologi ja antropologi Émile Durkheimin pyhän ja profaanin dikotomiaa, tutkija Erik Davisin oivalluksia kirjasta *Techgnosis* sekä akateemikko Russell W. Belkin Pyhän kulutuksen -teoriaa, kun tutkin pyhän ja profaanin paradoksaalista yhteen kietoutumista kulutuskulttuurissamme. Vaikka musiikkilaitteet ovat erottamattomasti profaaneja työkaluja ja kulutuskohteita, ne kantavat mukanaan runsaasti pyhän assosiaatioita pitkän historiansa ja moninaisten kulttuuristen ilmentymiensä vuoksi. Musiikkilaitteet voivat lisäksi kanavoida valtavia energiamääriä ja siten herättää numinoosin emotionaalisen intensiteetin: kunnioituksen, pelon ja mysteerisyyden.

Kolme taiteellista teostani havainnollistavat, miten elektronisten musiikkilaitteiden lavastaminen ja käyttö musiikkiesityksessä voi artikuloida pyhän ja profaanin yhteen kietoutumisen. Teosten tekeminen tiivistyy lu-

omaani käsitteeseen Grotesque Numinosity, jonka määritän esteettiseksi tapahtumaksi, joka omaksuu sekä kunnioituksen että absurdiuden ja löytää pyhän intensiteetin sieltä, missä pyhä ja profaani sulautuvat elektronisen äänen raakaan energiaan.

Acknowledgments

This thesis could not have come into being without the presence of the late Canadian choreographer Tedd Robinson, a pivotal figure in my life who passed away during the course of this work. Many of the concepts I attempt to articulate here are responses to what I experienced over more than a decade of artistic collaboration with him. His use of symbolism, what he called "Imagery," intertwined eclectic cultural references in ways that were always grounded in something deeply human and infused with humor, leaving a profound impact that resonates in the following pages.

I am grateful to my three supervisors, who have guided me over the past eight years in this research: Andrew Bentley, Alejandro Olarte, and especially Jan Schacher, who helped me carry this project to its completion. I thank my advisor Tero Nauha, who has been a generous and trusting partner in reading my many drafts, and Eero-Tapio Vuori, whose artistic insight has been essential to the practice-based dimension of this research. I also extend my thanks to my colleagues in the Music Technology department of the Sibelius Academy.

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Use of AI Tools

This doctoral thesis was written with the support of various digital tools, including large language models such as OpenAI’s ChatGPT (Microsoft Copilot and the GPT app) and Google’s Gemini (via Google Search and Google NotebookLM).

These tools were used to:

- Reword and refine text into academic English
- Clarify sentence structures
- Brainstorm and explore conceptual framings and formulations
- Assist with formatting the document using Pandoc and LaTeX
- Assist with the translation of texts

Such uses of these technologies are permitted by the University of the Arts Helsinki in its *Ethical Guidelines for Education and Studies*, which states that “using a language model for language revision is justified for compiling a grammatically correct and structurally smooth text (cf. proof-reading and translation tools and other similar tools).”¹

The text and images in this thesis are my own (unless otherwise specified). At no point were these tools used to generate original arguments, theoretical frameworks, or interpretations. I have reviewed and edited the content as needed, and I take full responsibility for the content of the thesis.

¹Opiskelijan Uniarts. 2023. *Uniarts Helsinki’s Ethical Guidelines for Education and Studies and Procedures for Misconduct and Disciplinary Cases*. October 17. <https://student.uniarts.fi/guides/uniarts-helsinkis-ethical-guidelines-for-education-and-studies-and-procedures-for-misconduct-and-disciplinary-cases/>

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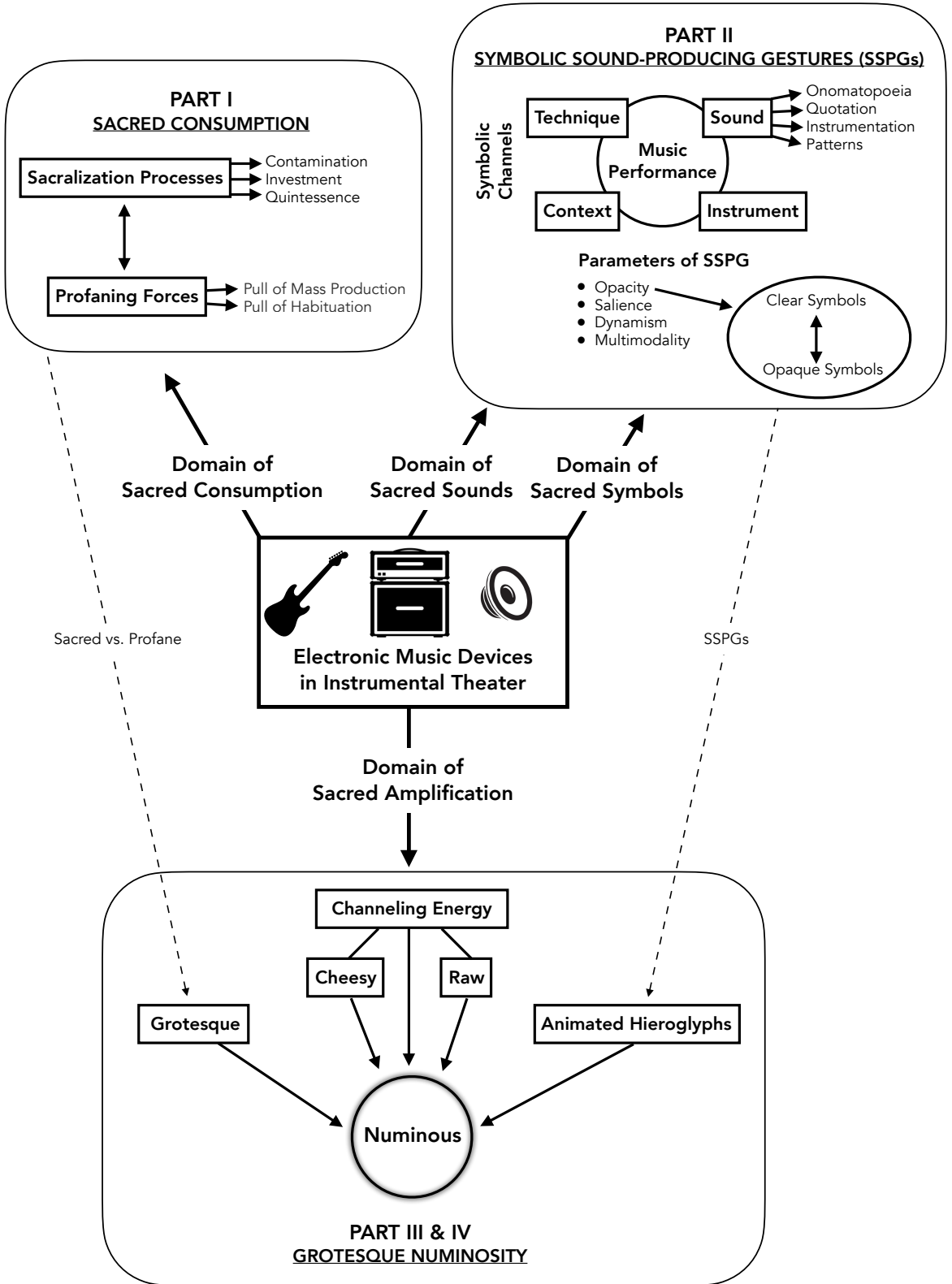
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Conceptual Map

This map visualizes the thesis' main concepts, providing readers with an overview of its structure and conceptual complexity.

The map illustrates the thesis' four-part structure. Part I examines Sacred Consumption, examining how electronic music devices become sacralized through processes like Contamination, Investment, and Quintessence, while facing profaning forces from mass production and habituation. Part II analyzes Symbolic Sound-Producing Gestures (SSPGs), investigating how Context, Technique, Instrument, and Sound in music performance interact to create symbolic meaning. Parts III and IV develop the concept of Grotesque Numinosity, exploring how electronic music devices in my artistic works oscillate between sacred and profane representations to ultimately converge toward the Numinous.

For definitions of each term in this map, see the glossary in Appendix C.



Chapter 1

Introduction

The Paradox of Sacred Technologies

Modern media fire up magical or animist perceptions by technologically stretching and folding the boundaries of the self; these perceptions are then routinized, commercialized, exploited, and swallowed up into business as usual. To tune in to such fears and glimmerings, you need to crack open the mundane casing of ordinary technologies and trace their archetypal wiring.

— Erik Davis (1998, 83)

When I first began this research, simply mentioning the title to friends and colleagues often sparked amusement or surprise. These two words, sacred and technology, seem to belong to opposite realms: the sacred and the profane.

I see technology today as marked by two characteristics that tend to pull it into the profane: its habituation (it becomes ordinary for the consumer through daily use) and its origin in mass production, where objects are endlessly manufactured.

For example, this Apple MacBook Pro on which I am writing this thesis could not be more profane for me, a piece of hardware that is used in my everyday work as a utility. And yet, many parallels exist between such objects and sacred ones. Marketing professor Russell Belk goes so far as to write:

The Mac and its fans constitute the equivalent of a religion. This religion is based on an origin myth for Apple Computer, heroic and savior legends surrounding its co-founder [...] Steve Jobs, the devout faith of its follower congregation, their belief in the righteousness of the Macintosh. (Belk and Tumbat 2005, 207–8)

It is easy to dismiss such claims as mere metaphor or exaggeration. However, they reflect a deeper reality. As Erik Davis argues in *Techgnosis* (1998), communication technologies like the Mac can be considered sacred. For Davis, much of this sacred dimension lies in the ways that these technologies reconfigure the user’s identity by “stretching and folding the boundaries of the self.”

What may have been a mythical moment during the launch of a truly transformative technology, like the first Mac, quickly becomes profane, or in the words of Davis “routinized, commercialized, exploited, and swallowed up into business as usual.” However, Apple’s marketing continues to cultivate the illusion that each new release is an event of profound and stellar significance, where the new Mac is always the best computer ever made, or, in the words of Apple during a recent release: “the best computing experience on the planet” (Apple 2024).

This is a glimpse into the paradox of 21st-century technology: utterly profane in its production and use, its transformative power reduced to routine, its mass-produced origin concealed beneath an advertising veneer. At the same time, advertising such as Apple’s seeks to elevate products to a sacred realm. Paradoxically, these processes within consumer culture both obscure and reveal different aspects of the sacred dimensions of technologies.

It is within this entanglement that my research unfolds. In this thesis, I examine how my practice as a composer of instrumental music theater can articulate this entanglement of the sacred and the profane in the context of contemporary consumer society. This articulation is attempted through artistic explorations with Grotesque and Numinous representations of electronic music devices in three musical performances.

1.1 Representing Technology as Sacred

Throughout this thesis, I use the term electronic music devices to denote the physical, electrically powered objects that musicians employ, focusing especially on the electric guitar, amplifier, and loudspeaker. As I will argue, technological objects such as these are always drawn back to their more profane representations, making their depiction as sacred inherently Grotesque: a term I will define as the clash between sacred and profane representations in chapter 2.

Therefore, a large portion of this thesis focuses on how they are represented as sacred. I argue that the basic sacralization mechanism is a form of Contamination, where electronic music devices become sacred simply by connecting to pre-existing ideas of the sacred across multiple Domains of Sacred Technologies.¹

Domains of Sacred Technologies

Electronic music devices such as the loudspeakers are simultaneously consumption objects, musical instruments producing sounds, symbolic objects that can be interacted with as part of an instrumental music theater performance, and electronic communication technologies extending the human self, as argued in *Techgnosis* (Davis 1998).

Each facet of these objects connects to different Domains of Sacred Technologies: the different contexts where technologies can be represented or experienced as sacred. A Domain is a bounded field of experience within which a specific logic, set of symbols, or mode of action prevails. Each Domain has its own set of rules. What counts as sacred or profane inside one Domain may be profane or irrelevant in another, which is one reason why the sacred and profane feel entangled in these objects. Thus, I delimit these different Domains of Sacred Technologies by dedicating one chapter per Domain, focusing on the connections between the objects and ideas of the sacred within each Domain.

Chapter 3 is dedicated to the Domain of Sacred Consumption. It looks at how consumption objects become sacred. The processes through which consumer objects acquire sacred status, known as *sacralization processes*

¹See the Glossary in Appendix C for definitions of all key conceptual terms.

(Belk, Wallendorf, and Sherry 1989), are particularly relevant to this discussion, as similar dynamics can be observed in the representational space of theater and musical performance.

Chapter 4 is the first of four Interludes (see also chapters 7 , 10, and 13), where I begin to trace an evolving notion of symbolism. I will briefly elaborate on these Interludes below.

Chapter 5, Domain of Sacred Sounds, looks at these object as musical instruments from the point of view of absolute music (Dahlhaus 1991, 1928), where music is seen as a non-symbolic inner experience. I argue, drawing on Lévi-Strauss's idea of music as myth (Lévi-Strauss 1964), that this very non-symbolism is one of the reasons why music, and the instruments producing it, can be perceived as sacred: an effect reinforced by the ritualized context of the concert hall (Small 1998). In this view, music embodies a kind of purity or transcendence precisely because it escapes fixed meaning and because of how it latches onto the emotions.

Chapter 6, Domain of Sacred Symbols, explores how musical instruments become sacred for the audience of instrumental music theater. Once the door to symbolism is open, musical instruments, including electric ones, can connect to diverse ideas of the sacred, as I will show in the chapters concerning the three artworks.

Two chapters explore how technologies, by Channeling Energy, can supercharge the experience of the Numinous, a key concept related to sacred experiences. Chapter 8 will define the Numinous as a blend of awe, dread, and a sense of mystery, which music is particularly well suited to evoke. Chapter 9 will examine sound amplification, focusing especially on the performance practice of Sunn O))). In this Domain of Sacred Amplification, I will examine how the extremely loud, bass-heavy music for which this drone metal band is famous serves as a powerful vehicle for creating numinous impressions.

These chapters are central to parts I, II, and III of the thesis, which will form the theoretical foundation for the analysis of the artworks in part IV.

Reading *Techgnosis* (Davis 1998) was an “aha!” moment in my research. It was through this book that I discovered my own intention for this thesis. This is reflected in how these chapters, by examining the connections between electronic music devices and ideas of the sacred through the Domains

of Sacred Technologies, align with Erik Davis's aim in *Techgnosis*: "to crack open the mundane casing of ordinary technologies and trace [the] archetypal wiring" of electronic technological devices.

Symbolic Representation

In order to connect objects such as loudspeakers to ideas of the sacred, I use symbols. Whether through the sounds loudspeakers produce, the ways performers interact with them, or the historical and cultural references they carry, these devices can evoke multiple connotations that connect them to the sacred. I define symbols as the sum of these connotations.

Parallel to the division of chapters into different Domains of Sacred Technologies, I make a division into parts, which reflects an evolving perspective on the symbolism of musical performance. As this notion of symbols develops, I have inserted the Interludes to extend and prepare the application of the concept for the next Domain.

In part I, I provide the context of consumer culture and, in doing so, establish the basic mechanisms of sacred representation, which I conceptualized as a form of Contamination.

In part II, I gradually unfold the possibilities of symbolism in musical performance. It begins with the notion of absolute music, where music is considered non-symbolic. I then explore the symbolic potential of sound by examining practices such as program music and *musique concrète*. With the genre of instrumental theater, the focus shifts from the symbolism of sound to the symbolism of music-making. My concept of Symbolic Sound-Producing Gestures broadens this horizon even further. I develop it to emphasize the symbolic dimension of musical performance. It emphasizes an approach where music is a multimodal experience, categorized into four Symbolic Channels: Instrument, Sound, Technique, and Context.

In part III, I explore the Numinous, which I define as a non-rational experience. In this context, symbolism cannot work solely as a rational play of association by using what I call Clear Symbols, a process central to the concept of Contamination. On the contrary, this type of sacred representation is characterized by Opaque Symbols, best illustrated with the notion of the Animated Hieroglyph, a concept I borrowed from Antonin Artaud ([1938] 1958). Here, symbols do not refer directly to ideas of the

sacred; rather, they are sacred because they can potentially induce a sacred experience. There is an intriguing tension with the concept of representation, as the sacred revealed by these symbols is no longer merely an idea but can become an experience.

Artworks

In part IV, I examine my artworks. Each of my performances uses an electronic music device as a starting point for expanded symbolism. The objects (the electric guitar, amplifier, and loudspeaker) respectively serve as the foundations for the three artworks *Le Refuge des Cordes*, *Electric Unconscious*, and *Loudspeaker Baptism*.² Each chapter presents one of the artworks and also offers a specific perspective on symbolism.

In chapter 11, I place greater emphasis on how Symbolic Sound-Producing Gestures are created in *Le Refuge des Cordes*. Four parameters (Opacity, Salience, Dynamism, and Multimodality) are used to analyze the process that led to the main gesture, in which a musician is suspended two meters in the air, striking the amplified strings with a feather.

In chapter 12, I focus specifically on one particular musical gesture: the turning On and Off of sound amplification, and how its meaning and symbolism evolve throughout the dramaturgy of *Electric Unconscious*, ultimately leading to an experience of awe and dread.

In chapter 14, I use the concept of Grotesque Numinosity as a lens to explore the work *Loudspeaker Baptism*. Grotesque, because for me a loudspeaker, as a consumption object, enters the concert hall already loaded with profane connotations, but through staging it can be seen as sacred, generating what I call a Grotesque representation. Numinous because underlying these representations are attempts to create numinous experiences, which I have divided into two strategies: Animated Hieroglyphs and Channeling Energy, the latter being supercharged by the sound amplification inherent to the loudspeaker.

In that sense, the performances do more than merely “trace [the] archetypal wirings” mentioned by Davis (1998, 83): they *activate* them. The po-

²A Research Catalogue exposition supplements this thesis, containing videos of the performances as well as the video examples referenced therein. See Appendix B for all relevant links.



Figure 1.1: *Le Refuge des Cordes* (2020). Image by Maija Tammi.



Figure 1.2: *Electric Unconscious* (2023). Image by Maija Tammi.



Figure 1.3: *Loudspeaker Baptism* (2024). Image by Maija Tammi.

tential of these technologies to transform the self becomes actualized.

1.2 Methodological Approach

Scattered throughout this thesis are selected moments I call Anecdotes from the Field of Grotesque Numinosity: fragments of lived experience where the sacred emerges (or fails to) in the folds of the everyday. These anecdotes illustrate how the paradox of the sacred in the 21st century plays out in my daily experience and serves as models that I sometimes replicate in my artworks.

These Grotesque Numinous anecdotes highlight a key aspect of my methodology. I have a fundamental trust in the *doing*—the belief that profound knowledge can be uncovered through the act of making itself. These anecdotes serve as anchor points, moments when I know, even if I cannot yet put it into words.

Such serendipitous moments form a complement to the three performances, which act as true catalysts. Each performance emerged from years of intensive work and, as such, becomes a proposition for articulating the paradox of sacred technologies, with varying degrees of success.

Art helps me feel the world, to articulate the emotions surrounding the sacred and the profane, to give words to those feelings. This is what I can offer as an artist: a sensitivity to the world that I have tried to rearticulate in my works, making these feelings as concrete as possible. In this way, the paradox of sacred technologies can become something experienced.

In that sense, this thesis aligns closely with the growing emphasis on practice-based research in academia, where:

not only is practice embedded in the research process, but research questions arise from the process of practice, crucially placing the practitioner researcher at the centre of the research. (Vear, Candy, and Edmonds 2021, xxxii)

Writing then becomes a way to package, articulate, and reflect on that knowledge. Through regular note-taking and journaling, followed by a loose analysis of this material, I am able to gain a broader understanding and formulate the trajectory of this thesis. Theory and concepts come as a way

to move from artistic intuition to conceptual insight that can be packaged and communicated to a broader field with agreed-upon concepts.

This process can broadly be defined as autoethnographic method involving the analysis and critical reflection on life events (Ellis, Adams, and Bochner 2011), related to my relationship with technological objects and my experiences of the sacred. In this process, I have focused primarily on the Christian Roman Catholic tradition (a significant part of my religious upbringing) as a reference point for comparison. However, I have also had other spiritual experiences that inform my sense of the sacred, particularly with Zen Buddhism. For the sake of consistency, I have limited the examples to my experiences within Catholicism.

For me, research and art are inseparable. In my career as a composer, I have noticed that the research dimension grows in proportion to the scale of a project. What sets this doctoral research apart is the need for artistic research to align with the standards of academia, particularly in fields with established methods. “Research means taking part in a research tradition” (Hannula, Suoranta, and Vadén 2014, 17). The challenge lies in how to articulate this process, contextualize it, and connect it to existing research traditions.

However, throughout my studies, I did not feel a need to rigorously conform to established methods, except those mentioned. Rather, the fundamental principle I have tried to follow in this thesis is that methodology, especially in this highly personal account, comes down to making the research vulnerable by opening up its process as much as possible (Hannula, Suoranta, and Vadén 2014, 26). This involves making assumptions explicit in the writing, which I have tried to do in the next section and in the overview of the key concepts in chapter 2.

My Point of View

Throughout the thesis, I mostly focus on my point of view as a composer, working outside the time frame of the performance, crafting materials and arranging them into compositions. At times, this resembles a ‘composer’s kitchen’, offering insights into my compositional process.

These performances are documented by hours of rehearsal on video, which proved particularly helpful as an aide-mémoire while analyzing the

artworks in part IV. The videos allow me to observe how a Symbolic Sound-Producing Gesture emerged during the rehearsal process and how it evolves into its final form.

I also speak from the point of view of a performer, especially in *Le Refuge de Cordes*, which was a solo performance. However, this performer's perspective is more limited in *Electric Unconscious* and *Loudspeaker Baptism*, which were performed by kollektiv international totem and Sawtooth Duo. I cannot stress enough how central the collaboration with the performers of these works has been: both in the creation of symbolic, sound-producing gestures, often custom-made for specific performers, and in the development of dramaturgies. However, this is not the focus of the present thesis, and addressing it in depth would have overextended a work that is already challenging to keep together.

I also speak from the position of an audience member. This is, however, a biased perspective, as I have insight into my own intentions and experiences, and it is easy to project or "copy-paste" those intentions and experiences onto an imagined audience perspective. I generalized from my own perspective to that of the potential audience members. While this is a limitation on some of the claims I make, it narrows the focus of the research. My process of gathering feedback from listeners has been informal and far from rigorous, as conducting such a study would have required a level of investment and methodological rigor that would have significantly impacted my ability to pursue the core aims of my research.

For example, when I discuss the myth of consumption, there is an implicit sense that this myth serves as a framework for experiencing music, one that is shared by a majority of the audience within the context of Western music performed in a wealthy European country. To explore this, I have drawn on the theories of consumption developed by Baudrillard (1998) and Belk, Wallendorf and Sherry (1989), which I rely on to generalize from my own experience.

This focus on my own point of view is also sensitive when making claims about sacred experience. Although I frame sacred experience as context-dependent and acknowledge this as a limitation of the research, there remains an implicit assumption that what I experience as Numinous (and attempt to reproduce in the artworks) will somehow be communicated, if

not through explicit reference, then through experience.

Another sensitive point is when I analyze the symbolism of gestures and their multiple connotations in part IV. It is important at this point to emphasize that I do not claim any universality in what these gestures symbolize. In this sense, the symbolic analysis I offer may reveal more about my intentions and frame of references than actual audience perception. However, I believe that since some symbols (which I define as Opaque) are always in motion—shifting, layered, and unstable—simply pointing to the possible symbolism I attempted to convey, and in some way experienced myself, is sufficient for this thesis.

Each of the technologies that I will focus on carries latent symbolic meanings. Their histories and cultural practices can be drawn upon to produce both sacred and profane representations. Digging into their wirings reveals many possible connections to moments when, for someone, these objects became sacred.

While certain characteristics of sacred representations are more widely agreed upon, the sacredness of places, times, or objects is usually determined by a community through shared agreement; broadly defined the ideas of the sacred could be any elements that have held a sacred character for someone in the past, present, or even in a speculative future. I see the sacred as a construction shaped by individual experience and intrinsically tied to a contextual web of references, or what I will conceptualize as myth.

In fact, as I will detail, the artworks are eclectic in their plural references to various the ideas of the sacred. My understanding of what constitutes the sacred has been shaped both by my personal experience of religion and the sacred, and by anthropological studies on the repertoire of ritual practices and the ways some sacred objects are traditionally displayed and interacted with. Whether these ideas of the sacred are universally recognized or recognized just by me influences how many people will make the connection to the references. In the performances it is my role to provide context, as I often want the audience to recognize and understand the references.

That said, this is not to claim that the symbolic analysis is entirely subjective. To support it, I draw on autoethnographic data: my listening experiences, encounters with other artists' practices, and my personal relationship with sacred symbolism. At times, I also engage in cross-analysis,

such as referencing Coggins' study on mysticism in Sunn O))) (2018) concerts to reflect on parallels with my own work.

Preliminary Notes on Theoretical and Artistic Limitations

Before going into the theoretical framework, which will be the focus of the next chapter, I want to acknowledge certain limitations of the theoretical and artistic perspectives that will be presented.

To understand the paradox of sacred technologies, over the last eight years I have drawn primarily from anthropology, religious studies, musicology, and the history of technology. Each of these fields contributes to an understanding of the different Domains of Sacred Technologies examined in this thesis. A thorough analysis of each of these fields is not the goal; rather, the aim is to combine their complexities into a cohesive perspective. I have tried to stay focused on what best reflects the artworks, allowing the theoretical perspectives to serve and illuminate the creative practice.

The authors I rely on may appear outdated, are predominantly male, and have rightly been criticized for their colonizing and patriarchal perspectives. It is, in many ways, a boy band of Eurocentric thinkers: Durkheim, Jung, Lévi-Strauss, Kagel. While I have made efforts to nuance their ideas and remain critical of their limitations, I cannot escape the fact that this theoretical framework is shaped by a particular historical and cultural legacy. These thinkers have nonetheless offered concepts that resonate with my artistic experiences, even as I remain aware of the exclusions and blind spots they carry.

I think in oppositions. Throughout this thesis, the reader will encounter numerous oppositional pairs: sacred and profane, Clear and Opaque, Cheesy and Raw. It is important to remember that these oppositions are always two poles on a continuum. Even in the case of the sacred and the profane, which, for Durkheim, represented the ultimate dichotomy, there are always gray areas, nuances, and moments of ambiguity. Oppositions function as heuristics: tools that can offer clarity, if only temporarily. But they are also traps, prone to oversimplification.

Another limitation of this approach is that attempting to label my work can result in an excess of terminology. While this was a necessary phase of my research, I eventually reached a “categorical wall” where labels became

inadequate. My response to this limitation is most evident in the concept of Grotesque Numinosity, which functions not as a precisely defined object but rather as an aesthetic lens through which to view and reflect upon the artworks.

Concerning the artistic framework, a few notes are necessary at this point. Throughout this research I have encountered extensive literature on rituals and sacred music within the field of anthropology. In this context, music is often made subordinate to text, with the sacred typically mediated through language. This is one reason why, although my works also involve speech, I have chosen to focus this thesis on the instrumental, deliberately leaving language out of the equation.³

Moreover, I want to emphasize that not all contemporary artworks are symbolic. I focus on a subset of works, including my own, where symbolism is intentionally foregrounded. However, many artistic practices deliberately resist such frames. The practice of absolute music, mentioned especially in chapters 5 and 6, is a good example of a non-symbolic artistic practice addressed in this thesis.

Lastly, I have attempted to contextualize my practice within other artistic practices by citing numerous artworks. This list of artworks constitutes a kind of artistic literature review, which is dispersed across the thesis. However, I have not found works that address consumption as sacred within the realm of music theater in the way I approach the theme in my work *Loudspeaker Baptism*.⁴

The theme of consumption as sacred is, however, a recurrent one in the visual arts (for example, in Banksy's *Christ with Shopping Bags* (2004) and in Wim Deloye's *Ring Dual Corpus* (2011)). I will not, however, discuss how this theme has been addressed in the visual arts, as this is better done elsewhere, such as in Crow (1996) and to some extent in John Berger's popular BBC series *Ways of Seeing* (1972).

³That is despite the fact that one of the artworks is an opera, a form with its own logic of sacralization and a historical engagement with sacred themes, an aspect that is not addressed here. In this context, the role of singing as sacralizing has been discussed by Pouradier (2023).

⁴I have, however, found musical works that directly engage with the theme of consumption. For example, *Charts Music* (2009) by the new conceptualist composer Johannes Kreidler sonifies graphs from the 2000s market crash. Another example is my colleague Uniarts Helsinki, Ville Raasakka's *Benzene* (2019), which combines video from 1980s soap advertising with abstract sounds played on a violin.

Catching Frogs

When I was five years old, I went out to catch frogs in a marsh. I remember standing at the edge of a small pond, observing the frogs on the other side. Wanting to get closer, I made my way around the water, until, without fully realizing how, I found myself standing on a patch of floating vegetation.

As I stood there, the ground shifted beneath me. It was soft, alive, unstable. I remember the sensation of being unable to move, frozen in a state between curiosity and fear, wonder and uncertainty. On this undefined terrain, neither water nor ground, my the sense of the real was shaken. My father eventually noticed and helped me back to firmer ground.

This thesis feels like that moment. To catch the flashes of knowledge, I have had to step off firm epistemological ground and onto something less stable. The artworks raised questions: What is ritual? How is electricity unconscious? How can one baptize a loudspeaker? These cannot be answered from a fixed position, but ask that I stand on unstable terrain and pursue experiential and reflexive knowledge.

In the next chapter, I will continue to uncover the implicit assumptions that have grounded my thinking by examining the key concepts central to this research.

Part I: Myths, Key Concepts, and Sacred Consumption

Anecdote from the field of Grotesque Numinosity

Technical Problem During My Crucifixion

It is dark. I'm getting ready. Layered with clothes. I spent the last days preparing for this. I built my own cross and now it is time. A group of people is waiting for me. I'll be leading the way. We are heading toward a small hill. There's a tiny church up there, and this is where it will happen.

The cross is heavy. We start walking. I'm worried that one of the 10-inch nails I stuck into the wood will hit someone in the darkness. It starts to go uphill. I take a deep breath and head for the climb. I slip and fall. People try to help me up. But I'm fine. I'll manage. I know the way. But I'm starting to sweat under all these clothes.

We arrive in front of the church. I lean my cross against two trees and go to kneel in front of the cast-iron fire bowl, which holds a pile of wood ready to be lit. The fire pit stands between the cross and the church, with a second woodpile beside it to keep the fire going during the ordeal.

While I light the fire, the group begins spinning pine branches, creating a soft spatialized "swoosh" sound that blends with the wind in the trees. The fire is lit, and I go sit inside the church for a while.

Someone knocks on the door. That's the signal. The cross is ready. It has been secured, and two people are waiting for me. I climb the ladder, place my feet on the footrest, and extend my right arm. It will be the first to be tied. A thick rope is used. Then the left arm. Then the legs.

The two helpers leave me alone on the cross, in the middle of a forest. The fire burns below, illuminating both the church and my body. The air

is fresh, around -1°C . It feels good to be at the height of the trees. From here, I can hear the wind in the pines much more clearly.

The group is stationed about 500 meters away, in a small hut. One by one, each person will come, burn their pine in the fire, and leave. Between each visitor, I have about 20 minutes alone in the forest. Some of them, Christians, kneel and cross themselves when they arrive. This was part of the plan.

On the cross, I feel a rush of emotions. In fact, I've never cycled through so many so quickly. First, embarrassment. What am I doing here? Then I try to remember my intention and breathe. Joy, sadness, anger, pain, fear.

Fear. The cast-iron bowl is heating up. It stands directly on the forest floor, and I can see that the ground beneath it is beginning to catch fire. Panic. I imagine the nearby woodpile igniting, and then the whole forest. I'm tied. Alone. What if I fall into the flames? I see visions of myself on the cross surrounded by fire, the tiny church burning behind me: a perfect metal album cover.

There's no safe word here. No way to signal nuance. It's not a big fire, and the ground is frozen. It's November, the forest is wet. But I only have one option to limit the danger: I scream.

I try to make it sound like a "not so urgent, but maybe come check" kind of scream. But it fails. It sounds like I'm dying.

Down there, half a kilometer away. They hear me and immediately think the same. This is Charles and he is in grave danger. Run. No more moody old fashion candle lanterns. Take your LED head lamps and run through the forest as fast as possible. Charles in is Danger. He fell into the fire.

They all arrived out of breath. All ten of them. Looking for a danger now nowhere to be found. The mood is broken. This crucifixion ritual has failed.

At the sight of them, I feel shame, embarrassment, but also warmth. They ran because they cared. They exhausted themselves for me. I feel their eyes asking: Why did you scream? I point with my nose to the fire pit.

They calm down. We decide to continue, but this time, someone will stay with me.

The real ritual wasn't where I expected it would be. The technical

problem unveiled the true ritual. This whole thing felt like a representation until I screamed. I wasn't on the cross but acting as if was.

But when they came, breathless, worried: it felt real. Something opened. The ritual wasn't about this mock up crucifixion, which at time felt a bit ridiculous. It revealed the underlying, bonds of our small community we had created in the past month, each person, caring for each-other.



Figure 1.4: D.I.Y Cross (2018). Image by the author.

Chapter 2

Overview of Key Concepts

This anecdote takes me back to the beginning of my journey in 2018. The crucifixion took place during a course at the University of the Arts Helsinki led by Eero-Tapio Vuori, titled *Ritualistic theater*. The three-week intensive course combined theoretical and practical work, culminating in a final week spent in a secluded forest. Each participant was required to prepare a ritual in close consultation with the workshop leaders, with particular attention to ethical and safety considerations.

In this chapter I use the anecdote of my crucifixion as an entry point to several key concepts that have underpinned this research from the outset, such as the sacred, myth, and ritual. This experience also foreshadowed ideas that later became central to the thesis, including Grotesque Numinosity and technological failure.

This overview is not exhaustive, as I will explore these concepts further in the following chapters. Its purpose is to lay out the basic assumptions that underpin my thinking throughout the thesis.

Certain concepts are also explored in dedicated chapters. Most notably absent from this preliminary discussion are the roles of representation and symbolism, which will unfold in the Interludes A and B. Also omitted here is my practice of instrumental music theater, which will be addressed in chapters 5 and 6, as well as the focus on the experience of the Numinous, which will be explored in chapter 8.

2.1 Sacred

In this thesis, the sacredness of technology is discussed from three points of view:

1. Technology as an embodiment of society (Durkheim [1912] 2009).
2. Technology as a channel toward the sacred experience of the Numinous (Otto [1917] 1923).
3. Technology as a sacralized consumption object (Belk, Wallendorf, and Sherry 1989).

The aim is not to formulate a unified theory of the sacred, but to draw on the theoretical frameworks that best illuminate the sacred dimensions of the electronic music devices used and the ways in which the sacred is represented in the artworks.¹

The Elementary Forms

In this section I focus on the first dimension, examining Émile Durkheim's classic work *The Elementary Forms of Religious Life* ([1912] 2009). The other two points of view will be addressed later in this thesis.

When I began this research, exploring the concept of the sacred quickly became complex and disorienting. Durkheim's dichotomy between the sacred and the profane offered a clear starting point. The sacred is here not only defined in opposition to the profane, but also represents the ultimate dichotomy:

There is no other example in the history of human thought of two categories of things so profoundly differentiated or so radically opposed to one another. (Durkheim [1912] 2009, 38)

The distinction rests on an experience of things in which “the feelings that sacred objects inspire in us differ fundamentally from those we have

¹In this thesis, I am primarily concerned with technologies as physical devices rather than the psychological “technologies of the self” emphasized by Foucault and others. Within the latter framework, the sacred or ritual could be treated as technologies “which permit individuals to effect by their own means [...] a certain number of operations on their own bodies and souls, thoughts, conduct, and way of being, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality” (Foucault 1988, 18).

toward ordinary physical things.” These “ordinary physical things” are profane objects, which Durkheim characterizes by how their “empirical qualities manifest in everyday experience” ([1912] 2009, 160).

This distinction seems paradoxical at first, since in Durkheim’s framework it seems like nothing is easier than transforming a simple piece of wood into a sacred one. As an example, *Churingas*, which are sacred objects for the Aranda, an Aboriginal people in Central Australia, only differ from their profane version by a simple mark on the object. Durkheim writes: “this mark, and this mark alone, confers their sacred character” ([1912] 2009, 322). Yet, for this mark to be sacred, it has to be supported by a community that integrates this marked object into their myths, beliefs, and rituals. Objects in themselves are not sacred unless they are integrated into a broader structure, which for Durkheim is society.

On the one hand profane objects only evoke themselves or their “empirical qualities,” while sacred objects evoke the whole society with its myths, community, and institution that is embedded in these objects. As a result, “we feel as though we are engaged in two distinct realities, separated by a clearly drawn line of demarcation: the world of profane things on the one hand, the world of sacred things on the other” ([1912] 2009, 160).

By embodying society, sacred objects in religions can acquire what he calls moral authority. He writes: “An individual or collective object is said to inspire respect when the conscious representation of it is endowed with such power that it automatically stimulates or inhibits behavior” ([1912] 2009, 155). In this sense, an object gains moral authority through a process “fortified by the numerous individual representations that have shaped them” ([1912] 2009, 155).

I can relate to Durkheim’s explanations when I think about my experience in churches, as I will detail, however succinctly, in chapter 8. When I see the image of Christ on the cross, it brings with it the whole baggage of Christianity, as if I were part of this story.

From Totemism to Consumption

Durkheim’s study is especially focused on totemism, which he understood as “a kind of anonymous and impersonal force [...] immanent in the world, diffused throughout a multitude of things” ([1912] 2009, 140–41). This

invisible power is almost like a viral force that could infect the sacred and profane it. For Durkheim, contagion emphasizes, rather paradoxically, that the sacred and profane, while being the ultimate separation, can easily flow into one another. “Far from remaining attached to the things marked as its own, the sacred is endowed with a kind of fluidity” (Durkheim [1912] 2009, 237). The notion of contagion resembles the concept of Contamination, which is central to my argument and will be addressed in chapter 3.

The “fluidity” of the sacred highlights the fact that the rules surrounding sacred objects are very strict. In that context, the function of rites and rituals is to enact these rules. Thus, the sacred is what is set apart. Durkheim’s sacred is set by its function within a social framework: a thing is sacred because society marks it as such through rituals.

Durkheim’s definition has been criticized for, among other things, its circular logic, where the sacred and religion (or society) justify one another. The sacred is equated with society, and society is what creates the sacred. This circularity is also reflected in my own argument developed in chapter 3, where objects become sacred in my performance because they are associated with ideas of the sacred.

One way to escape from this circularity is to root the sacred in experience, a dimension that became central to Mircea Eliade’s distinction between the sacred and the profane (1959). This is where the notion of the numinous, as coined by theologian Rudolf Otto ([1917] 1923), becomes significant. I will dedicate chapter 8 to this notion, but for now I define the Numinous as a non-rational experience of the sacred that blends feelings of awe and dread with a sense of mystery.

The Numinous does not negate Durkheim’s definition of sacred objects as embodiments of society; rather, it adds something extra. As an object to be sacralized, the loudspeaker can be viewed both from Durkheim’s perspective and as a source of numinous impressions.

Perhaps more importantly, the loudspeaker is a consumer object with its own sacralization logic that intersects with Durkheim’s. While circularity has been a common criticism of Durkheim’s theory, in the realm of consumption this circularity is amplified, prompting Baudrillard to theorize consumption as a self-fulfilling process (1998). Sacred Consumption operates through representational means, a dynamic that is useful for this

research because it also illuminates how the sacred is represented in theater and in my performances.

Durkheim provides a productive starting point for this research because he conceptualizes the sacred not theologically but as a social phenomenon that can be interpreted in both secular and religious contexts. This conceptual flexibility allows his framework to be applied to the electronic music devices central to this project. Moreover, the sacred/profane dichotomy has been foundational to studies of Sacred Consumption (Belk, Wallendorf, and Sherry 1989).

While I can still relate to Durkheim's sacred/profane dichotomy, especially through my experiences with organized religion, I feel that the concept of Sacred Consumption, while complicating this relationship, also enriches it. It offers a more nuanced and resonant way of describing my experiences and observations of the sacred in everyday life. The boundaries Durkheim described have not disappeared; instead, they have become entangled with each other. This thesis explores this entanglement, which can at times feel disorienting: the sense of the sacred shifts with the observer's perspective. I will conceptualize these different points of view as myths.

2.2 Myths

In preparing for the crucifixion, I had shared my intention with the community, a group of ten students and teachers. I framed the ritual as a sacrifice: a letting-go, a giving of the self, a connection to the image of Christ on the cross. But when a technical problem disrupted the performance, it shattered the illusion. In doing so, it revealed a deeper layer: the connection between people, the bonds within our small community, our shared belief in the importance of caring for one another.

This moment showed me that the intentions that led me to plan and set up this ritual lay beyond my conscious grasp. Beyond the Christian symbolism, what seems more important in hindsight was the relationship between myself and the group, and the way I had placed myself in a vulnerable position: alone, exposed, in an isolated setting.

While it is possible to plan rituals that engage with the fundamental dynamics of a group, this experience revealed to me that rituals have multiple

layers, shifting with the perspective from which they are viewed, and often operating on levels that can be unexpected and surprising.

On the cross, when they all came with their LED headlamps, it felt as though there were two perspectives, two myths playing out during the ritual. The technical problem came as a way to break the frame of the first myth, which was connected to my intention, and reveal a deeper myth.

Secular Myths

Traditionally, a myth is a story, often involving gods and supernatural beings, that seeks to explain aspects of the world. From an outsider's perspective, myths may often appear nonsensical; however, within a community a myth can form a coherent worldview, shaping beliefs, behaviors, and social structures.

However, in a secular society, myths in this sense have largely disappeared. Secularization, as Charles Taylor argues, is the broad historical process that first catalyzed the shifting relationship between the sacred and the profane in Western society (Taylor 2018). It underpins the transformation of religion from an all-encompassing worldview into one possible choice among others. As religious institutions lost authority, belief became individualized, and myth began to migrate.

Throughout this research, I aimed to engage with myths that have shaped both who I am and the society I live in. I sought to understand my own story and interact with it through the performances I created. In this thesis, while I frame my experience of the sacred within a Christian tradition (though with some reservations), my understanding of myth and sacred experience is largely approached from a secular perspective. In doing so, reading Durkheim's book was crucial.

While Durkheim participated in the colonial mindset by ranking religions according to their level of development, explicitly choosing totemism because it was, in his view the "simplest religion" (Durkheim [1912] 2009, 3), he also had the foresight to apply his method reflexively. He drew analogies between Indigenous totemic practices and the symbolic structures of French republican society. This led to surprising readings: flags, street demonstrations, and secular ceremonies as modern forms of totemism, sustaining the nationalist myth (Durkheim [1912] 2009, xvi–xv).

Durkheim saw himself as standing at the threshold of a transformation toward secular society, witnessing the gradual shift of sacred meaning from traditional religious structures to other domains of social life. He recognized that “we are in a period of transition and moral mediocrity” ([1912] 2009, 322). Durkheim wrote this in the aftermath of *L’affaire Dreyfus*, which divided the French nation. He then saw vividly the religious nature of secularism emerge through the public demonstrations defending the rights of the individuals and values of the enlightenment.

In this secular context, myth evolves into a narrative of collective identity such as nationalism. Myth is not merely a tale of supernatural origins; it is a symbolic framework that anchors a society’s values. It performs a social function by uniting and guiding groups. Every community possesses its own myths that fulfill this foundational role.²

In *The Elementary Forms* ([1912] 2009), Durkheim calls this idea “collective representations,” while the term *myth* largely remains defined in its traditional sense. However, many scholars after Durkheim now employ the term myth in a more modern way, as “a popular belief [...] embodying the ideals and institutions of a society” (Merriam-Webster, n.d.-b).³

For a more or less secular reader like myself, Durkheim’s use of religious language to describe secular society can be surprising. But, the more I thought about it, the more it began to resonate with my own experience. I remembered the student protests I joined in 2012 during the *Printemps Érablé* (Maple Spring), a mass student movement in Québec against the rise in tuition fees. I became actively involved in demonstrations and democratic debates within the student union at the Conservatoire de Musique de Montréal, where I was studying. Marching in the streets every day, singing, and upholding the values of free education, I experienced a profound sense of belonging to a community. A hundred years after Durkheim and its analyses of the protests around *L’affaire Dreyfus*, I found myself puzzled by

²Similar to the evolution of myth described here, the concept of ritual has been increasingly viewed through a secular lens following Durkheim (Moore and Myerhoff 1977). While the framework of “secular ritual” offers a well-established entry point for analyzing non-religious ceremonies—such as the classical music concert explored later—this thesis prioritizes the lens of Sacred Consumption. In my view, Sacred Consumption better reflects the sacralization processes surrounding electronic devices, which relies on representational means akin to those employed in theatrical space (see chapter 3).

³Another modern usage of the term denotes “an unfounded or false notion” (Merriam-Webster, n.d.-b), which is not pertinent to our discussion here.

certain behaviors during these protests, something I started to compare to experiences I had in a religious context.

During my crucifixion, my scream triggered an instant reaction in the group. Without thinking, they all rushed across the dark forest. I see this instant reaction based on how the group views the world and their place in it. How they value life over death. How they value friendship. No deliberation is required because the appropriate response is already inscribed in the collective consciousness.

What Durkheim stirred in me was a desire to understand the myths that have shaped who I am. Myths are woven into my identity and worldview: so ingrained and taken for granted that they often exist as unconscious beliefs. These beliefs, deeply ingrained, is what myth is for me. These were the myths I wanted to engage with in my rituals. Durkheim's book gave me the impulse to take a step back and reflect on the belief systems I am part of. This process, particularly in my attempt to understand the myths and stories surrounding technology and music performance, led me to explore the myth of consumption, which I will explore in chapter 3.

Engaging With the Myths of the Concert Hall

In a secular society, myth seems to have evaporated. Following Lévi-Strauss in his *Mythologiques* (1964), I will trace the hypothesis in chapter 5 that myth migrated to the concert hall.

The concert hall will serve as the primary context in which I situate most of the myths.⁴ I view myths as multilayered, with multiple narratives coexisting: sometimes competing, sometimes reinforcing one another. These include, for example, the myth of good versus evil embedded in the sonata form and the myth of reason underpinning its structure (Small 1998), which I will discuss later. Central to this thesis is the myth of consumption, which is the myth I chose to engage with most fully.

⁴I chose the concert hall as a general context within which to situate this theoretical research. I made this choice even though the artworks themselves are not presented in concert halls but rather in galleries, black boxes, and opera houses. Nevertheless, these contexts, and the way I use them through staging, maintain a meaningful relationship to the concert hall, particularly in terms of seating arrangements, ticketing, and lighting. Furthermore, the classical music concert has been extensively studied, providing a rich field of reference.

I use the concept of myth to designate the grand narratives (religious or secular) into which values are embedded. These narratives are often implicit; consumption, for instance, is an unnoticed aspect of my life. Occasionally, myth can surface as explicit stories, which is where I situate my role as a composer. Following Karen Armstrong, in *A Short History of Myth*, I see myth as a creative act. Armstrong concludes by calling on artists and poets to embrace a “priestly role” in creating and reshaping myths (Armstrong 2006, 160). I see my practice as trying to excavate these implicit stories from the unconscious, bring them to the surface, engage with them, and perhaps transform these grand narratives. In this sense, the term ritual, rather than performances, may be more appropriate, as it has traditionally been the means by which societies engage with myths.

2.3 Ritual

I started this doctoral project with the intention of creating new rituals, such as the crucifixion described above. I saw ritual as intimately tied to the notion of the sacred. In my experience as a Catholic, it is through ritual that the sacred is upheld, or that the profane is transformed into the sacred.

While I felt there was a link between my artistic practice and ritual, it was hard to pinpoint. One particular definition of ritual, introduced to me rather arbitrarily during a 2020 university workshop titled *Ritual and Sound*, felt particularly useful. Paul Post, a professor of ritual studies at Tilburg University, defines ritual as:

a more or less repeatable sequence of action units which, take on a symbolic dimension through formalization, stylization, and their situation in place and time. On the one hand, individuals and groups express their ideas and ideals, their mentalities and identities through these rituals, on the other hand the ritual actions shape, foster, and transform these ideas, mentalities and identities. (Post, Molendijk, and Kroesen 2011, 18)⁵

⁵The notion of sacred is not explicitly mentioned in the definition, since Post is more concerned with ritual forms in modernity, especially outside traditional religious contexts. However, I interpret “the ideas and ideals, their mentalities and identities” as secular concepts tied to the notion of the myth as explained previously.

What I found particularly useful in this definition is that it gave me answers to why I felt my performances were ritualistic but also gave me a direction to how I could engage more fully with creating rituals.

I see this definition as a four-level structure, where each level builds upon the previous one.

- Level 1 – Repeated Actions: Rituals are “repeatable sequences of action.” To me, this is the most mundane definition of ritual, and one that often came up in my casual conversations with friends and colleagues. In these conversations, brushing one’s teeth every morning, for example, was frequently described as a ritual.
- Level 2 – Symbols: Rituals are actions, which “take on a symbolic dimension.” A large portion of this thesis emphasizes the centrality of symbolism in my practice and how these musical actions become symbolic in that context.
- Level 3 – Myth: Rituals are how “individuals and groups express their ideas and ideals, their mentalities and identities.” At this level, symbols are not isolated but are woven into a broader narrative or myth, giving them depth and coherence.
- Level 4 – Transformation: Rituals “shape, foster, and transform these ideas, mentalities and identities.” At this level there is a sort of alchemy between myth, symbol, and the context, and the individuals and communities experiencing the ritual. This level determines how deeply the ritual affects the participants: how much the story aligns with and shapes their worldview.

For most of this thesis I will use the concept of ritual as situated between the 2nd and 3rd levels, as a symbolic action that expresses myth in a limited way. I will address ritual in this general sense, particularly when discussing the role of ritual behavior in Sacred Consumption.

However, the term ritual is also used in relation to my artworks, which I would situate, at least in their intention, between the 3rd and 4th levels.

Throughout this research, as I personally worked through each of these levels in my performances, I encountered increasing difficulty in creating

rituals. The 1st and 2nd level come as a natural way of my practice of instrumental theater. Composing a score of symbolic actions has been central to my work over the past decade. This is reflected in my crucifixion anecdote, which is full of symbolism. The cross, the pine trees, the fire, and actions such as burning the pine trees or being crucified all carry symbolic meaning. It is on this level that I felt most vividly the connection between my artworks and rituals.

Getting to the 3rd level was a task much more complicated for me as I attempted to create new rituals. How do my rituals interact with myth? The myth a ritual engages with is very complex. Especially when, in the aftermath of that crucifixion, I became convinced that what truly happens in ritual may be entirely different from what appears on the surface. This thesis is an attempt to articulate these connections, especially to the myth of consumption.

Most challenging, however, is how my performances can foster and transform these “ideas and ideal” and move to the 4th level.

Transformation and the Liminal

While many rituals serve to affirm and uphold what is considered sacred, the most important characteristic of ritual for me is its transformative purpose. This is why I wanted to create rituals.

Transformation is something I personally attribute great value to, something that often occurs in my life, whether I seek it or not. This is one reason why I see rituals as both useful and necessary. Transformation can be difficult and even painful, and for me the most important function of ritual is to create frameworks that facilitate and support this process collectively.

In his classic book *Rites of Passage* (1909), Van Gennep systematically compared ceremonies that mark an individual’s transition from one status to another within a given society. He identified a tripartite sequence in these rituals: *separation*, *transition*, and *incorporation*. Victor Turner later expanded on Van Gennep’s work, introducing the concept of *liminality* and adapting the model into: *pre-liminal*, *liminal*, and *post-liminal* (Turner 1977).

Liminality is an in-between state, derived from the Latin *limen* (threshold). It represents a moment where cultural norms and identities are sus-

pended, creating the possibility for transformation (Turner 1977). Liminality is further characterized by two concepts that are intertwined: *communitas* and *anti-structure*.

On the one hand, *communitas* is a spontaneous, unstructured, and egalitarian bond between individuals that transcends social hierarchies and norms, fostering a sense of unity and collective belonging. On the other hand, *anti-structure* refers to the temporary suspension of normal social structures during certain events or phases, creating an unstructured state that contrasts with the hierarchical and rule-bound nature of society.

These concepts have been applied in theater as a way to create rituals that place the audience in a liminal space. Works such as *Dionysus in 69* (1968) by The Performance Group and Richard Schechner in the 1960s are exemplary in this regard. The group developed methods that moved the audience from passive observers to active participants.

I see the extent to which a ritual creates a liminal space as a marker of its transformative potential. However, if transformation is important to me, creating liminal spaces within my musical performances remains a significant challenge. I see liminality in performance as arising from the relinquishment of control, allowing participants to make their own decisions. It is something that can only be permitted to emerge. However, this is challenging, because my performances are usually thoroughly composed and pre-planned, leaving little room for such spontaneity.

Although liminal structures remain on the periphery of this research, the idea of transformation runs implicitly throughout. It emerges when I discuss sacred experience and the Numinous, both of which can be seen as a kind of transformative experience found in rituals. However, here too are strong limitations in how the artworks can deliver such experiences, which I discuss particularly in chapter 15.

Therefore, although ritual was central to the research, especially at the beginning, it occupied progressively less space in my drafts leading to this thesis, as I try to reflect on how much the artworks interact with this notion. *Le Refuge des Cordes* was initially framed as a ritual, yet, like the crucifixion, I felt it ultimately failed in that role, albeit for different reasons. Nevertheless, these ritual attempts became anchor points in my research, helping me better define my practice in relationship to ritual.

Despite the artworks' limitations in creating liminal spaces for audiences, the concept of liminality remains valuable as an in-between space. In the artworks, much of the effort is directed toward placing technological objects in a liminal zone, where they appear Grotesque, suspended between the sacred and the profane.

2.4 Grotesque

The clash between sacred and profane representations, when they are juxtaposed, layered, or forced into contact, is what I refer to as the Grotesque. This concept draws from the architectural term used to describe gargoyles and other monstrous figures on sacred buildings such as French Gothic cathedrals.

In contemporary usage, *grotesque* typically describes what is bizarre, monstrous, deformed, or repulsive. Yet, the term also possesses a rich aesthetic and conceptual history, explored in Mikhail Bakhtin's *Rabelais and His World* ([1965] 1984). Bakhtin identifies the grotesque as a central feature of Renaissance literature, especially in François Rabelais's works such as *Gargantua* (1534). Bakhtin introduces the concept of "grotesque realism," which emphasizes the body as a source of the grotesque.

The body, as characterized in Renaissance idealism, embodied harmony, proportion, spiritual beauty, and rationality. Bakhtin analyzes how the grotesque emerges from the contrast between this idealism through its association with biological reality. In his view: "the essential principle of grotesque realism is degradation, that is, the lowering of all that is high, spiritual, ideal, abstract; it is a transfer to the material level, to the sphere of earth and body in their indissoluble unity" (Bakhtin [1965] 1984, 19–20). For Bakhtin, sacredness is only one form of the "high," which the grotesque brings down into contact with bodily life and material reality.

The goal of my artworks can be seen as a way to create situations akin to the "carnavalesque," as Bakhtin describes it, which is the social context in which such grotesque imagery operates: a temporary inversion of hierarchies, a suspension of norms, where kings become fools and fools become prophets. This is recalled in the works of Rabelais, who "recreates that special marketplace atmosphere in which the exalted and the lowly, the sacred

and the profane are leveled and are all drawn into the same dance” ([1965] 1984, 160). The carnivalesque resembles a moment of liminality. It is in this perspective that my artworks can be seen as a form a liminal space where technological objects “dance” between the sacred and the profane.

However, the function of the grotesque in medieval times and the way I use it today appear to be opposite. Bakhtin discusses *medieval laughter*, in which the grotesque becomes a means to “play with terror and laugh at it; the awesome becomes a ‘comic monster’” ([1965] 1984, 91). In the often dreadful living conditions of the medieval period, marked by disease and hardship, and exaggerated in Rabelais’ masterworks, laughter serves as a sign of triumph “over the fear inspired by the mystery of the world and by power” ([1965] 1984, 92).

My own experience diverges from the medieval context Bakhtin describes. In a secularized, technologically mediated world, death and danger are no longer immediate presences but rather distant or abstracted. For me as an artist, it seems more relevant to do the reverse: to bring back mystery and power into profane objects, or at least to create space for such interpretation and experience.

Therefore, in this thesis, while I draw on the Grotesque to describe the profanation of the sacred through its encounter with the banal or the material, I also use the concept for the opposite. Grotesque is not just “degradation” but also elevation.

The cover image of this thesis is a fitting example of the Grotesque, featuring four gargoyle-like figures surrounding a sacred object. However, instead of a church, the object is a dirty fridge: an emblem of the paradox inherent in sacred technologies.

Placing a fridge at the center of this image (or at the heart of a ritual, as in *Electric Unconscious*) is Grotesque: it degrades and profanes the ritual frame. Yet, I also perceive a form of positive Contamination, which I will for argue in chapter 3, wherein the fridge is uplifted, at least potentially, through its representation as a sacred object.

Moreover, the Grotesque is merely a starting point for reevaluating and renegotiating the role of these objects in my life. With Grotesque Numinosity, a concept I will develop later in this thesis, the Numinous emerges from its tension with the Grotesque. The laughter such a Grotesque im-

age evokes is only the first step, and the whole point of the artworks is to bring back the monstrous dimension, where the “comic monster” becomes a serious one. This eruption of the Numinous through the Grotesque is a key concept in how the artwork operates, one that I will further develop toward the end of this dissertation, especially in *Electric Unconscious* and *Loudspeaker Baptism*.

In the crucifixion, after my scream, the profane erupts, desacralizing the ritual through the glare of LED headlamps. My position on the cross becomes unintentionally Grotesque; yet, it is through this Grotesque situation that the sacred emerged for me.

2.5 Energy

I will argue throughout this thesis that technology channels energy. This idea is central to both the theoretical framing and the practical dimensions of my artworks. Energy is understood here in a broad and deliberately layered sense, encompassing physical, electrical, and even emotional domains. It is through channeling all the different forms of energy that music performance with electronic technology can lead to the Numinous.

Forms of Energy

I list here some of the main forms that the term energy takes through this thesis:

- **Electrical Power:** Sound amplification relies on electrical energy. This power, usually generated by distant infrastructures (power plants, electrical grids) is channeled through a plug in a wall to energize the electric guitar, amplifier, and loudspeaker. Electrical energy is translated into acoustic energy (sound pressure), measured in decibels. This transformation lies at the core of the technological process of sound amplification central to this thesis.
- **Means of Production:** This term is borrowed from a Marxist analysis where energy is embedded in the social and material processes that produce technological objects. Every amplifier or loudspeaker is the product of labor, extraction, refining, transportation, and assembly.

- **Effort:** Effort relates to human energy, both bodily and psychic. Effort or exertion is central to my music performances, which demands muscular energy and stamina, which translates into the physicality of playing an instrument. Musical performance also draws on cognitive effort such as the focus and attention needed for reading complex scores synchronously. Effort also relates to what is invested in ritual: time, food, materials, attention, and labor are all invested in symbolic acts such as the ritual behavior found in Sacred Consumption.
- **Emotional Energy:** Music can channel emotional energy, a term that can be linked to studies in psychology that measure physiological arousal (Rickard 2004). I view music as a way to modulate the experience of amplified sound, giving it its emotional color. Music is a way to tame the electrical power, transforming it into sustained rhythms, melodic development, harmonic swells, monolithic drones and cathartic crescendo, which I explore in chapter 8.

I use energy in combination with the term channeling to describe the effect I want to achieve with the artworks. To channel energy is to direct, concentrate, or mediate force through a specific form. The term “channel” carries multiple connotations: it refers to the electrical paths of audio signals, spiritual mediums, radio frequencies, and affective or symbolic flows.

Channeling energy plays with the more esoteric connotations of the word channel, which reference practices such as spiritualism. In this tradition, to channel is to become a medium for unseen forces or spirits. My use of the term intentionally engages with, but significantly departs from, this meaning.

In my artistic framework, sound becomes a channel through which the Numinous is experienced. It channels, concentrates the energy, but also provides a dose of mystery. To experience the Numinous, one must be attuned to the right frequency, the right channel.

2.6 Technology

In this thesis, I focus on electronic sound amplification as the central technological process. Amplification is fundamental to the three objects at the

center of the artworks: the electric guitar, the amplifier, and the loudspeaker.⁶

The technical aspect of the objects are one facet of how these objects are examined in this thesis. Electronic music devices are approached not primarily as tools, but as symbolically charged ritual objects, a site of affective and sacred projection. Such objects become sacred not through functionality alone, but rather in spite of it, through the way they are framed, handled, and perceived within performance contexts.

In this section I will focus on the technological aspect that renders sound amplification a sacred technology. This can be articulated through three general claims:

- The failure of technological objects reveals their connection to society.
- Technology and humanity are intrinsically intertwined.
- Technology functions as an extension of the human.

In this section, I will present broader theoretical frameworks related to these claims.

Technological Failure as Revelation

In *Being and Time* ([1927] 1962), Heidegger uses the example of the hammer to explore how technical objects shape human's mode of being. The concept of *ready-to-hand* describes a way of engaging with the world through use, where the object becomes transparent in its functionality. "The peculiarity of what is proximally ready-to-hand is that, in its readiness-to-hand, it must, as it were, withdraw [zurückziehen] in order to be ready-to-hand quite authentically" (Heidegger [1927] 1962, 90). As the hammer drives nails into wood, it facilitates action and fades from conscious attention, smoothing the operation and enabling a particular way of being-in-the-world.

Heidegger observes that this mode of being shifts dramatically in the event of technological failure, when, for example, the hammer breaks. In

⁶While these objects are critically analyzed in this thesis, I want to acknowledge that they appear in the artworks as part of a complex network of supporting technologies. These include microphones, cables, sensors, computers, and controllers, each playing a crucial role in enabling the artwork, though they are not scrutinized to the same extent as the three main objects. This network of electronics is documented in the Research Catalogue, where further details about the technical background and the making of the artworks can be found (see Appendix B for all the relevant links).

such moments, the hammer becomes *unready-to-hand*: it ceases to function as an extension of the activity and instead appears as a useless and heavy construction of wood and steel. Its presence, once transparent, becomes conspicuous, bringing the object into awareness.

When its unusability is thus discovered, equipment becomes conspicuous. This conspicuousness presents the ready-to-hand equipment as in a certain un-readiness-to hand. But this implies that what cannot be used just lies there; it shows itself as an equipmental Thing. (Heidegger [1927] 1962, 103)

When my crucifixion failed, the fire in the iron bowl shifted from *ready-to-hand* to *unready-to-hand*. As long as the fire remained confined to the bowl, its technical function was transparent (ready-to-hand), serving its purpose by illuminating the dark night. However, when the forest floor began to catch fire, the fire was revealed. What was revealed to me was the raw power of fire. Fire was no longer a controlled utility but a threatening force capable of consuming an entire forest.

My sense is that this rather dreadful vision, revealed through technical failure, parallels the failure of music technologies such as the amplifier. In the artworks, this idea of technological failure as a mode of revelation is explored in *Electric Unconscious*, where a technical problem is deliberately staged to draw attention to the amplifier and the electrical network that powers it. This interruption brings the otherwise transparent technology into awareness. I argue that a sense of dread can emerge from this technical failure, from a sudden awareness of the latent power and fragility of the electrical system that surrounds a performance of music and supports my modern way of life.

I see technological failure in the artworks as a way to reveal the network of energy, the means of production around an object, as well as the representational context in which it happens. In the crucifixion, it is not only the fire in the iron bowl that is transformed from *ready-to-hand* to *unready-to-hand*, but the entire structure of the ritual. Before the failure, the ritual operated transparently, its actions and elements flowing smoothly; but the technical breakdown disrupted this continuity, exposing the underlying constructed nature of rituals. It revealed the different layers of myths previously dis-

cussed. Similarly, the frame of the concert can be revealed when there is a technical problem.

The Human Within the Technical

For me, the difference between a hammer and a loudspeaker, from a technological point of view, lies in the amount of energy, especially the means of production, invested in the object. Both tools originate from the telluric forces that shape the earth, but the loudspeaker represents a much deeper entanglement with industrial systems. Generally speaking, the hammer is a relatively simple tool, requiring minimal transformation of materials. The loudspeaker, on the other hand, is the result of multiple stages: mining, refining, manufacturing, transportation, and assembly. Each stage involves different forms of energy and specialized labor. It is a concentrated artifact of global energy flows, technological infrastructures, and economic networks.

In *Being and Time*, Heidegger's example of the broken hammer reveals how the disruption of a simple tool momentarily suspends its transparency and makes it available for scrutiny. The failure is localized: the handle cracks, the head detaches. The cause is tangible, singular, and repairable within the tool's own context. By contrast, when a loudspeaker breaks down, the failure reveals not just the speaker as an object but a vast, distributed technical network.

The extent to which modern technological objects are intertwined with society can be, in itself, a source of awe, and I argue that this awe becomes palpable when a technological failure occurs. Much like Durkheim saw sacred objects as embodiments of society, technology like the amplifier can represent society and evoke a sense of the sacred at least potentially, an argument I develop in chapter 9.

The intricate connection and co-evolution of technology and humanity, as found in Heidegger, is further developed by Gilbert Simondon, who opens his doctoral thesis *On the Mode of Existence of Technical Objects* by stating that his intention is "to show that culture ignores a human reality within technical reality and that, in order to fully play its role, culture must incorporate technical beings in the form of knowledge and in the form of a sense of values" (Simondon 2017, 15). Technology becomes a way of being in the world in a co-evolutionary process between humans and objects.

Simondon anticipates what later theorists, such as N. Katherine Hayles, would elaborate as the idea that agency arises not from isolated subjects, but from the relational milieu in which technical and human elements co-constitute one another. Hayles remark that “there is no technical agency without humans, who design and build the systems, supply them with power and maintain them, and dispose of them when they become obsolete” (Hayles 2017, 32). Even with objects as simple as a hammer, agency is shared, *distributed*: it emerges through the interaction between humans and objects.

As a doctoral student, I observed that the concept of technological agency forms a prominent line of inquiry in artistic research among my peers. For instance, it is thoroughly explored and linked to Latour’s Actor-Network Theory (Schlienger 2022). It is also explored in how technological agency can be emphasized in artworks that rely on the micro-variations, chaotic behavior, or limits inherent in the materiality of the different types of technology used in music (Grayson 2024; Ham 2024).

However, this thesis is less concerned with that conception of agency. Instead, I examine human–technology interdependencies through the lens of consumption, which, as Baudrillard stresses, encompasses both the means of production and the extended social processes that sustain them (Baudrillard 1998), an issue I will address in chapter 3.

Technology Extends Humans

I argue that as technology directs ever larger amounts of energy, especially means of production and electrical power, it extends the self to ever greater lengths. The idea of technology as an extension of the self has been a central idea in the work of numerous theorists.

In 1964, Leroi-Gourhan argued, comparing *Homo Sapiens* to their ancestors, that the human body externalizes its functions through technical supports: “our memory transferred to books, our strength multiplied in the ox, our fist improved in the hammer” (Leroi-Gourhan 1993, 246).

Contemporary to Leroi-Gourhan, media theorist Marshall McLuhan ([1964] 2013) arrives at similar claims, but from a very different theoretical background. While Leroi-Gourhan approaches the question of technics

through the lens of evolution, archaeology, and prehistoric anthropology, McLuhan develops his ideas within the fields of media theory.

Leroi-Gourhan focuses primarily on mechanical technologies, such as the hammer, tracing their co-evolution with the human body. In contrast, McLuhan argues that technology extends not only the body's physical capabilities but also the nervous system, emphasizing the way media reconfigures perception, cognition, and sensory experience.

For McLuhan, amplification is nearly synonymous with the process of extension: technologies extend the self by *amplifying* different aspects of the human body, whether it be “an organ, a sense or a function” (McLuhan [1964] 2013, 153). Technology can amplify consciousness itself, which he describes as being extended through “satellite broadcasting” (McLuhan [1964] 2013, 219).

Erik Davis build on this idea in *Techgnosis*, where he argues that technology extends the imagination. Davis focuses on the historical analysis of communication technologies, from the written word to the internet. Tracing back to the Greeks and the development of the alphabet, Davis demonstrates how communication technologies like writing shaped Greek thought and identity (1998, 34–36).

The reshaping of identity through technology is exemplified in Eric Havelock's classic book *A Preface to Plato* (1963), where Havelock discusses the creation of the word *psyche* in Greek: a concept that co-emerges with the advent of the written word. He goes further, suggesting that concepts like intellect, intelligence, or mind could only have been discovered through the use of writing, as the written word externalizes the mind onto paper. Davis uses this example to demonstrate how “new technologies of perception and communication open up new spaces,” and how “these spaces are always mapped, on one level or another, through the imagination” (Davis 1998, 34–36).

All technologies exhibit a form of agency, as Simondon and other thinkers have argued, even if distributed or relational. However, the technologies examined by Davis, like the telegraph and the automaton, evoke a stronger sense of autonomy: the telegraph speaks across space, disembodied from its origin; the automaton mimics life, unsettling the boundary between animate and inanimate.

This is important, as many of the connections between communication technologies and the supernatural or mystical stem from the way these technologies evoke a sense of autonomous agency.

This perceived agency often gives rise to feelings of the uncanny. Automata, designed to imitate lifelike movement, generate discomfort not because they move, but because their motion feels almost, but not quite, alive. Freud suggests that such uncanniness arises from the return of repressed childhood stages, before the boundary between animate and inanimate was fully formed (Kang 2011, 23). This blurred line between animate and inanimate gives rise to the uncanny: a sensation that can be powerful, unsettling, and sometimes even lead to feelings of dread.

While the telegraph does not act on its own like the automaton, it conveys a similar sense of autonomous agency because it delays and extends communication. As the first modern electronic communication tool, it played a key role in sparking the Spiritualist movement, with its séances and mediums receiving “transmissions” from spirits, acting as decoders of the other world (Stolow 2006). Much of the spiritual imagination disclosed through the telegraph and materialized in ghosts, spirits, and the dead, is largely due to its reliance on symbolic language, such as Morse code, which opens the door to interpret the creaking of an old house, tapping, and all sorts of weird sounds to be interpreted as a form of communication (Sconce 2000). The telegraph enabled metaphors of invisible communication and Spiritualists drew parallels, suggesting that communication with the spirit world might function similarly.

Indeed, the telegraph has a fascinating history, revealing themes that later re-emerge with the rise of the digital world, an exploration to which Davis devotes a large portion of his book. The telegraph, for Davis and McLuhan, marks the beginning of a situation of dread (Davis 1998, 73; McLuhan [1964] 2013, 219). However fascinating and relevant this history may be to the strange, paranormal, and unsettling, I will not address it in this thesis. I do not pursue this line of inquiry in depth, though it remains highly relevant to the broader theme of technology and the sacred.

Unlike the telegraph or automaton, the amplifier does not mimic or encode. Setting aside broader debates about technological agency, in my framework the amplifier simply reacts. Unlike the automaton, it does not

initiate action except, in principle, when a technical failure foregrounds its presence. However, it does so by intensifying the present moment, and I argue that this immediacy is precisely what links it to the Numinous, which will be further explored in chapter 9.

In this thesis I will continue to argue that, by embodying society and by extending human imagination, electronic music devices such as the loudspeaker can be perceived as sacred. This is, however, only one facet that links these objects to the sacred. In the next chapter I will focus on another facet of these objects: their role as objects of consumption.

Chapter 3

Domain of Sacred Consumption

In the article “The Sacred and the Profane in Consumer Behavior” published in the *Journal of Consumer Research*, Belk, Wallendorf and Sherry argue, based on a field study interviewing Americans about their relationships to objects, that “consumption can become a vehicle of transcendent experience; that is, consumer behavior exhibits certain aspects of the sacred” (Belk, Wallendorf, and Sherry 1989, 2).

One way to understand their claim is to see consumption as filling the void left by religion in a secular and materialistic society, where the material world is perceived as all there is to existence. The authors’ idea is that the need for transcendence does not disappear, it simply shifts and manifests through consumption as a way of attaining experiences that go beyond the ordinary (1989, 8).

In sacred consumption, “almost anything can be imbued with sacred meaning” (1989, 13). This statement contrast with how, in the previous chapter, I showed Durkheim’s view on the sacred as “radically opposed” to the profane ([1912] 2009, 38). How can sacred be both the ultimate separation and something easily projected onto everyday consumer goods? One goal of this chapter is two understand how to reconcile these two views that continue to influence how sacred functions in contemporary society.

One reason could be that the definition of sacred varies. While Belk, Wallendorf and Sherry draw on Durkheim to outline the “12 properties

of sacredness,” emphasizing that “the sacred can best be understood by contrasting it with the profane” (1989, 6), the article often uses the term sacred in a more secular sense, referring to something valued and important or “highly infused with significance” (1989, 32) or meaning.

Value in sacred consumption goes beyond economic value. Objects of consumption are not sacred solely because they are expensive and luxurious goods. While luxury and sacredness can converge, sacredness, as I use the term here, arises more through symbolic investment and ritualized use, sometimes with, sometimes against, the grain of economic value.

While a comprehensive discussion on the relationship between sacred and meaning is beyond the scope here, the important question for me in this chapter is how this value is transmitted to objects, another way of asking how objects are sacralized. Within the framework of Sacred Consumption, I focus on three mechanisms, or what Belk, Wallendorf, and Sherry (1989) term sacralization processes, by which objects become sacred: Contamination, Investment, and Quintessence. I examine each in turn.

3.1 Contamination

My awareness of touching surfaces intensified during the COVID-19 pandemic, as they became perceived as potential carriers of death. The pandemic struck at the beginning of this doctoral research, and I remember, in the early days, washing every container I brought home from the store. I became extremely sensitive to the possibility that bacteria and viruses, invisible to the eye, could be transmitted through touch.

While there was scientific knowledge (bacteriology, virus transmission), there were also fear, myths, and stories about what kind of virus this was. The unknown surrounding the virus and its modes of propagation meant that any precaution felt justified. One could never be too careful. To this day, remnants of that period persist. I am much more conscious when touching public surfaces. This act has taken on a new weight in my life, as has the awareness of disease in my interactions with others: the fear of contamination.

Contamination is one of the “12 Properties of Sacredness” identified by Belk, Wallendorf, and Sherry (1989). In a later article, Belk succinctly

defines contamination as “the contagious ability of the sacred [to] transmits its power to that with which it comes into contact” (Belk 2012, 70).

In Sacred Consumption, there are positive and negative forms of contamination. Contamination is positive when profane objects become sacred by the contact with the sacred. For example, profane places can acquire sacred status through contact with sacred persons or events, such as: “places where sacred persons were born, performed miracles, received mystic revelations, and are buried” or “places made sacred through events that occurred there (e.g., Jerusalem)” (Belk, Wallendorf, and Sherry 1989, 11).

Accordingly, in negative contamination, sacred objects lose their status through contact with the profane. A contact that can involve people, places, or even intangible elements such as stories and myths. Such contact does not have to be physical. The mere sight or even the thought of something profane can be sufficient to debase a sacred figure.

The notion of contamination in its negative form can be linked to the process of *degradation* that is central to Bakhtin’s grotesque realism ([1965] 1984). Elements that often degrade the body, in Bakhtin’s analysis of Rabelais, such as excrement, would also desacralize a consumer good. However, similar to my use of the term Grotesque, contamination operates in both negative and positive directions. As previously argued, if technological objects are perceived as Grotesque within the artworks, it is because a form of positive contamination is at play.

Belk defines *contamination* through the “contagious ability of the sacred” (Belk 2012, 70). This notion closely aligns with *contagion*, a concept I previously discussed in relation to Durkheim’s idea of the “fluidity” of the sacred, which has the ability to move through things and thus necessitates rituals to maintain boundaries (Durkheim [1912] 2009, 237).¹

Contagion is central to Mary Douglas’ thinking in *Purity and Danger* ([1966] 2002), where she nuances Durkheim’s claim. Douglas examines how “beliefs in dangerous contagion” ([1966] 2002, 3) are used to define and uphold societal rules and morality. Contagion refers to the way pollution spreads, which, for Douglas, occurs when something crosses or disrupts a

¹In their medical use, both terms refer to the transmission of disease, but while contamination refers to the presence of harmful substances on objects or surfaces, contagion refers to the transmission of disease from one host to another.

society's fundamental sense of order, such as the boundary between the sacred and the profane.

Douglas reveals the complexity of pollution rules in how they map onto morality, the sacred and profane, and the systems of classification specific to each society she examines. For example, in seeking to understand the stark contrast in Christianity between the holy and the unclean, she looks at societies where uncleanness is elevated to a sacred status. In certain contexts, elements such as excrement and even incest become sacred when framed within ritual (Douglas [1966] 2002, 160).²

While *contagion* is more widely used in anthropology,³ in this thesis I will use Contamination instead. Following Belk's use of the term, my use of the term Contamination refers to a deceptively simple process by which things become sacred through their association with the sacred. To my view, this is a central mechanism in Sacred Consumption, and also in my artworks.

The use of the term Contamination reflects a more representational approach to the sacred. While *contagion* is more contextualized and embedded within society, Contamination implies in this thesis that things become sacred because they are represented as such, following more clichéd and conventional notions of the sacred rooted in Western and Christian traditions.

With Contamination, consumption objects become sacred through their association with pre-existing ideas of the sacred, and significant effort is invested in achieving this effect. The range of objects involved in Sacred Consumption is vast and uncannily diverse, precisely because anything can be imbued with meaning through Investment. "Anything may become sacred. Sacredness is in large part an investment process" (Belk, Wallendorf, and Sherry 1989, 14).

²This kind of moral reversal, enabled by ritual frameworks, is typical of what Turner called the anti-structure, a reversal of structure where, for example, in the rite of passage to becoming a king, one has to go to the lowest of the low (Turner 1977, 170–72).

³The notion of contagion carries a heavy historical burden. From 19th-century social hygiene movements to the vilification of gay men during the AIDS crisis, the metaphor of contagion has repeatedly served to justify exclusion, control, and moral panic, as explain in Gustave Lebon (2002)

3.2 Investment

Investment follows from Contamination: if I want something to be sacred, I must actively direct my effort toward linking the object to other widely recognized sacred entities, ensuring a positive form of Contamination. The fundamental principle seems to be that things gain value through the effort (whether time, money, or other resources) invested in them. As Belk, Wallendorf and Sherry state, “these sacralizing processes are enacted purposively by consumers in an effort to create sacred meaning in their lives” (1989, 22).

I argue that these efforts need to be invested because there are forces pulling the object toward profanity, which need to be constantly fought against. I have named two of these profaning forces: the Pull of Habituation and the Pull of Mass Production.

On the one hand, habituation describes the process by which something initially new or striking gradually becomes dull through repeated exposure. Belk, Wallendorf and Sherry acknowledge that “sacred status may be lost through habituation” (1989, 21), which can strip sacred objects of their heightened meaningful presence.

While there is often a burst of excitement when acquiring a new gadget, that excitement tends to fade quickly. This is especially true of electronic technologies, whose almost magical effects quickly turn into “business as usual” (Davis 1998, 83). For example, I still remember the excitement I felt when the first computer with Windows 95 arrived in our home and how a whole new world opened up for me. However, after spending a good portion of my adult life in front of screens, engaging with my computer no longer feels remarkable.

On the other hand, there is a form of negative Contamination when a product becomes associated with mass production. This is especially relevant to consumer objects like electronic music devices, which are duplicated along the manufacturing chain. It is hard for me to see one object as sacred when there are a thousand or millions which are exactly the same.

While I am aware that I would not be able to make electronic music, among many other things, if it was not for mass production, I associate mass production with negative social and environmental consequences. This became heightened for me during this research, as I was trying to find strate-

gies to more deeply appreciate objects like the loudspeaker I was working with in my compositions. I remember attempting an exercise inspired by Goethe's "exact sensorial perception" (Harding 2014), in which one is meant to discover wonder by visualizing in great detail "the coming into being" of a phenomenon, such as a flower.

I felt that wonder can more easily be found in the deep appreciation of a flower: its growth, its roots, its beauty, and the mystery of life, than when I attempted the same with a loudspeaker. Digging into the origins of this device, I found a sense of wonder in the long chain of technological advancements and human ingenuity that made its creation possible. I was also moved by the labor of those who have dedicated their lives to developing such products. However, what struck me more powerfully was a visceral revulsion toward the industrialized birthing process of the loudspeaker. This simple exercise, along with its emotional consequences, gave rise to a central idea in the work *Loudspeaker Baptism*.

I will argue that much of the Investment in Sacred Consumption is directed toward resisting the Pull of Habituation and the Pull of Mass Production. These desacralizing forces are fought by transforming mass-produced objects into unique, singular artifacts. For example, in gift-giving, the act of wrapping "separates items from the profane world of commerce, singularizes them [...] and turns them into gifts" (Belk, Wallendorf, and Sherry 1989, 18). Investing effort into beautiful wrappings, and perhaps most importantly, removing the price tag, alters the meaning of the object and signals additional value to the receiver.

Differently, when collecting objects, efforts are not directed at individual objects, each merely a product of the manufacturing chain, but rather at the ensemble and its uniqueness. As Belk, Wallendorf and Sherry state, "taken as a whole, collections are regarded by their owners as special, unique, and separate from the everyday items they have and use" (1989, 29). It is not the object but the collection that becomes sacred. In the authors' vocabulary, gift giving and collecting are categorized as "sacralization processes."

Another of these processes (arguably the most important, to which gift giving and collecting are merely subcategories) is "ritual," which, in the context of consumption, I have previously defined as symbolic behavior

with limited connections to myth.⁴

In Sacred Consumption, ritual is seen as an Investment, expressed through symbolic actions that hold little practical value on their own. The more effort one puts into something, the more valuable and meaningful it becomes, and there is an endless amount of effort and resources that can be devoted to ritual. The more superfluous the action, the more it can be perceived as sacred, until an entire life can be oriented around sacralizing a single object and making it the center of one's identity.

While ritual behavior does singularize a consumption object, making it unique among and separating it from other mass-produced items, it can also powerfully counter habituation by refreshing the ways in which the object is typically interacted with, bringing focused attention, care, and detail to the experience.

This kind of ritualized behavior with technological objects is at the heart of my work *Loudspeaker Baptism*, which in Act I dramatizes the unboxing of a loudspeaker. While the piece also comments on the YouTube trend of unboxing videos (O'Connell 2013), it serves as an example of how a simple act can be surrounded by symbolic action, thereby elevating the object's value. Through stylization, repetition, and heightened attention, even the mundane act of unboxing becomes a sacralizing performance.

Investment, like Contamination, is not unique to Sacred Consumption. In studies of prehistoric rituals, for instance, whenever an unexplainable or seemingly superfluous expenditure of effort (effort not directed toward survival) is observed, such as the careful burial of the dead, it is usually linked to some form of religious practice (Hastorf 2001). In cases where tombs have been discovered, Investment is typically reflected in the presence of rare materials and items, with a correlation between the quantity and quality of these offerings and the perceived sacred status of the person buried.

There is however another sacralization process which appears to be unique to Sacred Consumption: Quintessence.

⁴In the four-level structure outlined in chapter 2, this type of ritual would be positioned between the 2nd and 3rd levels.

3.3 Quintessence

Quintessence is a phenomenon where an object possesses a “rare and mysterious capacity to be just exactly what it ought to be . . . unequivocally right” (Cornfeld and Edwards 1983). Rather than a process that happens in time, like Contamination or Investment, Quintessence seems to be an inherent quality.

Belk, Wallendorf and Sherry acknowledge that “not all sacralized objects are as unique as handcrafted walnut furniture,” which initially puzzled them. They note that some objects “are sacralized and cherished precisely for their similarity to other objects” (1989, 15). I believe this was puzzling because if Investment is the primary agent of sacralization in consumer behavior, then Quintessence is an outlier.

This insight was key for me: it filled a gap in the paradox of sacred technology. Quintessence explains how ordinary, mass-produced objects, like a Mac computer or a bottle of Coca-Cola, can become the focus of sacred or ritualistic behaviors.

In fact, quintessence is about upholding this mass production process, revering the mundane casings of technology for their pure utility “that give the impression that they are beyond mere commerce” (1989, 17). Quintessence is the holy grail of technological design, manifesting as the goal of reducing friction and achieving instantaneity. Such goals are explicitly stated even by companies like Genelec, a Finnish company specializing in high-end loudspeakers which, in the words of Thomas Lund, Genelec Senior Technologist, strives to become a “mirror of sound” (Kettunen 2018). The underlying aim is to make the device disappear, leaving behind only the pure and untouched experience.

Another way to understand quintessence is as “a quest for authenticity—‘The Real Thing’ in Coca-Cola’s well-chosen vocabulary” (Belk, Wallendorf, and Sherry 1989, 17). Authenticity, like perfect, frictionless design, is an unattainable goal aimed at a pure experience of a single thing perfectly attuned to the senses, like the cold, sugary, sparkling liquid of Coca-Cola assailing the mouth. One could think that a drink consumed 1.9 billion times per day worldwide (The Coca-Cola Company 2024) would become dull after a few days, let alone decades. Thanks to Coca-Cola’s consistent branding, authenticity skips over the Pull of Habituation, by promoting the

value of a product that never changes because it is promoted as already perfect, quintessential.

In Sacred Consumption, it is not only the consumer that is trying to resist the Pull of Habituation and Pull of Mass Production, but also the producer. Indeed, Belk, Wallendorf and Sherry's article *Theodicy on the Odyssey* (1989), described as "groundbreaking" (Rinallo, Scott, and Maclaran 2012, 7), introduced the concept of sacredness to the field of marketing. This widely cited paper has since been used as a reference to develop more effective branding strategies. For example, Sharma et al. (2017) explore how ritualization and sacralization can "provide international marketing managers with a new strategic tool to position their brands in international markets."

Belk, Weijo and Kozinets describe how both consumer and producer, engaged in a tandem dance, resist the Pull of Habituation, what they term *normalization* (2021). Focusing particularly on modern technology, they theorize the *disenchanted enchantment model*, drawing on Max Weber's concept of the disenchantment of the world (Weber 1946, 1922), which is understood as a form of secularization wherein scientific understanding replaces traditional, magical, and religious worldviews. They theorize an enchantment cycle in which consumers and companies engage in "collective speculation, exploration, narration, and innovation" (2021, 16).

On the producer's side, the marketing concept of singularization (Burg 2018), in which "a commodity becomes decommoitized" (Belk, Wallendorf, and Sherry 1989, 17), illustrates how companies may attempt to resist the Pull of Mass Production through packaging, design, and storytelling. Moreover, through advertising and the endless release of new products, companies continually strive to refresh their products and present them as novel, such as Apple's repeated claim that each new Mac delivers "the best computing experience on the planet" (Apple 2024).

On the consumer's side, YouTube unboxing videos can be seen as a contemporary trend that perpetuates this cycle. In 2024, YouTube logged more than 25 billion views of videos with "unboxing" in the title (Smurfit Kappa 2024). Unboxing functions like a form striptease, where consumers trigger desire in other consumers.

Contrary to other sacralization processes previously mentioned,

Quintessence appears to be enacted solely by the producer, with the product consumed as given. Through immense efforts in design and marketing, companies invert intuitions about the sacred and the profane: mass production and habituation become sacred features. The sacred emerges not in resistance to the profane, but through its perfection.

3.4 A Self-Fulfilling Prophecy

If the consumer society no longer produces myth, this is because
it is itself its own myth.

— Jean Baudrillard (1998, 193)

For the French sociologist and philosopher Jean Baudrillard, writing in 1970, consumption is a “self-fulfilling discourse of society about itself, a general system of interpretation, a mirror in which it takes supreme delight in itself.” Consumption is so pervasive that it extends beyond the mere “consumption of material goods, products, and services” to include “the consumed image of consumption,” which “constitutes our new tribal mythology—the morality of modernity” (Baudrillard 1998, 194).

Quintessence serves as a good example of this self-fulfilling mechanism behind Sacred Consumption, and explains why “almost anything can be imbued with sacred meaning” (Belk, Wallendorf, and Sherry 1989, 13). It is as if the object transcended its making, something which is especially true for modern technology like the TV or sound amplification, which I will explore in chapter 9. As Baudrillard writes:

the miracle of TV is perpetually brought off [...] by the grace of technology, which wipes out, so far as the consumer’s consciousness is concerned, the very principle of social reality, the long social process of production which leads to the consumption of images. And does this so well that the TV viewer, like the native, experiences the appropriation as a *capturing* in a mode of miraculous efficacy. (Baudrillard 1998, 32)

The object is so enchanting that it no longer connect to its fabrication. The experience of the product erases “the long social process of production”

mentioned by Baudrillard. While quintessence does not appear as a concept in Baudrillard's framework, it can be seen as the result of the Marxian concept of commodity fetishism, where the sacredness attributed to technological objects may be understood as a fetishized surplus: a symbolic overlay that obscures the conditions of their production.

Baudrillard succinctly describes fetishism as “substituting a manipulation of forces for a manipulation of signs” (1981a, 91), where the commodity is “emptied of its concrete substance of labor and subjected to [...] a labor of signification” (1981a, 93). I understand Quintessence similarly: sacredness made tangible through marketing, which fosters emotional bonds between consumers and products. The product itself becomes merely a proxy for the marketing. In this sense, Quintessence illustrates how sacredness in consumption operates as a self-fulfilling construct.

With Contamination, Investment, and Quintessence, the sacred and consumption meet theatrical representations, where fictions are built upon fiction. This stands in contrast with how the sacred is usually defined, whether in its theological relation to God or in its connection to society in Durkheim's functionalist framework. I see sacred objects in consumption not representing society but rather a constructed illusion through marketing, aimed at perpetuating itself, a “self-fulfilling prophecy” (Baudrillard 1998, 127). While consumption does foster community in some cases, investigating the basis of this community returns us to the same empty myth.

Sacred Consumption may also feel empty because it lacks a moral framework, a sense of right and wrong, or a guiding purpose, offering only the direction to further consumption. Or, maybe it feels empty because it lacks the rich history of human drama and historical lineage. Of course this is a double-edged sword: just as with religion's history, it comes the dark side of power, wars, and scandals.

More than anything, I feel consumption lacks a genuine connection to sacred experience. While it rests on individuals, Sacred Consumption relies little on phenomenological experience. This is particularly evident in Belk, Wallendorf and Sherry's article, where sacred experience is often treated as a commodity to be purchased (such as eating Big Macs or visiting Disneyland), with little consideration for the inner experience. For me, the experience of the sacred is essential, a point I will explore in chapter 8, where I argue that

concepts like the numinous (Otto [1917] 1923) can serve as foundations for what is considered sacred.

From a phenomenological perspective of sacred experience, the ritual of consumption leaves me feeling hollow. I personally experience a sense of malaise in acts of consumption. Visiting the holy places of consumerism, “cathedrals of consumption” (Belk, Wallendorf, and Sherry 1989, 11), such as shopping malls, feels like the antithesis of a sacred space. While I occasionally feel a flicker of excitement at exercising my purchasing power, the experience is often overshadowed by guilt and, at times, even disgust. Perhaps this response is shaped by 21st-century environmental awareness, or perhaps it reflects a broader disillusionment with consumer culture. Generations before me might have felt ecstasy in these spaces, akin to the reverence one feels in a church. But for me, the Pulls of Mass Production and Habituation proves too strong to ignore.

Belk’s definition of sacredness feels empty to me, yet it makes sense: a fitting description of what is considered sacred in contemporary society, especially concerning technology. There is something uncanny about this form of sacredness, where its only function is to make consumers buy more. My deep-seated quest for meaning and spirituality, central to my human experience, has been hijacked to serve the gods of consumption, offering nothing in return but the fleeting dopamine rush of acquiring something new.

3.5 Concert as Commodity

Choose from a million beliefs, but you cannot choose to be a consumer.

— Kozinets and Sherry (2012, 263)

In the aftermath of my crucifixion, I was forced to confront the deeper narrative underpinning my practice of instrumental music theater, which lies at the heart of this thesis. When I sit in a concert hall, what connects me to the rest of the audience? What is the shared story we tell ourselves? As Kozinets and Sherry emphasize, one cannot choose not to be a consumer, and one obvious answer is that everyone has bought a ticket. This seemingly

benign act is, for me, crucial. The argument I propose here is that the vast majority of music performances I have seen and participated in, including the three performances that are part of this doctorate, carry an implicit myth of consumption.

This idea came into full clarity for me in the aftermath of a second ritual I attempted. The ritual in question was the first artistic component of this doctorate, the performance titled *Le Refuge des Cordes*, presented in a gallery space in Helsinki in 2020.

Crucially, the context of this performance was very different from that of my crucifixion. The crucifixion took place in a secluded forest with a group of ten people whom I had gotten to know over the intensive period of one month, developing a sense of community and friendship. Although it is never possible to completely escape the grips of consumption, it felt very distant there, as did civilization itself.

Unlike the crucifixion, which stood outside the frame of consumption, *Le Refuge des Cordes*, performed mostly for strangers in an urban environment, was firmly situated within it. While the crucifixion was an important personal experience, it remains outside my professional identity. In contrast, *Le Refuge des Cordes* is deeply connected to how I survive within the economy.

Moreover, the performance was folded into a doctoral project financed by a state-run university, where it automatically enters the circuitry of consumer logic. The funding body demands measurable “outputs” (concerts, view-counts, citations) that justify its investment; audiences must be attracted, documentation uploaded, impact reported. This institutional framing is present, no matter what the intentions behind my ritual.

This came into focus for me because I felt that *Le Refuge des Cordes* failed as a ritual, something I ruminated on for the following two years. While I tried to stay true to my intention, I felt a strong sense of malaise in presenting this ritual to an audience. I ended up attributing this malaise to a dissonance between two competing myths at play: the myth of consumption and the one I was attempting to engage with in the performance.⁵ I recognized in hindsight how consumption and market pressure can corrupt my intention of creating ritual, and how this was evident even in certain of

⁵The work was intended to explore my personal connection to ropes and strings and how they have shaped my identity since childhood.

my artistic choices.

It was when I started planning the 2nd concert that things really became poignant. There was a fork in the path, and deciding on the second project proved to be a challenge. While going into details here would be too much of a tangent, suffice it to say that two options were open to me. On the one hand, I could have tried to conduct the research outside the frame of consumerism as much as possible, an approach that many artists and communities are embracing in their attempts to reconnect with ritual and community beyond the confines of capitalism.

On the other hand, I could simply accept that the concert is a commodity, an object of consumption, an experience that is bought, and choose to work with that tension. I wrote in my journal on 1.11.2021: “The simplest thing. Just do a concert.” This choice was reinforced by the institutional research context of this doctorate. While there is a certain freedom in the academic framework of artistic research, the underlying incentives to “get things done” pushed me toward what felt like the simpler option.

3.6 Consumption Myth in the Concert hall

In the realm of religion, there is often a tension between the capitalist economy and the ritual of the church. When I go to church, I have to give the tithe, and there is a certain manipulation in that rite. The tithe often comes after the peak of the ritual, after communion, when one feels most strongly the sense of community, perhaps even a moment of awe or sacred experience, a deep connection. Then, it is time to pass the collection plate, which simultaneously reintroduces the mundane, grounding the experience back into the reality of culture, capitalism, and the ever-present incentive to generate income.

Belk (1989) aptly points out that religion itself has become an object of consumption. As I have done many times, one can go to a movie theater or a church for the same purpose: to be entertained—though the latter is usually the cheaper option. If one embarks on a pilgrimage to a holy site, consumerist symbols are impossible to ignore: souvenirs, religious merchandise, and tourism infrastructure constantly remind visitors of the commercial layer surrounding the sacred. These sites exist in a double reality,

functioning both as places of worship and as tourist destinations.

While I have come to embrace this dissonance, and even enjoy the tension and the uncanny aesthetic experience it can sometimes produce, a grotesque mix of sacred and profane, I cannot help but occasionally question myself: did I go to church to engage with the myth of Christianity, or did I go to keep the wheel of consumption turning? Sometimes, it is not so easy to answer that question.

In creating new rituals such as my crucifixion and *Le Refuge des Cordes*, I experienced the tension between my ritualistic and consumption intentions, allowing me to perceive, and even physically feel through my malaise, the implicit consumption myth embedded in the performances.

While *Le Refuge des Cordes* happened in a gallery, I will consider concert halls as the main context for this research. Like the gallery or a holy site, I argue that the concert hall exists within a double reality. Attending a music performance is also participating in implicit consumption rituals in which people invest time and money for reasons that go beyond the entertainment or enjoyment of art.

One of these reasons, particularly thought-provoking, is discussed in a study by Hans Neuhoff exploring the social structures, mentalities, and taste profiles of concert audiences in Germany. Based on this article, Elena Ungeheuer argues that:

Absolute silence and the emotional control of an audience are the most distinctive features of classical and modern music concerts, despite the music's often disturbing character. Emotional control is a decisive prerequisite for performing long chains of events and is thus a fundamental part of obtaining and *preserving economic hegemony*. (Ungeheuer 2020, 54) (my emphasis)

I found that Ungeheuer's article resonated with my own experiences of consumption in performances, where the classical music concert can be understood as a tool for social control. It stands in stark contrast to the "act of liberation, emancipation, or revolt—hallmarks of subversiveness" often found in more popular musical events (Ungeheuer 2020, 54). The ritual efficacy of the concert hall is tied to the "preservation of economic hegemony," in other words the perpetuation of consumption's self-fulfilling prophecy.

Consumption is not the only myth in the concert hall, and I will continue to explore the connection between the classical music concert and the sacred in the following chapters. However, consumption became particularly important for this project because of the objects at the center of the artwork.

In a sort of *mise en abîme*,⁶ representing technology as sacred becomes a means of interacting with the myth of consumption at the heart of a concert, bringing this myth to awareness, playing with it and connecting it with the unfolding narrative within a performance. The unboxing scene in Act I of *Loudspeaker Baptism* serves as an example where the image of concert consumption is reflected back at the audience through an act that many can recognize as futile while still fully indulging in it in their personal life.

Electronic music devices, as objects of consumption, are subject to the sacralization processes I have discussed. These objects can be invested in by consumers and producers to resist the Pulls of Habituation and Mass Production. An electric guitar, for instance, becomes sacred through positive Contamination, because it was owned by a rock superstar or played on a mythical album. Consumers invest not only their money but also their identity in purchasing quintessential loudspeakers, like Genelec, which are branded as the “mirror of sound.”

Yet electronic music devices possess dimensions that extend far beyond their status as commodities, engaging additional Domains of Sacred Technologies through their sound and the ways they are interacted with. In the next Domain, developed in chapter 5, where I explore the tension between the ideal of absolute music and the inevitable pull of symbolism in musical performance, these devices will be reconsidered not as objects of consumption, but as musical instruments.

⁶This French term refers to “a reflexive strategy where the content of a medium is the medium itself” (Oxford University Press 2011).

Part II: Symbols in Music Performance

Anecdote from the field of Grotesque Numinosity

The Rusty Metal Rod

In the summer of 2014, Matthias and I hid away in a weather-beaten barn in the countryside, sketching ideas for a new percussion piece. Around us lay piles of old tools, wood scraps, and rusted metal: perfect materials for sound-making. We struck and scraped every object we could find. After a while, Matthias picked up a long rusty steel rod. When he struck it, the rod released a clear, shimmering, bell-like ring that made us both stop and listen.

We decided to uphold the mystery of this object by tying it to a rope and letting it hang in the center of the barn. The more we played, the stranger it felt: as if each tone unearthed something buried within the metal.

To deepen the experiment, we swapped our drumsticks for a chewed-up deer hip bone we had found in a nearby field. The old bone meeting the cold metal produced a rough, resonant growl: a raw clash of nature and civilization, the bone disintegrating against the rod.

Matthias's focus was total, attuned to every microscopic overtone. Watching him, I found myself drawn into the same quiet intensity. To this day, that image anchors me to the mystery of music-making. I did not yet have the language of "ritual" or "symbol," but I sensed that by making sound with that humble piece of trash we were reaching for something greater than ourselves.



Figure 3.1: Matthias and the Metal Rod (2014). Image by Jonathan Goulet.

Chapter 4

Interlude A: Symbols

Although the inner experience of sacred objects and their link with community, morality, and myth may differ significantly between religious and consumer contexts, from an external perspective the behaviors surrounding them appear strikingly similar. Objects are revered, taken apart, and upheld in ways that suggest a sense of the sacred.

In *Theodicy on the Odyssey* (Belk, Wallendorf, and Sherry 1989), representation plays a crucial role, since only the external perspective of Sacred Consumption was examined. When participants represented their relationship with objects in a way that mirrored the reverence typically associated with sacred artifacts, the object was deemed sacred.

I will argue throughout this thesis that a similar process is at work in some theatrical and musical performance, where Contamination, Investment, and Quintessence play a central role in shaping representations of electronic music devices as sacred.

Contamination highlights the thin boundary that sometimes separates the sacred and the profane: within spaces of representation, any object or action can be framed as sacred, with the right lighting, staging, and action.

In *Inside the White Cube: The Ideology of the Gallery Space* (1999), Brian O'Doherty, describing the modern gallery space, notes that:

The outside world must not come in, so windows are usually sealed off. Walls are painted white. The ceiling becomes the source of light.[...] In this context a standing ashtray becomes almost a sacred object. (O'Doherty 1999, 14)

I interpret O’Doherty’s words as an example of how the architecture and interior design of a gallery use positive Contamination to associate their spaces, and the objects they contain, with the sacred.¹ Objects are staged to be perceived as sacred. The manner in which they are presented, their careful arrangement, isolation, and lighting, mirrors the display of sacred objects in certain religious settings, like Protestant churches or in Eastern religions like Zen Buddhism in Japan. Having experienced the minimalist, purified aesthetic of these religious spaces, I attribute a sense of sacred to objects in a gallery.

Similarly, the Apple Store (see figure 4.1) adopts an aesthetic that evokes the atmosphere of a church. Perhaps the most striking feature is how the Apple Store, like churches, puts emphasis on its gigantism (Niglio 2024, 8). It creates an environment that highlights the consumer’s smallness upon entry. It “makes your body feel like you’re entering somewhere sacred or holy” (Laskow 2016).



Figure 4.1: Apple Store, Fifth Avenue, New York City.²

I see the Apple Store, and similar modernist architecture, as employing staging tools that are also used in theaters, such as lighting and spatial arrangement, to counter the negative, profane connotations of habituation and mass production, and instead reinforce a sense of the sacred. They use light, particularly through the glass front, and a purified, minimalist design. Mac computers are staged on tables with ample, seemingly unnecessary

¹Museums have often been compared to churches for similar reasons (Branham 1994; Mairesse 2014).

²Image by Jorge Láscar, licensed under CC BY 2.0, via Wikimedia Commons.

space around them, a symbolic display of power and financial means. Much like the empty wall space around objects in museums, this spatial strategy enhances the presence of the products, making them feel like deeply meaningful, highly valued objects. The same positive Contamination is at work in music performance, which will be my focus from now on.

The rusty metal rod at the center of my collaboration with Matthias was staged.³ By suspending it and placing it at the center of the performance, we elevated it from the anonymous pile of trash it originated from. Symbolically, the metal rod became an *axis mundi*, a pole at the center of the world serving as a connection between heaven and earth (Eliade 1959, 36–37). Through this simple act of staging, a discarded mass-produced material was transformed into something unique and valuable, carrying sacred connotations.

However, in musical performance, more elements come into play. Unlike MacBooks in an Apple Store or paintings in a museum, an instrument is not merely staged but also performed with. The interaction with the rod and the resulting sounds further enhanced its uniqueness, value, and symbolism. When we performed the piece in concert, there was a solemnity, embodied by Matthias’s precise playing. Then there was the bone and the arcane, visceral quality it introduced and the rich meanings it evoked. And finally, there was quality of the sound, the uncanny arrangement of found objects and musical gestures that, as if by some sort of magic, resulted in this rich, mysterious, and beautiful sound.

Throughout this doctorate, the experience with the metal rod became an anchoring point for me. I had this conviction that “there is something there.” Much like the crucifixion, it posed a question, a doubt that I sought to resolve, which pushed me to undertake this research. Why did I associate to these particular musical gestures a sense of sacredness or ritual?

This is but one example of those moments of music-making when there is a hint of ritual, a kind of smell. Some objects, particularly instruments, come to possess a sense of mystery, sometimes because of the strange relationships and movements they are subjected to, and sometimes simply because of their sound and how it resonates in a space. They feel like sacred

³This collaboration with my friend and percussionist Matthias Soly-Letarte led to the creation of *Face à Face I* (Quevillon 2014), a central work of my Master’s thesis.

objects in a ritual I do not understand, symbolizing something unfamiliar yet greater than myself.

I coined the term Symbolic Sound-Producing Gestures to point toward this feeling that emerged from this kind of multifaceted object at the center of my practice in instrumental music theater. Before arriving at this central concept, I must first contextualize it in relation to both my practice of instrumental theater and the notion of the symbol.

Thus, this part II of the thesis centers on symbols, which I will first define in this interlude. I will then explore, in chapters 5 and 6, symbolism in music and instrumental theater, leading to the Interlude B, where I will focus on Symbolic Sound-Producing Gestures.

4.1 Symbols

I see symbols as balancing between two poles, which I will refer to as the Clear and the Opaque. While it is useful to highlight these extremes for now, the symbols within artworks always exist along a gradient between these two poles.

On the one hand, Clear Symbols are characterized by the semiotic definition established by Charles Peirce, who distinguishes between icon, index, and symbol. In Peirce's framework (1931--1958), symbols are a category of signs in which there is no inherent resemblance between the signifier (the symbol itself) and the signified (the concept it represents). Their connection is arbitrary and culturally learned. Examples include numbers and letters whose meanings are determined by convention rather than any intrinsic link between form and meaning (Settinieri et al. 2017).

On the other hand, there are Opaque symbols perhaps best encapsulated in the work of C. G. Jung, a particularly influential figure in the study of symbols and their interpretations within the field of depth psychology. As a student of Freud, Jung viewed symbols as representations of something unknown: things that cannot be fully grasped or made entirely clear. He writes:

What we call a symbol is a term, a name, or even a picture that may be familiar in daily life, yet that possesses specific connotations in addition to its conventional and obvious meaning. It

implies something vague, unknown, or hidden from us. (Jung 1964, 20)

If the “conventional and obvious meaning” refers to the Clear aspect of a symbol, Jung’s mention of “specific connotations” that are “hidden from us” highlights its Opaque dimension. Denotation refers to the most basic or literal meaning of a sign. For example, the word *rose* denotes a specific type of flower. Connotation, on the other hand, describes the secondary, cultural, or symbolic meanings that signs acquire. For instance, beyond its denotative meaning, the word *rose* connotes passion or love. While denotation is relatively fixed and limited, connotation is open-ended, almost infinite in its interpretive possibilities.

Clear Symbols rely on well-established cultural conventions that have been reinforced within a society. Both rituals and traditional theater depend on such Clear Symbols to coordinate large groups of people, ensuring shared understanding and collective participation. Beyond the symbolic communication found in speech, Western dramatic theater relies on Clear Symbols to construct a narrative. If a symbol intended to drive the story forward is not understood, if it is too ambiguous or opaque, the narrative fails to unfold as intended. Similarly, in rituals, Clear Symbols provide direction and structure. They indicate what actions to take and how to proceed. If the meaning of a bell’s ringing, for example, is not recognized, the ritual cannot be properly enacted or completed.

However, I would argue that the richness of both rituals and theater lies in their use of Opaque Symbols: symbols with multiple layers of connotation. Symbols carry indefinite expressions with multiple meanings, pointing to things that are not easily defined and, therefore, not fully known. Their significance extends beyond rational explanation, operating in the realm of intuition, the unconscious, and the ineffable.

In his popular YouTube lecture series *Awakening From the Meaning Crisis* (2019), professor of psychology and cognitive science John Vervaeke emphasizes that the meanings of symbols are never fully exhausted. This is because symbols are not merely static representations; they are something one participates in through interpretation and lived experience. Their richness lies in their deeply subjective nature: each engagement with a symbol adds new layers of meaning.

Sometimes, symbols can represent opposites, where meaning emerges through paradox and ambiguity. Mary Douglas, notes that:

ambiguous symbols can be used in ritual for the same ends as they are used in poetry and mythology, to enrich meaning or to call attention to other levels of existence. [...] Ritual, by using symbols of anomaly, can incorporate evil and death along with life and goodness into a single, grand, unifying pattern. (Douglas [1966] 2002, 41)

In my practice, I often encounter meaning that is not immediately graspable, but can almost be felt. In the studio with musicians (as in my experience with Matthias and the metal rod), I sometimes see an image, a musician playing in an unusual way, and the image is charged with meaning, though it remains just out of reach of my conscious understanding. It is a feeling, a hunch, something intuitively sensed that cannot be articulated.

Moreover, if I try to rationalize it too much, reducing it to a specific interpretation, it loses its value. When analyzing dreams, Jung states, as cited in Decharneux and Nefontaine (2014, 3e éd.:85): “The richness of the meaning of dreams lies precisely in the diversity of symbolic expressions and not in their univocal reduction.”⁴ Reducing the symbolism of dreams to a single interpretation flattens their depth, just as it does with the symbolism of music performance. If unconscious meaning is forced into rationalization, it loses its weight, its resonance. The meaning of Opaque Symbols slip away like a wet fish, refusing to be pinned down to a single interpretation.

In Jung’s theory, symbols function as a bridge between consciousness and the unconscious. This bridge is built through interpretation, where meanings that may not be immediately graspable emerge from the depths of the mind. These meanings often follow universal patterns, which Jung developed into his theory of *archetypes* and the *collective unconscious* (1991), a concept that, broadly defined, refers to universal symbols that point to the fundamental roots of human experience.

Jung’s theory of archetypes faced much criticism, particularly for its male-centered assumptions, as critiqued through the lens of feminism (Wehr

⁴“La richesse du sens des rêves repose précisément sur la diversité des expressions symboliques et non sur leur réduction univoque” (my translation). Unless otherwise noted, all translations from French are mine.

2015) or through efforts to decolonize Jung’s thought, challenging its Eurocentric and essentialist tendencies (Boscaljon 2024).

While I will not use the notion of archetypes, I will, however, use the term “archetypal meanings” as used by Erik Davis (1998). I understand this term as referring to deep-rooted symbolism linked to fundamental aspects of the human condition: life and death, love and hate. This idea of archetypal meaning bears similarities to Jung’s concept of the collective unconscious, which has also been widely criticized for its universalism, overgeneralization, and lack of empirical evidence.

Such universalism is also present in Claude Lévi-Strauss’s concept of *mental structures* (1974), which assumes that basic, shared structures exist across human cultures. This idea is exemplified in his analysis of myths. This assumption forms the foundation of Structuralism, which seeks to uncover universal patterns (structures) in human thought and culture and analyze their differences. To some degree, Jung’s notion of the collective unconscious shares this premise (Iurato 2013), though it lacks the empirical rigor that Lévi-Strauss applied to his work. Both frameworks rest on the idea that deep-seated structures shape human understanding.

The term *unconscious* carries strong psychoanalytic connotations, which I will not explore in detail. While for Jung the unconscious extends far beyond the individual mind, in this thesis I use the term more narrowly, as a synonym for what Rudolf Otto, in relation to the experience of the numinous, called the *non-rational*, a notion I will explore in chapter 8. For me, unconscious meaning refers to connotations and associations that are not accessible through reason but instead stimulate the imagination and offer an intuitive sense, a hunch, of meaning.

4.2 Four Symbolic Channels

In my music performances, symbolic meanings are not located in a single medium but emerge from the interplay of several distinct layers, which produce connotations, referencing extra-musical elements. Symbols are the sum of these connotations, enabling musical performance to be positively contaminated by references to ideas of the sacred.

For clarity, I group these layers into four Symbolic Channels, which I

describe as follows:

- **Instrument:** The physical object on stage, including its brand, design, color, lighting, and positioning. In this thesis, instruments serve as the centerpiece: they are the starting point of each artwork, upon which other sources of symbolism are grafted.
- **Sound:** The acoustic result of performer–instrument interaction, including timbre, pitch, loudness, rhythm, melody, and texture.
- **Technique:** The instrumental technique, or how the body interacts with the instrument, including touching, striking, bowing, or manipulating it to create sound.
- **Context:** Everything else surrounding the act of performance, including venue architecture, ticketing rituals, lighting, audience behavior, institutional frameworks, and the performers themselves.

It is an oversimplification to strictly differentiate between these dimensions of music, as everything is interconnected. However, making such distinctions remains useful as a heuristic shortcut for clarifying the focus and structure of this thesis.

In table 4.1, I use “the rusty metal rod” as an example to illustrate each channel.

Table 4.1: Four Symbolic Channels

Channel	Example: The Rusty Metal Rod
Instrument	Suspended metal rod at center stage. The old bone.
Sound	The resonance of the metal rod.
Technique	Rubbing the bone against the rod. The solemnity and precision of Matthias.
Context	Matthias. The barn.

Context is of utmost importance for symbolism, as it provides the frame to which symbols refer, how they are interpreted. Context is composed of many elements, such as the space, time, and social dimension of the music performance. I have bundled up all these elements into the category

Context to reflect how these elements are balanced in the thesis and how they contribute to the symbolism in the artworks.

As mentioned, the main Context for this thesis is the classical music concert, which I briefly explored in the previous chapter in relation to the concert hall and Sacred Consumption. I will continue to examine this particular context in the coming chapters, referring to specific contextual elements when they are relevant, especially in chapter 8 on Numinous experience.

When it comes to the symbolism of music performance, I will have only scratched the surface, as each new context brings a different symbolism, which could be the subject of an entire thesis. For a more in-depth exploration of these aspects, I can only refer to the anthropological and ethnomusicological literature on rituals and music.⁵ Additionally, numerous artistic research projects have engaged with similar themes, through community-based practices, installations, participatory works, and in-situ performances, among others.⁶

4.3 Instrument, Sound and Technique

The thesis focuses primarily on the other three Symbolic Channels. The next two chapters concentrate on the symbolism emerging from the channel of Sound and Technique. Although the Instrument channel will naturally come into focus here as well, it deserves its own dedicated discussion in chapter 9, especially regarding the types of instruments that concern me most in this thesis: electronic music devices such as loudspeakers, amplifiers, and electric guitars.

The next chapter is structured around the progressive expansion of symbolism in music performance, focusing especially on symbolism and how this connects music to the sacred. I start by addressing the concept of absolute music, which refers to instrumental music that exists independently of any explicit narrative, program, or extra-musical reference. It is purely the organization of sound, relying on rhythm and pitch (melody and harmony) as its primary means of expression. Absolute music serves as an ideal starting point because it represents a kind of ascetic practice of listening, where

⁵For example: (Feld 2012; Turino 1999).

⁶For example: (Fast 2018; Dobewall 2021).

music symbolizes only itself. Claude Lévi-Strauss' comparison of music and myth (1964, 1:22–38) will further illuminate how music in its “purest” form can evoke the sacred. Thus, the first question can be posed this way: Is there something in music itself, and therefore in the music technologies producing it, of sacred dimension?

From there, in chapter 6, I will expand to examine the numerous possibilities of symbols in music performance, both in the auditory and visual modalities. I will show that symbolism is inherent even within the canons of absolute music—whether from the composer's perspective, through extra-musical material, or in the audience's mind. Music can tell stories not only through sound but also through the act of music-making itself, a concept central to Mauricio Kagel's idea of instrumental theater (Heile 2006). While the next chapter will focus on the Sound channel, chapter 6, with its focus on instrumental theater, introduces the idea of uncovering symbolic meaning in the Technique channel.

My practice of instrumental theater has strong roots in the tradition of absolute music. Such pieces are often performed in the same contexts, spaces, and by the same performers as works from the contemporary and absolute music canons of Western classical music. This is yet another reason why, before exploring the multidisciplinary nature and rich symbolic potential of instrumental theater, I will first focus on how sound and music themselves can become subjects of sacredness.

Chapter 5

Domain of Sacred Sounds

Creation myths involving sound are numerous. The Bible's Book of Genesis describes the creation of the world through the spoken word of God: "And God said, 'Let there be light,' and there was light" (Gen. 1:3). Each phase of creation follows this pattern, where God speaks and the elements of the world come into being, presenting sound (the word) as the medium through which the universe unfolds. In this Christian narrative, the creative act centers on the word: a form of sound imbued with meaning. Perhaps it is not sound alone, but language, that holds the ultimate power to create.¹

Maybe because of such foundational myths, music in the realm of the sacred is often subordinate to speech. The focus is frequently on words rather than the music itself. Throughout my research, I have repeatedly found that this hierarchy is reflected in scholarly literature on sacred music. One striking moment for me was when I attended the Music, Mortality, and Ritual Symposium hosted by Durham University in 2021 (Durham University 2021). A vast majority of the presentations revolved around sacred texts: myths, prayers, or magical incantations. The sacred characteristics attributed to music were often secondary, seen primarily as a means to support or enhance the text.

¹The spoken word as a generative force finds resonance in J. L. Austin's theory of performativity, where utterances do not merely describe reality but enact it. In *How to Do Things with Words* (1962), Austin distinguishes between constative and performative utterances, the latter being speech acts that *do* something by virtue of being spoken, such as declaring a marriage or naming a ship. In this light, the divine speech in Genesis functions as the ultimate performative act: language does not represent creation, it brings it into being.

Because sacred texts have been firmly established for centuries, music that incorporates such texts is easily categorized as sacred and part of their performance rituals. Scholar of music and religion Owen Coggins notes that, “lyrical content and the intentions of the musicians are what matters in determining and defining religiosity in music” (Coggins 2018). Sacred music as a category encompasses everything from New Age compositions to church hymns to the latest evangelical pop-Christian hits. Moreover, without text, as Coggins points out, music can also be labeled sacred if its creator explicitly claims sacred intentions or motives in its creation.

While this is a sample, and far from a comprehensive literature review on the subject, which lies beyond the scope of this project, it poses the question: beyond language, how are sounds sacred, how can they trigger the imagination and lead to sacred symbolism without relying on textual or declared intentions?

5.1 Absolute Sacred Music

In respect of instrumental music, he required that the orchestra should as much as possible be hid; because by the mechanical exertions, by the mean and awkward gestures of the performers, our feelings are so much dispersed and perplexed. Accordingly he always used to shut his eyes while hearing music; thereby to concentrate his whole being on the single pure enjoyment of the ear.

— Johann Wolfgang von Goethe (1907)

In 1796, Goethe described in *Wilhelm Meister’s Apprenticeship and Travels* a form of music performance that would later evolve in Germany under the term *Konzertreform*, in which orchestras performed while hidden behind a curtain. Cathy van Eck notes that this “extreme practice [...] should be regarded as a by-product of a larger aim or program to achieve more focus on the purely sonic aspect of the music” (Eck 2017, 104).

The object of such a practice is *Absolute Music*, a term referring to music as non-representational, where it is revered as a purely abstract art, devoid of external associations, where music “creates a separate world for itself,

detached from the emotions and feelings of the earthly world” (Dahlhaus 1991, 13). It is described as abstract and absolute because symbols beyond the music itself are not intended to come to mind.

Nowhere, perhaps, has this phenomenological listening experience of music been so vividly described as in Marcel Proust’s *Remembrance of Things Past* ([1919] 2023), where the narrator recounts the effect of Vinteuil’s “little phrase.” It is a magnificent exploration of the connection between the musical lines and the inner listening experience of the narrator. It illustrates how music reflects the protagonist’s feelings and memories in complex and dynamic ways, not merely mirroring his inner states but conversing with them in an abstract form. The depth of this relationship peaks when the “little phrase” develops sacred dimensions:

As though the musicians were not nearly so much playing the little phrase as performing the rites on which it insisted before it would consent to appear, as proceeding to utter the incantations necessary to procure, and to prolong for a few moments, the miracle of its apparition, [...] Swann felt that it was present, like a protective goddess, a confidant of his love. (Proust [1919] 2023, sec. 3)

What is striking here is how music becomes so intrinsically tied to one’s emotions that it takes on the role of an agent, engaged with in an abstract way. In the first volume of *In Search of Lost Time*, Swann, a central character, is swayed by his love, which the little phrase gradually comes to symbolically represent. Through obsessive investment, the little phrase acquires an agentic and sacred quality, becoming a goddess. From the lens of consumption, music is particular because it can be infinitely consumed and invested in, yet never truly owned.

What is particularly interesting here is the language of music’s invisibility. Its “apparition” is described as a “miracle.” Indeed, the very appearance of music is paradoxical; it is precisely this invisibility that allows music to become so deeply entangled with emotion and the self.

A similar conception of music as absolute is also central to the French ethnologist Claude Lévi-Strauss, who sees music as “free from those representational links” (1983, 22). His Proustian influences are especially evidenced

in his popular book *Tristes Tropiques*, which includes a scene reminiscent of Proust's depiction of music's profound effect (Ledent 2012).

Lévi-Strauss is a good reference here, as he is both an authority on the study of myths and a lover of music. In the opening of his monumental *Mythologiques*, which develops the structural analysis of myth, he compares music and myth and does not hesitate to associate music with ideas of the sacred. For him, music is “at once intelligible and untranslatable, the musical creator is a being comparable to the gods, and music itself the supreme mystery of the science of man” (Lévi-Strauss 1983, 18).

In both cases of Lévi-Strauss and Proust, absolute music is elevated to a sacred dimension due to its invisibility and non-representational nature. This allows music to merge with one's inner world, becoming a vessel for emotional projection and engagement to an extreme degree, as seen in Proust.

The very fact that music operates on both the rational mind and emotion becomes a “supreme mystery” for Lévi-Strauss:

music's extraordinary power to act simultaneously on the mind and the senses, stimulating both ideas and emotions and blending them in a common flow, so that they cease to exist side by side, except insofar as they correspond to, and bear witness to, each other. (Lévi-Strauss 1983, 28)

What Lévi-Strauss describes here as “ideas and emotions” blended “in a common flow” is similar to what I refer to as a Numinous experience. What makes music sacred is precisely this kind of similarity to other non-rational experiences, which music evokes so mysteriously: sound, emerging from thin air, reaching directly into emotion. How can something invisible have such a profound effect, making me feel such intense emotion?

5.2 Another Myth in the Concert Hall

As with all things sacred, absolute music must be upheld through ritual, which delineates the time when music is elevated to this pure, abstract language from the time when it is not. The preferred ritual for this is the

classical music concert. In chapter 3, I explored this format as a ritual of consumption, but one can also look at it from other points of views.

The classical music concert, as a ritual, has evolved over centuries, adapting to various social contexts. Martin Tröndle analyzes the evolution of this form, noting that by 1850 it “exerts a clear social control” (2020, 16). Photographs from that period depict concert settings where the seating arrangements were oriented toward one another, making it easy to observe and distinguish individuals and their class status. Simply by taking a seat at the concert, one knew their place in the social order.

This dynamic is still present at the end of the 19th century, when Proust writes and describes the social ritual of “being seen being seen” at the opera. These social performances are detailed from the narrator’s point of view, as he himself tries to carve out a place among the upper ranks of Parisian bourgeoisie. With a keen sociological eye, Proust reveals how seemingly trivial details, such as the way one says hello, become essential tools for maintaining status or navigating the social hierarchy.

While remnants of this status-affirming game still persist today in attending classical concerts, Tröndle argues that the classical music concert has gradually developed, selecting elements that cultivate the listener’s attention to the music. Through its stage-centered seating arrangements and lighting design, the concert hall fosters a concentrated listening attitude. The focus of attention is directed to the practice of absolute music, where the score is seen as the pure vessel of a composer’s intention, and less toward the social.

Drawing an analogy with biological evolution and natural selection, Tröndle shows how variations in concert formats that generate greater audience focus are more likely to persist for socio-economical reasons:

One might say that every new concert variation that attracts the attention of the audience—from the great symphony to the riff in the 4/4 time of rock and roll—opens up financial resources that lead to its stabilization. (Tröndle 2020, 13)

In this sense, humans in Western societies have been living in the so-called attention economy far longer than one might assume. It is perhaps due to this kind of selective pressure that putting performers behind, cur-

tains like in *Konzertreform*, is a variation of the concert format that did not last very long. Although the ideals of Absolute Music has shaped this format; the persistence of concerts today owes as much to evolving attention economies as to any lingering reverence for sonic purity.

5.3 Music as Myth

With the death of myth, music becomes mythical in the same way as works of art, with the death of religion, are no longer merely beautiful but become sacred.

— Claude Lévi-Strauss (1990, 653)

There are other myths within the concert hall beyond those of consumption, the elevation of absolute music, and status affirming.

According to Lévi-Strauss, the invisibility of music is just one point of comparison between myth and music. Music is experienced as supernatural because, like myth, “it comes from nowhere” (Lévi-Strauss 1983, 18). From there, Lévi-Strauss develops a complex argument with profound implications, proposing that music is a “language without meaning” (Lévi-Strauss 1990, 647). This perspective sparked considerable debate, particularly in the field of contemporary music, where, in the same breath, Lévi-Strauss heavily critiques practices such as serialism and *musique concrète* (Lévi-Strauss 1983, 22–26). These intricate debates on the meaning of music, which develops into the broader study of music semiotics (Nattiez 1974; Goldman 2011), fall beyond the scope of this research.²

Lévi-Strauss’ comparison between myth and music goes so far as to suggest that around the 17th and 18th century myth slipped into the concert hall, and music started to assume the function of myth. Belief in mythical stories and their supernatural claim about the origin of the world in the Western world began to wane, as the rise of science and reason provided new frameworks for explaining the world. Myths were seemingly discarded.

²While it may seem relevant to the subject of symbolism in music and the study of gestures, such research (Delalande and Nattiez 2019) focuses primarily on music within the absolute paradigm, which is not relevant to the analysis of the artworks as discussed in this thesis. I will detail how I approach this subject in relation to my use of the word *gesture* in Interlude B.

However, Lévi-Strauss suggested that, rather than dying out, myths evolved into a more abstract form of storytelling, one that aligned with the socio-political and intellectual context of the time.

For Lévi-Strauss, like myth, the musical work:

offers an interpretative grid, a matrix of relationships which filters and organizes lived experience, acts as a substitute for it and provides the comforting illusion that contradictions can be overcome and difficulties resolved. (Lévi-Strauss 1990, 659)

This idea is explicit in *Musicking* (1998), where Christopher Small analyzes the classical music concert as a ritual. He examines the sonata form within the symphonic works of Beethoven, for example, becoming the most widely told abstract narrative among bourgeois elites. The sonata form is a musical structure commonly used in the first movements of symphonies during the Classical and Romantic periods. Small compares the contrasting themes and the modulation across different keys as a narrative that:

tells of the establishment of an order, of the disturbance of that order by an element that may be attractive, even seductive, but that threatens its existence, and of the struggle to reestablish order, to contain or overcome the disturbing element. [...] the force that overcomes is that of logic, clarity, rationality. (Small 1998, 188)

The sonata form represents a battle between good and evil, ultimately overcome by the idea of progress. This abstract myth, a story without words, captivated the Enlightenment mindset and enchanted audiences for centuries. Christopher Small likens it to the ritual of a bedtime story, with its moral, promoting the values of the Enlightenment (reason and science), serving as a form of abstract collective conditioning.

Promoting the myth of progress, maintaining social status, and now reinforcing the myth of consumption explains why the classical music concert remains so highly valued as an institution, despite attendance in concert halls declining (Lauer 2023; Tröndle 2020). In cities, concert halls and opera houses, much like churches, have become signs of power and wealth alongside other major landmarks such as sports stadiums and skyscrapers.

In short, there are two characteristics of the sacredness of absolute music in the Western classical music context: first, its status as a non-representational and purely abstract form, revered for its connection to the emotional mysteries; and second, its function as an abstract myth, similar to the dialectic between good and evil exemplified in the sonata form. Coming back to the four Symbolic Channels, these constitute sacred connotations most purely linked to the Sound, devoid of the influence of Instrument or Technique.

However, precisely because of music's abstract nature, interpretation remains bound to the Context channel. A framework is always necessary for interpretation. This abstraction allows music to be shaped by the listener's subjective interpretation, enabling it to convey a wide range of profound narratives, depending on the interpretive framework shaped by the context of listening. In Marcel Proust, Vinteuil's sonata form does not portray a struggle between good and evil but rather evokes an intimate dialogue with a "protective goddess, a confidant of his love" (Proust [1919] 2023, sec. 3).

I am now leaving the world of absolute music and entering the realm of music's symbolism. While I will come back to absolute music, especially in chapter 8, from now on I will define music as a multimodal experience that is shaped not only by sound but also by elements such as the space and social context in which a performance takes place (Way and McKerrell 2017, 8). The most important aspect, after sound, is the visual dimension of a performance, which in the context of my artworks refers to what is seen and presented on stage.

I previously tried to amplify the faint echoes of sacred resonance within the Sound channel, looking at music in the absolute paradigm. As I will now start to focus on Instrument and Technique, only lightly touching on Context, such sacred resonance will begin to fill every space.

The classical concert as an institution is something I have personally struggled with, as so many other musicians have done. It is through my friction with this art form that I have come to better articulate my own practice.

Attending a concert often feels somewhat odd, because my listening practice goes against the expectations imposed by the space. I frequently change seats between pieces to experience different listening positions, or

explore various ways of listening: closing my eyes, observing the audience, focusing on the performer, studying the space, or paying attention to the instrument itself. If I struggle with the experience of the classical concert as an audience member, I also struggle with the concept of absolute music as a composer.

Absolute music was never the defining paradigm of music for me, even though it remains an important part of my musical background and education, particularly through my studies at the conservatory, where I engaged with the great works of this tradition. However, even before my formal introduction to classical music composers, I was always drawn to music that told stories through abstract sound, and my earliest compositions reflected this narrative impulse through the integration of extra-musical material.

Chapter 6

Domain of Sacred Symbols

Once symbols are admitted inside the concert hall or performance space, diverse ideas of the sacred can be referenced through their connotations. In this chapter, I will examine the symbolic possibility within instrumental theater.

I see absolute music as a practice of being intentionally deaf to the symbolism of music, which nonetheless proclaims its meaning on multiple levels. In the concert hall, sacred symbolism can be found even in the very elements designed to enhance attention. Conventions often obscure symbolism beneath habitual practices, yet aspects such as seating configurations and lighting serve as powerful tools that shape the meaning and symbolic resonance of a musical experience. Changing these elements changes the meaning of a performance.

I would argue that even when absolute music is elevated in the concert hall to the status of a sacred language there remains an undeniable pull toward the symbolism of sound. Even when no symbolism is intended, it can still be found. As I will explore later with the concept of *patter-nicity*, meaning often emerges from noise—an essential survival mechanism ingrained in the human brain. Even in the prime example of absolute music, the sonata form, the dialogue between themes has been characterized as a masculine-feminine dichotomy. Whether or not this “gendering of musical form” (Hepokoski 1994) has any basis, the key point is that it reflects a fundamental aspect of human cognition: the tendency to seek meaning wherever attention is directed.

Across the ages, composers and music theorists have attributed symbolic significance (often of a sacred nature) to specific intervals and scales. Beyond their structural and expressive functions, these elements have carried deeper meanings. The ancient concept of the *harmony of the spheres* illustrates this idea, as mathematical ratios were believed to govern both the microcosm of the vibrating string and the macrocosm of the Ptolemaic universe. This notion was particularly influential during the Renaissance.

Gioseffo Zarlino (1517–1590), a major Italian theorist, was deeply influenced by Pythagorean ideas about harmony. In his treatise *Le istituzioni harmoniche* (Zarlino 1558), he explores proportions and tuning systems in ways that echo the principles of *musica universalis*, another word for harmony of the spheres. Numerical symbolism in music, as discussed by Gozza (2000), further highlights how music has long been intertwined with mystical and philosophical thought.

Finding purity in intervals was particularly significant at a time when intonation systems were far from the now-universal equal temperament. Tuning carried an element of mystery and the unknown, and the *harmony of the spheres* provided a framework for selecting pitches and intervals in relation to something greater, an overarching cosmic order that guided musical choices amid the many possible tuning systems. This focus persists today in many different musical practices where there remains an aura of sacredness around the pursuit of perfect tuning, a certain fetishization of the absolutely pure, harmonious interval. There is something almost magical in finely tuned resonance, much like the intricate beauty of fractals.

If there is sense of awe in the celestial purity of consonant intervals, there is an equal sense of dread in the infamous tritone, *diabolus in musica*, whose unique and unsettling dissonance was forbidden in medieval sacred music. This stark contrast between consonance and dissonance is exemplified in Hector Berlioz's *Symphonie Fantastique* (Berlioz 1830), where the tritone, along with other moments of dissonance, functions as “an addition to or stain upon what would otherwise be more concordant, ‘pure’ music, as an external force of defilement” (Donlevy 2003).

6.1 Symbols in Instrumental Sounds

Berlioz's work is a classic example of *program music*, “instrumental music that carries some extramusical meaning, some ‘program’ of literary idea” (Encyclopædia Britannica, n.d.), which is often outlined in the liner notes accompanying a piece. While I have argued that absolute music inherently carries a narrative of its own through myth, here the narrative is more like a concrete story, featuring characters, events, and landscapes that are explicitly represented through the qualities of the music.

There are numerous examples of musical symbolism before the Romantic period, but they tend to be isolated and implicit rather than representing a systematic approach. Berlioz and other Romantic composers began to make their narrative intentions explicit through musical symbols. Beyond the abstract symbolism of intervals, Berlioz creates evocative imagery which I categorize into four strategies for creating symbolism in sound:

- Onomatopoeia: The imitation of environmental sounds using musical instruments or voice.
- Quotation: The borrowing of elements from another piece of music or sound work, an early form of *sampling*.
- Instrumentation: The historical and cultural associations tied to a particular instrument, similar to what I term the Instrument channel, but only within the realm of sound.
- Patterns: How musical patterns create references to rhythms or temporal structures found in other contexts.

The *Scene in the Countryside* is a clear example of the narrative strategies Berlioz employs to tell a story through music. In the concert program accompanying the 1832 performance, he concludes the description of the third movement by writing: “The shepherd resumes his ‘ranz des vaches’; [...] Distant sound of thunder... solitude... silence...”¹ (M. Austin and Tayeb 2021).

Consequently, at the end of this movement, an English horn is heard, representing the lonely shepherd playing *ranz des vaches*, a traditional melody

¹“A la fin, l’un des pâtres reprend le ranz des vaches; l’autre ne répond plus... Bruit éloigné du tonnerre... solitude... silence...”

sung by Swiss Alpine herdsmen as they guided their cattle to pasture. This melody symbolizes solitude and nature. Moreover, this is a Quotation, a melody borrowed from another context that carries strong connotations. By integrating this familiar tune, Berlioz taps into its cultural and emotional associations that support his narrative.

As an example of Instrumentation, the melody is played by the English horn, which, like the oboe, has long been associated with pastoral settings. Both instruments share an ancestor, the shawm: a double-reed instrument often depicted as being played by shepherds. This historical association reinforces the sense of solitude and nature evoked in the scene.

In contrast with this folk song, there are soft rolls on the timpani. This is an example of Onomatopoeia: the imitation of a sound through another sound, such as those found in nature. The low, rumbling resonance of the timpani serves as a simple and effective depiction of thunder in the distance.

At the beginning of the movement, the English horn and oboe are exchanging the *ranz des vaches*, suggesting, as Berlioz writes, “two shepherds in the distance dialoguing”² (M. Austin and Tayeb 2021). This type of question-and-answer alternation between two distinct, personalized instruments exemplifies symbolism through Patterns. Patterns serve as a means of organizing musical material over time. If the lines of the oboe and English horn did not clearly alternate, the passage would lose its sense of dialogue. It is because this exchange imitates sonic patterns found in reality that Berlioz successfully renders the image of two shepherds calling to one another across vast green pastures.

Onomatopoeia, Quotation, Instrumentation, and Patterns are four ways in which Berlioz employed musical symbolism to convey the story he envisioned. While Berlioz used these techniques to depict a pastoral, rather profane scene, the same techniques can be employed to represent the sacred. For instance, the sound of bells can evoke the church and its rituals through the Instrumentation, while the Quotation of sacred chants directly connects music to religious contexts.

In a somewhat dreadful conclusion to his symphony, Berlioz incorporates this kind of symbolism in the final movement, *Dream of a Witches' Sabbath*, which he describes as: “The funeral knell tolls, burlesque parody of the Dies

²“il entend au loin deux pâtres qui dialoguent”

Irae”³ (M. Austin and Tayeb 2021). Here, Berlioz subverts the sacred chant of the *Dies Irae*, a funeral hymn traditionally chanted in Catholic liturgy, transforming it into a Grotesque and macabre vision.

Such profanation of sacred symbolism reflects a complex relationship with religion, a recurring theme in Berlioz’s life. Although born Catholic, Berlioz is often described as agnostic or even atheist (Crabbe 1980). He was openly critical of the Church as an institution, while simultaneously composing music on Christian themes.

This Grotesque finale to the *Symphonie Fantastique* is significant for this argument, as it offers an early example of attempts to articulate the clash between the sacred and the profane, a tension at the center of Berlioz’ life, through musical symbolism.

6.2 Symbols in Recorded Sounds

My first composition used musical symbols in a manner reminiscent of the evocative storytelling in Berlioz’s *Symphonie Fantastique*. This inclination toward programmatic music intensified when I discovered the world of *musique concrète*, a compositional practice which truly developed after World War II, as tape recording technology became more accessible.

Working in studios of the public radio in the late 1940s in Paris, Pierre Schaeffer pioneered the genre, developing an entire musical theory around this form of music, which used sound materials that were radically different from traditional musical sources.

Pierre Schaeffer’s insistence on the intrinsic properties of “sound objects” (Schaeffer 1966) and the idea that they should be perceived independently of their source reflects a legacy of the absolute music paradigm. He sought to legitimize *musique concrète* as a form of “serious music,” countering the common critique of his *Étude aux Chemins de Fer* (Schaeffer 1948) that it was merely an exercise in playing with noises from the world.

However, for me and many others, I found the most interest in compositions that relinquish the idea of the sound-object. The works that resonated most with me not only acknowledge the connection between sound and its

³“Glas funèbre, parodie burlesque du *Dies irae*”

source but actively play with these connotations, embracing the rich web of associations that sounds carry.

An important book for me was Michel Chion's *L'art des sons fixés ou La musique concrètement* (1991), in which Chion expands the notion of musique concrète as conceptualized by Schaeffer. His approach is exemplary in a work such as *Requiem* (Chion 1973), which explicitly references the acoustics of churches and the sounds of sacred music to construct, often in ironic and poetic ways, a singular interpretation of the requiem. Much like Berlioz a century earlier, Chion reimagines the musical landscape of funeral rites by blending both profane and sacred representations.

The ability to record any sound, combined with the expanding possibilities of electronic *lutherie*, mixing, and editing, and finally playing it back through high-fidelity sound systems, greatly expands the symbolic potential of sound. As discussed in relation to Berlioz' works, I have identified four strategies for creating symbolism in sound (Onomatopoeia, Quotation, Instrumentation, and Patterns), all of which are significantly broadened in their possibilities through musique concrète.

For example, the capacity to capture any sound vastly increases the potential for the Quotation not only of melodies but also of so-called "non-musical" sounds, such as the passing of a train.

The richest symbolic potential is found in Onomatopoeia, where the characteristics of certain sounds are referenced in more abstract ways, enabling new forms of sonic representation. Through the systematic analysis of sound, Schaeffer develops a vocabulary for describing their characteristics, which he synthesized in his typo-morphology (Schaeffer 1966). This typology categorized sound morphologies based on features such as *mass* (ranging from pitched sounds to noise) and *duration* (ranging between impulse sounds and sustained sounds). In this framework, sound objects can be understood as *energy profiles*, such as the *delta*, which is a shape found not only in instrumental sounds but also in natural phenomena like the waves of the sea or the passing of traffic on a quiet street.

In contrast, the orchestra of Berlioz is inherently limited by acoustic instruments and the physical constraints of performance spaces, restricting its ability to represent the full spectrum of sound morphologies. With quasi-unlimited morphological possibilities, musique concrète enables a far greater

variety of references to the real world, significantly expanding the potential of Onomatopoeia and musical storytelling.

Such possibilities in symbolism led composers to speculate about the universality of energy profiles, suggesting that certain sonic shapes, such as the *delta* profile of a wave, are so characteristic that they can be referenced without explicitly recording the sound of the sea, but rather by replicating its morphological characteristics.

In *The Tuning of the World* (Schafer 1977), R. Murray Schafer even argues that certain sounds possess peculiar morphological characteristics that evoke deep symbolism, even when the actual sound itself is not directly heard but rather imitated through Onomatopoeia. By capturing the essence of these sonic shapes, composers can tap into their inherent symbolic power, allowing listeners to recognize and interpret them based on their universal acoustic features.

Influenced by Jung's theory of archetypes, Murray Schafer tries "to show how certain sounds possess strong symbolic character and how some of the most ancient may act to invoke archetypal symbols" (Schafer 1977, 169). Schafer develops his interpretation of such symbolism, and also the affects related to sonic archetypes like the sea, the wind, the bell, and the horns.

This led Trevor Wishart to embark on an ambitious quest, inspired by Lévi-Strauss, to bring myth to life through music. His goal was not only to evoke the deep meanings embedded in sounds but also to manipulate and transform their associations.

In his book *On Sonic Art* and his analysis of *Red Bird* (Wishart 1977), he attempts to construct a mythical narrative, arguing that "just as in the structure of a myth, we need to use symbols which are reasonably unambiguous to a large number of people" (1996, 183). Wishart refers to these sonic symbols as *sound-images* or even "archetypes of sound morphology" (1996, 106). He explores how, through carefully crafted structures, "we could establish either the primeval or the romantic symbolism of the sea—or in fact both—and generate subtle resonances and transformations between the two interpretations" (1996, 190).

Inspired in part by Trevor Wishart's experiments in *acousmatic music*, a practice akin to musique concrète, James Andean takes this approach even further by developing an *acousmatic narratology* (Andean 2024). One of

the most defining aspects of sound symbolism in the acousmatic tradition, Andean notes, is that recorded sound carries a “double reference.” In acousmatic music, sound can refer not only to the object producing the sound but also to the *space* in which it exists.

For me, as for many other composers, space is a fundamental element, something that was significantly limited in Berlioz’s time, as sound was always bound to the fixed acoustics of the concert hall. In terms of storytelling, the integration of spatialized sound allows for a multitude of metaphors related to space, such as movement, travel, and the connotations of different environments, greatly expanding the expressive possibilities of musical narration. The concept of *cinéma pour l’oreille* (cinema for the ear) (Normandeau 2010) underscores the extent to which musique concrète enables new forms of narrative construction afforded especially through the use of space.

Coming back to my own practice as a composer that I was developing under the guidance of electroacoustic composer Yves Daoust, I quickly became interested in creating stories through sound. Quite naturally, when confronted with the limitless possibilities of sound in musique concrète, storytelling serves as an anchor by providing a way to structure and make sense of the eclectic material, even if the narrative is not always explicitly communicated to the listener.

However, as Andean notes, there are inherent limits to acousmatic narratology (2024). He highlights how the reception of a narrative is ultimately a collaboration between composer and listener: listeners may interpret unintended meanings from sounds or miss subtle narrative cues altogether. Additionally, cultural specificity plays a crucial role; the symbolic meaning of sounds can vary greatly between cultures, raising further questions, including ethical considerations regarding the use of sound sources. Moreover, unlike language, sound is inherently *truthful*, in the sense that it cannot lie. This limits the composer’s ability to employ techniques such as unreliable narration or deception, which are common in literature.

The challenge of organizing an infinite palette of sonic material into coherent narratives remains a unique and ongoing exploration. Listening to Wishart’s works *Red Bird* (Wishart 1977), for example, reveals how difficult it is to achieve clear and universally understood symbolism in sound. It remains a field in flux, still being mapped, with the language of sound

symbolism continuously evolving. Wishart's works are acousmatic, intended to be heard through loudspeakers with minimal visual distraction. This medium imposes inherent limits on the types of stories that can be told, especially when words are not used. Many of the classics of the genre rely heavily on spoken text to convey meaning, yet for me, someone who was never particularly drawn to words, this approach was not appropriate. While studying at the music conservatory, I sought to create a clearer sound dramaturgy for audiences without relying on words.

6.3 Symbols in Movement

Parallel to my investigation into the symbolism of sounds in the musique concrète tradition was an exploration of movement: an attempt to anchor the abstract nature of sound in the visible reality of physical movement.

Movement has been an important part of what made music interesting for me. My practice as a musician began with the electric guitar in rock bands, where I felt that playing music gave me the freedom to move. Some of my earliest memories of playing the guitar are centered on the physicality of it: the enjoyment of strumming the strings, feeling the movement of my arm as an integral part of the musical act.

This physical quality developed when I began performing as a free improviser. The sense of freedom I discovered in that context allowed me to emancipate my playing, moving further away from traditional guitar technique and focusing more on the physical effort I invested in producing sounds with the guitar. This shift also changed the way in which I perceived musicians in performances: I found myself increasingly drawn to their movements rather than to the specific sounds they produced. The movements, the bodily expressions, and the physical engagement with an instrument became just as compelling as the music itself.

Further along my musical path, I encountered contemporary dance and discovered ways of moving while playing that made sense to me. It was the late choreographer Tedd Robinson who first pointed out the *functional* quality of my movements in our co-created work. Functional movement is movement with a purpose: a concept that was central to Tedd's choreographic approach. Tedd was looking for the meaning in everyday movements, strip-

ping away superfluous choreography to highlight the beauty of movement driven by the function. For him, the act of making sound was itself a functional movement that he found fascinating. His perspective helped me to see my own performance differently, reinforcing the idea that movement and music could be seamlessly intertwined, with movement becoming an essential element of musical expression.

In 2012, we created *Charles and Tedd Doing Things with Sticks* (Robinson and Quevillon 2012) in a barn nestled within a fir tree forest. The wind whistling through the trees inspired me to create contrasts in the sound environment by incorporating spinning fir branches into the performance. Positioned outside the barn on a platform, I spun the branches, producing sounds that could be barely heard acoustically from within the barn. Inside, the performance space was equipped with two pairs of loudspeakers: one pair positioned behind the stage and another placed very close to the audience. The microphone signal from the platform outside was delayed and distributed across the two pairs of speakers, creating a *zoom-in and zoom-out* effect as the sounds ping-ponged between the speakers before finally dissolving into the surrounding fir tree forest. In parallel, Tedd performed inside the barn, balancing sticks on various objects. The interplay between our two performances—his delicate and precarious physical manipulations and my wild, spatialized sonic experimentations—created a compelling contrast, highlighting a tension between order and chaos.

It was in this collaborative work, where I was spinning, shaking, and swinging branches, that I discovered how one can modulate the balance between the visual and sonic aspects of a musical performance. Branches are typically not so easy to make music with—they need a lot of effort to create sounds, and the whole body needs to be involved when spinning a branch.

From my perspective, I am simply making music. All of my movements were directed toward making sounds. During the performance, my primary focus was on listening rather than on my physicality. I also noticed that when my movements did not produce sound I felt somewhat uncomfortable, as if they lacked meaning. Although the actions required to create sound with branches were quite unusual for a musical performance, I still consider them part of the musical realm, as they were purely about making sound.



Figure 6.1: *Charles and Tedd Doing Things with Sticks* (2012). Image by Rod MacIvor.

From the audience’s perspective, however, my performance operated at the boundary where the focus shifted from sound and music to the visual and physical aspects of the act. Blurring the line between music and dance, it was more about the relationship between the body, the instrument, and space than about a musical discourse.

This experience was foundational in shaping my vision for this thesis, guiding me to explore the visual connotations of music-making and leading me to the practice of instrumental music theater.

6.4 Instrumental (Music) Theater

Instrumental Music theater is the term I have used to describe my practice within the context of this research. I borrowed it from composer Mauricio Kagel’s concept of *instrumental theater*, which Björn Heile, in his monograph on Kagel, describes as a form of theater in which “music does not accompany action, but is the action” (Heile 2006, 40).⁴ Instrumental the-

⁴The word *music* is implicit in *instrumental theater*. The term parallels *instrumental music*, which refers to music performed exclusively with instruments, without voices. In

ater has its roots in the Dionysiac rituals of Ancient Greece, which mark the origins of theater itself (Csapo and Miller 2007). However, I will focus on its more recent development in post-World War II Europe, as it marks a shift from traditional dramaturgy toward what Lehmann has termed post-dramatic theater (2009), which aligns more closely with my own practice.

The Darmstadt Summer Course was established in 1946 in post-World War II Germany. As a composer, this period holds an almost mythical status for me, as references to these courses are deeply embedded in the history of 21st-century music. In the 1950s Darmstadt became a hub for musical absolutism, with figures like Arnold Schoenberg, Pierre Boulez, and Karlheinz Stockhausen shaping the development of serialism. Serialism is a compositional method that organizes musical elements into structured series. While closely linked to the twelve-tone technique developed by Schoenberg in the early 20th century, serialism expanded Schoenberg's dodecaphonism to govern other musical parameters, including rhythm, dynamics, and articulation as well as non-musical parameters such as movement and text.

In their book on New Music Theater (2008), Salzman and Desi describe the shift from absolute music in Darmstadt to the possibilities of theatrical expression in a way that reflects my own artistic trajectory. The emergence of new sounds and electronic music resisted strict categorization, despite serialism's attempts to formalize all aspects of sound. Electronics introduced sonic materials that did not conform to the tonal framework of the equal tempered system or the structured logic of serialist techniques. This raised fundamental questions: What should be done with these sounds? How could they be organized?

It was the use of the voice that initially led composers such as Nono, Berio, Aperghis, Ligeti, and Stockhausen away from absolute music. As Salzman and Desi point out: "The voice cannot be treated just like any other instrument. Its use immediately implies all the problems and characteristics of the human psyche" (Salzman and Desi 2008, 141). The voice inherently carries theatricality, the meaning of language, and the expression of emotion.

the same way, *instrumental theater* can be understood as theater without actors or spoken language, where the focus lies on the musician, the instrument, and their intricate relationship. *Instrumental Music Theater* is a term I sometimes use in this thesis to make *music* more explicit. It is, however, synonymous with *instrumental theater*, which I use interchangeably.

What began as a tentative departure from the concept of absolute music was fully ruptured with the arrival of the American composer John Cage at Darmstadt in 1958. Cage introduced indeterminacy and chance as compositional strategies, which stood in direct opposition to the rigid formalism of Darmstadt's 1950s ideology. As the author of *The Idea of Absolute Music*, Carl Dahlhaus, puts it, Cage's influence "swept across the European avant-garde like a natural disaster" (cited in (Iddon 2013)).

More importantly for this discussion, however, is Cage's more theatrical work, *Music Walk* (Cage 1958), which initially emerged from his collaboration with choreographer Merce Cunningham. Centered on a sequence of musical actions performed in randomize order, *Music Walk* was performed in Düsseldorf in 1958. Among the audience was the Argentine composer Mauricio Kagel.

Cage and Kagel first met in Darmstadt. While many in Darmstadt were initially hostile to Cage's wild ideas, Kagel, who arrived in Germany in 1957, was already receptive and enthusiastic about Cage's experimental approaches to music-making.

Kagel is said to have coined the term *instrumental theater* "in reference to John Cage's *Music Walk*," which was "new and innovative enough that there was a felt need for new terminology, and the use of the term shows the link between Cage and Kagel" (Salzman and Desi 2008, 127). In *Music Walk*, each musical action appears removed from its original musical context, revealing its potential theatricality. The act of music-making is seen as a dramaturgical action.

The need for storytelling is central to Kagel's work. While deeply influenced by the paradigm of absolute music, he is also strongly attached to narration and dramaturgy within musical language. Kagel insists that there is an inherent dramaturgy, a story that one can imagine when listening to music or composing (Solare and Kagel 2009, 20). This focus on storytelling is crucial in instrumental theater, as it employs expanded means to bring stories to the music stage.

What Kagel may have recognized in Cage's *Music Walk* (Cage 1958) was an expanded possibility for dramaturgy within the act of music-making itself, without relying on linguistic signs or added visual elements from other artistic media, but rather through the relationships between performers,

instruments, space, and sound. In other words, he saw the symbolism of music-making as dramaturgically potent. Music-making, even before its association with language, is an activity rich with symbolism that can be harnessed to create a theatrical narrative. Going back to the four Symbolic Channels, in instrumental theater Technique becomes symbolic.

6.5 Symbols in Technique: Match (1964)

In Kagel's composition *Match* (Kagel 1964a),⁵ two cellists face each other from opposite sides of the stage. The piece begins with simple exchanges of Bartók pizzicato clearly evoking, through Onomatopoeia, the dynamic of a tennis match.

Influenced by the complexities of serialist thought, which he absorbed during his frequent stays at the Darmstadt Summer Course, Kagel employed serialist techniques in *Match*. However, instead of organizing pitches as in traditional serialism, he catalogued the cello's various playing techniques and extended techniques—such as the Bartók pizzicato, where a player plucks a string with such force that it rebounds and slaps against the fingerboard, creating a sharp noisy attack—treating them as serialized musical objects (Heile 2006, 47). Through this approach, he structured the piece as a competition between the two cellists, transforming performance into a theatrical confrontation.

In instrumental music, technique refers to the various methods of playing that are specific to an instrument. For the cello, as a string instrument, there are two well-known primary techniques: arco (playing with the bow) and pizzicato (plucking the strings with the fingers). However, the range of techniques extends far beyond, encompassing numerous variations that fill the pages of books about instrumental techniques.

Different body movements generate various instrumental techniques, each shaping the sounds produced. Fine, precise movements coexist with larger, whole-body movements, which may have varying degrees of impact on the resulting sound. In Western classical music, when effort is optimized efficiently to produce sound, it is typically regarded as good playing technique.

⁵A filmed version of the work directed by Kagel is available (Kagel 1966).

In my experience studying at the Conservatoire de Musique de Montréal, classical musicians who exhibited excessive movement in their playing have traditionally been frowned upon. One of the prevailing arguments for this restrained approach has been that the ultimate goal of performance is to achieve an idealized form of pure or absolute music, in which the abstract discourse of sound remains the sole bearer of significance. As remarked earlier in Goethe's *Wilhelm Meister's Apprenticeship and Travels*: "by the mean and awkward gestures of the performers, our feelings are so much dispersed and perplexed" (1907).

With the development of modern music after World War II, and the increasing focus on timbre as a primary musical parameter, composers began searching for new sounds, leading to the expansion of instrumental technique and the emergence of what are known as extended techniques. These techniques produce sounds that differ from the conventional tones for which an instrument is primarily designed.

With the advent of electronics and sound amplification, extended techniques have proliferated and become highly individualized, to the point that some compositions consist almost entirely of such precisely defined techniques.

In *Match*, the theatricality of the work arises from Kagel's separation of technique and sound, treating technique as an object independent of its original context. The absurdity of certain techniques becomes apparent when the effort required to produce a sound is disproportionate to the resulting sound itself. The clearest example of this can be seen in the first cello staff in the second measure on page 15 of the score (Kagel 1964b), reproduced in figure 6.2.

Here the cellist has to deal with multiple layers of absurd techniques. The performer is required to execute a *pizzicato* counterpoint with two fingers of the left hand, a task that is intentionally inefficient. Normally, *pizzicato* is the domain of the right hand; using the left hand over the fingerboard typically produces a weak tone that stands in ironic contrast to the *forte* dynamic demanded by the score. Furthermore, Kagel requires these pitches to be stopped with the thumb, which is rather clumsy in regard to pitch precision.

This awkward left-hand technique is necessitated only because the right

The image shows a musical score for a string instrument, likely a double bass, in bass clef. The score is divided into two systems. The first system includes the instruction 'SUL TASTO' and 'LT' (col legno), with a dynamic marking of 'ppp'. The second system features a complex passage with 'PIZZ.' (pizzicato) markings and dynamic markings of 'f'. Above the staff, there are diagrams showing fingerings: 'I' for the first string and 'IV' for the fourth string. A note above the staff reads: 'Press the string with the thumb and pluck with 2 fingers.' Below the staff, a note reads: 'Play I + IV strings simultaneously (with the bow underneath the four strings)'. The score includes various musical notations such as stems, beams, and slurs.

Figure 6.2: Transcription of *Match*. Image by the author.

hand is occupied with a gesture whose sonic outcome is nearly negligible: bowing underneath the strings with the wooden side of the bow (*col legno*, marked as LT in the score). As seen in the Ensemble Offspring performance at 7:11 (Ensemble Offspring 2011), the complexity of this measure suggests a form of notation where the information overload requested of the player is meant to be seen as much as heard.

Match becomes a site of athletic competition between musicians more than a traditional musical piece. Kagel plays with these connotations, critiquing the focus on virtuosity deeply rooted in classical music, especially during the romantic period (Taruskin 2005). Exchanges similar to those in a tennis match are common in musical traditions, particularly in Jazz and other forms of improvised music, where soloists challenge each other through call-and-response patterns, pushing themselves to ever greater levels of virtuosity. However, in *Match*, the use of superfluous and exaggerated techniques adds an ironic tone to this competition, subverting the traditional ideals of technical mastery and musical prowess.

Coming back to our subject of sacred symbolism in music, there could be a certain sacred dimension to this virtuosity, a sense of emancipation from the material body through the act of overcoming its limits. However, in *Match*, the possibility of transcendence is constantly disrupted by irony and humor, introduced by a third character: the referee, played by a percussionist. The referee's interventions break the musical flow by using a diverse set of percussion instruments that add layers of meaning and connotation, further reinforcing the theatrical absurdity of the piece.

If *Match* represents a rather profane aspects of a sports competition, the same compositional approach can just as well be used to represent a church service or sacred ritual. As I will show in my own artworks, the potential for sacred symbolism in the Technique channel is vast, since it draws from a long history of human relationships with objects. When a loudspeaker is held up in the air or carried like a newborn baby, it easily evokes sacred rituals such as baptism. Such connections between Technique and the sacred will appear frequently as I analyze the artworks in part IV.

6.6 Post-Dramatic Instrumental Theater

Instrumental theater exists at the intersection of two currents that emerged in the 1950s and 1960s. On the one hand, as I have just shown in the post-World War II European musical scene, following a focus on serialism there was a shift toward a reconciliation with more symbolic forms of music, incorporating the voice and the expanding possibilities of electronic sound. On the other hand, the theater of Antonin Artaud and other dramaturges later categorized as post-dramatic by Lehmann (Lehmann 2009, 1999) challenged the very foundations of theater, such as stories or characters.

Kagel was also influenced by contemporary theater practices. As he stated, cited in Délécras (2019, 168): “without an awareness of what has recently been achieved in the fields of spoken theater and speech direction, no new music theater is possible.”⁶ Contemporary theater forms have expanded the possibility for theatrical dimension of music beyond the hegemony of opera, offering composers new dramaturgical models.

At the same time, Lehmann (2009) highlights that music has long served as a model for exploring new dramaturgical approaches, offering a way to structure actions without relying on traditional narrative drama. Music enables a more open-ended form of storytelling while maintaining a certain rigor such as in the score-driven dramaturgy of Cage and Kagel. Director and professor of scenic music Matthias Rebstock notes that Lehmann:

sees John Cage and the Fluxus and Happening scenes Cage in-

⁶“Aucun nouveau théâtre musical n’est possible sans une prise de conscience de ce qui a été réalisé dans le domaine du théâtre parlé et de la direction linguistique ces derniers temps”

spired as vital points of reference for postdramatic theater, which he comprehends as being characterised through ‘simultaneity’, a ‘dehierarchisation of theatrical means’, and a fundamental, all-encompassing musicalisation of the material – each of which are facets pertinent to the music theater of the 1960s. (Rebstock 2017, 536)

In the dynamic push and pull with the concept of meaning within musical performance, composers like Kagel embraced new forms of storytelling, integrating movement as essential elements of musical expression, which in some cases led to an explosion of meaning through numerous references, symbols, and signs going in all different directions. While the expanded possibilities of musical composition opened new avenues for storytelling, Kagel was quick to undermine that expectation, using these means to construct ever greater ambiguous deconstructions.

This process, which Salzman and Desi describe as “de-semiotization,” involves dramaturgical techniques such as “information overload and hyper-fragmentation” (2008, 124). Perhaps the most radical embodiment of this idea is found in Cage’s use of indeterminacy, which fundamentally rejects the notion of music as a structured language. This de-semiotization became a tool of subversion, removing meaning from where one would typically expect it, representing “a liberation from the compulsion of the civilizing process to produce sense and meaning in its artistic work” (2008, 124).

Alongside Cage, Kagel emerged as a trickster of the 1960s avant-garde, subverting the conventions of the classical music concert through humor and irony: a deliberate rebellion against the bourgeois concert hall and its previously mentioned rituals. De-semiotization becomes a means of deconstructing not only the narrative represented on stage but also the deeper narratives: the myths and rituals embedded within the concert hall experience.

Even the structure of concert halls and opera houses, the very way they are built, responds to the traditions of how they are used. Kagel said, ‘What repels us is not the music, but the bourgeois concert hall.’ Kagel dealt directly with those rituals, habits, and procedural traditions in music: the concert as a

social event caricatured in a theater. (Salzman and Desi 2008, 141)

According to Salzman and Desi (2008), Kagel was explicitly committed to deconstructing these rituals, exposing them in full light and revealing their pompous absurdity, using the symbolic dimension of music-making to dismantle the concert format.

Music performance is inherently multimodal, and in instrumental theater, as Heile notes, “sound-producing gesture and sound produced are to be seen as one integral music-theatrical action which has acoustic and visual components” (Heile 2006, 40). However, limiting “music-theatrical action” to merely its “acoustic and visual components” is reductive, as the action engages with a broader contextual whole. Kagel repeatedly drew on this context to critique the formats, musical institutions, opera, and classical concert settings in which he situated his often absurd musical situations.

Lehmann cites many examples of post-dramatic theater directors that are relevant to this discussion, not only in terms of new dramaturgical models, but also in how they engage with the sacred. Going beyond drama is, in a sense, also a return to a time before drama: a return to ritual.

Richard Schechner, for example, theorized his practice of *environmental theater* (Schechner 2004), particularly with *The Performance Group* in the 1960s, which embodied this approach, as mentioned earlier. In *Dionysus in 69* (The Performance Group and Richard Schechner 1968), spectators were invited to participate in the performance, dissolving social conventions and breaking the fourth wall. Within this liminal space, the production explored themes of ecstasy and liberation through various ritualistic actions.

One could also cite Jerzy Grotowski’s practice of Poor theater (Grotowski 2002), which sought to strip theatrical performance down to its essential elements, primarily the relationship between actor and spectator, by removing elaborate sets, costumes, and technical effects. Through a rigorous, almost ascetic approach to actor training, Grotowski emphasized physical and emotional discipline, pushing performers to their limits in pursuit of direct expression. This intense dedication fostered a kind of spiritual or transcendent experience, both for the actor and the audience, in which the act of performance became a ritual.

An important aspect of post-dramatic theater concerns the relationship with the audience. Grotowski and Schechner's practices are exemplary in the attention paid to designing an audience experience very different from more representational dramaturgical models. However, Kagel's instrumental theater remains primarily a representational practice, maintaining a clear boundary between audience and performer. As mentioned earlier, this is also where I situate my own practice. The ritual of the concert is not entirely deconstructed, and the fourth wall is preserved, occasionally broken or commented upon, but largely upheld within that framework.

Among the figures of post-dramatic theater, I find inspiration in Antonin Artaud's extreme visions of theater developed in *The theater and its Double*, which exemplifies the transformative power of theater, without necessarily renegotiating the representational format as a whole, but through a "battle of symbols" (Artaud [1938] 1958, 27).

6.7 The Theater and Its Double

Artaud is important for me because, while I have found a medium for expressing myself in Kagel, finding symbolism in Technique, the symbolism Kagel uses is all but sacred. If Kagel provided the *how* for my practice of instrumental theater, Artaud gave the ultimate *why*.

Kagel's work is ironic to its core, offering no metaphysical escape. All possibilities for sacredness within the traditional absolute music paradigm are systematically deconstructed. If a sacred experience can be found in music, it might traditionally emerge from its absolute realm; yet here, it is polluted by theatrical actions. It could arise in the ritual of the concert hall, but Kagel ridicules and dismantles it. It might be sought in emotion, yet his music is neither enchanting nor overtly emotional. Perhaps the sacred could be located in the relationship between performers, in technique, in the act of performance itself, or in the transcendence of virtuosity. But Kagel denies these as well, where, like in *Match*, the possibility of transcendence through speed and virtuosity is exaggerated to the point of absurdity.

The composition *Match* is dedicated to Dieter Schnebel, another significant composer of music theater. I first encountered Schnebel's work in 2007 at a performance at Montreal's Goethe-Institut, given by Chris-

tian Kesten from Maulwerk, a Berlin-based ensemble specializing in music theater. Among the pieces performed, Kesten presented *Poem für einen Springer* (Schnebel 1989), in which a musician repeatedly jumps on stage. There was a certain catharsis in the performer's sustained effort, something symbolic that felt larger than the performative actions themselves, yet also unclear, slightly opaque. While Kagel's symbols are often loaded with meaning, only to be emptied through humor and irony, Schnebel's work, while employing the same theatricality in the music-making, seemed to leave room for openness, allowing meaning to emerge without immediate resolution.⁷

I find in Schnebel something that resonates with my own intentions when creating a musical work. I tend to take these musical actions more seriously, drawn to their rich possibilities for meaning. Rather than imposing a fixed interpretation, I often seek to strip them of immediate, specific connotations, rendering symbols opaque. When these unusual actions on stage are taken seriously, they reveal a sense of mystery: one that I want to respect and develop. They become abstract musical actions that resonate on a deeper, more spiritual, metaphysical, or human level. These possibilities for sacred symbolism in theater are pushed to their apex in Antonin Artaud's vision of theater.

Antonin Artaud was a French playwright, poet, actor, and theorist known for developing the concept of the *Theater of Cruelty*, which aimed to shock audiences into confronting deeper truths through intense sensory experiences and symbolic expression rather than traditional narrative or character-driven drama. Though his ideas were not widely staged during his lifetime, they had a lasting influence on experimental theater and post-dramatic performance.

Influenced by the Balinese theater, Antonin Artaud envisioned a musical approach to theater where action would be guided by rhythmical precision. As he writes in *The Theater and Its Double* in 1938:

Here is a whole collection of ritual gestures to which we do not have the key and which seem to obey extremely precise musical indications, with something more that does not generally belong to music and seems intended to encircle thought, to hound it

⁷Schnebel later made explicitly religious works (Schnebel 2020), which may explain a fundamental difference in intention and spiritual yearning between the two composers.

down and lead it into an inextricable and certain system. In fact everything in this theater is calculated with an enchanting mathematical meticulousness. (Artaud [1938] 1958, 57)

For me, the “double” of theater is a theater for the unconscious, where the ambiguity and Opacity of symbols, symbols “to which we do not have the key,” hold a particular potency. These symbols transcend fixed meanings and engage the spectator on deeper, visceral levels that “encircle thought.”

In Artaud’s vision, theater becomes the organization of powerful symbols, capable of acting like a surgical operation on the mind.

I propose then a theater in which violent physical images crush and hypnotize the sensibility of the spectator seized by the theater as by a whirlwind of higher forces. (Artaud [1938] 1958, 82–83)

Translating this process with the term “battle of symbols” mentioned earlier (Artaud [1938] 1958, 27) falls short. I would rather describe it as a battlefield, which better reflects Artaud’s own words *champ de bataille*: a site of exchange and destruction in which one is situated, not observing from the outside but caught in the midst of it. With this expression, Artaud refers to a symbolic system, a way of assembling and organizing symbols, in which the theater becomes a site of violent exchanges within the unconscious.

These “higher forces” highlight the metaphysical dimension of Artaud’s work, which attempts to reach or express something beyond the physical world. He envisions a theater of metaphysical impact, one that makes the invisible forces of existence felt through the nerves and the skin.

With Artaud I found an ideal of symbolism that I applied to my own work, encapsulated in the idea of “animated hieroglyphs” (Artaud [1938] 1958, 54), where Artaud’s envisions Dynamic symbols as perpetually in motion, never fully settling into a fixed meaning. Artaud’s approach embraces sacred symbolism without necessarily anchoring it to religious traditions, while aiming at a radical, transformative aesthetic that reaches the extremes of awe and dread. What I found in Artaud is an expression of the Numinous, which will be a central concept in part III.

Chapter 7

Interlude B: SSPGs

Technique is primarily concerned with how a sound is produced. However, Kagel's *Match* shows how there is more to Technique than just its role in the making of sound. In my work, I am particularly interested in these moments when Technique itself becomes communicative by carrying extra-musical meanings and connotations. The term Symbolic Sound-Producing Gesture (hereafter SSPG) emerged as a way to focus on this single aspect of instrumental theater.

While instrumental technique is primarily functional and refers to qualitative aspects of music performance such as precision, consistency, and efficiency, the study of musical gestures belongs to a broader field of research concerned with topics like expression, meaning, and embodiment.

SSPG combines the concept of the *symbolic* with *sound-producing gestures*, a term borrowed from the study of musical gestures, where it is defined as:

human movements made with the intention of transferring energy from the body to an instrument, i.e., as excitatory gestures, as well as human movements made with the intention of modifying the resonant features of an instrument, i.e., as modulatory gestures. (Godøy, Haga, and Jensenius 2006)¹

Sound-producing gestures belong to a broader functional categorization of musical gestures, which also includes communicative, sound-facilitating,

¹This definition builds on Cadoz's typology of *instrumental gestures* (Cadoz and Wanderley 2000).

and sound-accompanying gestures (Jensenius et al. 2010, 23).² These categories are not mutually exclusive, as a single performer’s movement can fit into multiple classifications. SSPG, as a type of musical gesture, primarily focuses on sound production, but the inclusion of the term symbolic suggests that it is also communicative.

Unlike terms such as instrumental techniques or musical actions, sound-producing gestures inherently imply meaning: “the term gesture does not refer to body movement or expression per se, but rather to the intended or perceived meaning of the movement or expression” (Jensenius et al. 2010, 15). Stating that sound-producing gestures are symbolic is almost tautological, as this extra meaning is what distinguishes it from synonyms such as motion and movement, which are more abstract, parametric, and calculable ways of analyzing bodily actions or simple physics describing displacement.

The notion of being sound-producing is relatively straightforward to grasp and categorize: if a gesture produces a sound, “transferring energy from the body to an instrument,” then it is sound-producing. The question of meaning, and therefore the symbolic, is a thorny one in the study of musical gestures. While I will not go into more detail here, in the next section I aim to justify my need for a new terminology.

7.1 Which Symbolic?

According to Delalande, part of the difficulty of defining gestures is what “links an observable—the performer’s gesture—to a mental representation, the imaginary movement evoked by sound forms” (Delalande and Nattiez 2019, chap. 3).³ These imagined gestures, occurring in the audience’s mental representation of the performance, are what he calls *le geste évoqué*, or figurative gestures, as translated by Cadoz and Wanderley (2000). In music performances, these two levels of meaning can contradict each other. As an example, Delalande notes, “a back and forth movement in the melody doesn’t suppose that the pianist is moving back and forth” (Delalande and

²See Appendix A for a definition of these terms, and also for a more complete overview of the terminology related to musical gestures, see the “terminological explorations” in (Schacher, Pérez, and Strinning, n.d.).

³“relie un observable, le geste de l’instrumentiste, à une représentation mentale, le mouvement fictif qu’évoquent les formes sonores”

Nattiez 2019, chap. 4).⁴ The skill of a musician such as pianist Glenn Gould, in Delalande’s focus, lies in how he navigates this tension, using physical gestures that may diverge or emphasize from the figurative gestures perceived by the audience (Delalande and Nattiez 2019, 221).

While Delalande is explicitly interested in the symbolic dimensions of gestures, the symbolism he examines differs from that which my term SSPG addresses. The need for a specific terminology such as SSPG arose as a way for me to highlight the types of symbols I aim to foreground.

But what is especially fascinating is to see, in both cases, how these sound-producing gestures carry a power of evocation. Music draws on different forms of symbolism, some more or less conventional, somewhat “pasted on,” such as the association of a particular instrument with a deity in Tibetan music, or, closer to us, of a deep voice with that of Christ. But there is a more central form of symbolism that permeates musical thought from within: the symbolism of movement. Drawing the bow is not only about producing sound but about giving it a certain “lightness” or “vigor”—in other words, producing meaning. (Delalande and Nattiez 2019, 221)⁵

While Delalande acknowledges the “power of evocation” in sound-producing gestures, the connotations I explore in this thesis, such as “the association of a particular instrument with a deity in Tibetan music,” are seen by him as clichés or superficial additions, or, in his word, “*plaqués*” or “pasted on.”

One way to look at it is that the symbolism Delalande is interested in, and what he considers as “producing meaning,” is more intrinsic to music, or, as he puts it, “permeates musical thought from within.” The symbolism

⁴«un balancement dans une mélodie – ce qui ne suppose pas que le pianiste se soit balancé.»

⁵«Mais ce qui est surtout passionnant, c’est de voir, dans les deux cas, comment ces gestes producteurs de son se chargent d’un pouvoir d’évocation. La musique fait appel à différentes formes de symbolismes, dont certains plus ou moins conventionnels, un peu « plaqués », comme l’association de tel instrument à telle divinité dans une musique du Tibet, ou, plus près de nous, d’une voix grave à celle du Christ. Mais il y a une forme de symbolisme plus central, qui imprègne de l’intérieur la pensée musicale, c’est le symbolisme du mouvement : tirer l’archet, ce n’est pas seulement produire du son mais c’est lui donner une « légèreté » ou une « vigueur », c’est-à-dire produire du sens.»

refers back to the score and invites an interpretation of sound in light of the physical gestures, rather than pointing outward toward extra-musical associations.

This kind of preference for inward looking symbolism is also found in *Musical gestures: sound, movement, and meaning* (Godøy and Leman 2010), an important reference for the study musical gestures, where “symbolic gestures” are associated with “stereotypical routines, including gestures that are often seen as expressing power, freedom, and perhaps also machismo, are apparently expected by the audience as a genuine ingredient of a good live rock show” (Schneider 2010).

These two examples underline how extra-musical symbols are not well represented in the study of musical gestures, hence the need for different terminology that focuses on the symbolic in its more “pasted-on” aspect.

In Leman and Godøy’s study of musical gestures, sound-producing gestures are perhaps the least symbolic and least meaningful, as their primary goal is simply to produce sound. Adding the term *symbolic* draws attention to the following fact: all sound-producing gestures carry symbolic significance, but some more than others. Their meaning can be more potent, more powerful, while others remain purely functional. Some gestures are more gestural than others, depending on how clearly and strongly they reference something specific (Godøy and Leman 2010, 9).

In the same way, the commonly understood meaning of *symbolic gestures*, as defined in the *Merriam-Webster Dictionary*, “an act that has no purpose or effect other than to show support, respect, etc.” (Merriam-Webster, n.d.-c), highlights an added layer of meaning in something that might otherwise seem insignificant. It revitalizes the symbolism of an action, just as SSPG revitalizes the symbolism of music-making.

Similarly, I understand *ritual gestures* as symbolic gestures in the dictionary sense, but with connotations that refer specifically to religious practices. For example, in Christianity, kneeling and the sign of the cross are common ritual gestures. In this sense, Symbolic Sound-Producing Gestures that evoke sacred connotations could be regarded as ritual sound-producing gestures, a perspective whose complexities and questions I will unfold in the following sections.

7.2 Extra-Musical Symbolism

This perspective on the extra-musical symbolism of gesture is taken more seriously in Cyril Délécras's comprehensive study of new music theater through the lens of gesture (Délécras 2019). He evaluates the extent to which a musical gesture is theatrical. "Good instrumental technique," as I have discussed, occurs in Délécras' words when "the gesture is purely utilitarian, it has zero degree of meaning. In this case, analyzing the sound equates to measuring the gesture. Conversely, the gesture provides extra-sonic information, which can take various forms" (Délécras 2019, 505).⁶

For Délécras, the various types of "extra-sonic information" fall into four categories:

- Dramatic: refers to Clear Symbols and gestures from traditional theater that support a story.
- Aesthetic: pertains to the aesthetic weight of a gesture, "its plastic and energetic value, which is meaningful in itself" (Délécras 2019, 506).⁷
- Structural: when gestures become objects, forming part of a grammar akin to a musical motif within a composition.
- Symbolic: refers to "meaning rooted in collective memory, associated with the information contained in the gesture" (Délécras 2019, 506).⁸

My use of the term SSPG can be seen in this framework as emphasizing the *Symbolic* function of musical gestures while also possessing an *Aesthetic* dimension, similar to how Délécras categorizes gestures in Kagel's work (2019, 507).

There are numerous examples of SSPG and various methods for creating them. In chapter 11, I will detail my approach using the work *Le Refuge des Cordes* as a specific example.

SSPGs are quite rare in the concert hall and within the canons where good technique prevails. However, one notable example is Ravel's *Concerto for the Left Hand* (Ravel 1930), which carries deep symbolic significance.

⁶“Si le geste est uniquement utilitaire, il possède un degré 0 de signification. Dans ce cas, analyser le sonore revient à mesurer le geste. Dans le cas contraire, le geste apporte une information extra-sonore qui peut être de différentes natures.”

⁷“sa valeur plastique et énergétique, qui est signifiante en elle-même.”

⁸“Une signification ancrée dans la mémoire collective est associée à l'information contenue dans le geste.”

Ravel composed it for a friend who had lost his right arm in the war, and to this day it is still performed with one hand, despite being easier to play with two. While historical performance practice and displays of virtuosity may justify playing with one hand, I would argue that its symbolic resonance with resilience and perseverance is another significant reason.

Context plays a crucial role in how the symbolic connotations of bodies making music rise to consciousness. For example, attending a theater performance versus a concert frames the audience's expectations differently, shaping the symbolism attached to music-making. While the seating configuration remains largely the same in both settings, the theater stage is often arranged in varying ways, frequently aiming to surprise the audience through staging. In contrast, the concert hall stage follows rigid conventions, with a predictable configuration for each formation where an orchestra will always be presented more or less the same way.

In theater, habits of listening and watching cultivate an awareness of visual and symbolic cues, inviting the audience to seek meaning beyond what is immediately apparent. This interpretive engagement is part of the pleasure of experiencing live performance, theater, and art: the process of extracting layers of meaning and connotation from a work. By contrast, the concert hall does not prime its audience for the same level of visual interpretation. Here, the expectation is that everything will proceed as planned, and the efficacy of the performer's movements is largely taken for granted. Visual symbols in this context tend to relate to external realities, such as the performer's attire reflecting the social status, rather than commenting on the representation of the music itself, which is anchored in the authority of the immutable score.

Music performance is highly staged, yet, maybe because of its roots in absolute music, the classical music concert is seen more as a direct presentation of reality than a representation as in theater, which often uses symbols and stories. This is, of course, a simplification. The distinction is not absolute. However, my point is that expectations in music performance tend to be more rigid than in other forms of artistic performances. The audience expects musicians to remain relatively stationary, confined to a narrow space, and to produce sound with precise control (Jenseniens et al. 2010, 22).

As I will show in chapter 12 when examining the artwork *Electric Uncon-*

scious, this creates numerous possibilities for disruption and surprise, but it also poses challenges in terms of subtlety where the intended meaning of visual cues may go unnoticed.

Délécras’s concept of *eccentricity* (2019, 243) highlights this noticeable excess of effort in the context of a music performance, what might be perceived as “bad technique,” that prompts a question in the audience’s mind. “Why?” Why play music this way? Why go to such lengths to produce a sound that could be achieved more easily? This initial moment of questioning is what sparks the emergence of the symbolism of Technique in music performance.

7.3 Parameters of SSPG

I have identified four parameters, analogous to musical parameters such as pitch or rhythm, that can serve as compositional tools to modulate, adjust, and structure the symbolism of SSPG within a piece of instrumental theater. I have termed them: Opacity, Saliency, Dynamism, and Multimodality.

Opacity

The Opacity parameter is the level to which connotations are understood.

Opacity is the primary compositional parameter for SSPG, the one that is most controllable and flexible. SSPGs operate at the threshold where the audience becomes conscious of the symbols of music-making in their extramusical function. Marc Leman observes different levels of consciousness in musical meaning, which “can initially start from sensations and perceptions of qualia, and then evolve into phenomenal representations, conscious awareness, and finally, hermeneutic interpretations and linguistic descriptions” (Godøy and Leman 2010, 127–28). I refer to Opacity as the degree to which a symbol is moved up or down this progression. At one end are Opaque Symbols (“perceptions of qualia”), and at the other end are Clear Symbols (“linguistic descriptions”).

On the one hand, the level of Opacity correlates with the number of connotations a symbol carries: the more connotations, the more opaque it becomes. On the other hand, Opacity can also arise from abstraction, a lack of symbolism, by attempting to remove immediate references from a

gesture, stripping it of its most obvious meaning. As a composer, I can manipulate these symbols by either adding or removing connotations as the work requires.

This concerns not only the quantity of connotations but also the relationships between connotations. As mentioned earlier in chapter 4, within one symbol, connotations can even have opposite meanings.

The challenge for me, when creating a piece, is to find a balance between maintaining openness of meaning and preventing the audience from becoming completely disoriented. Taken to the extreme, Opaque Symbols can undermine signification itself, resulting in a disorienting experience filled with ungraspable meanings.

Salience

Salience is a term that refers to how easily a symbol is grasped: how readily the mind latches onto it or how strongly it imposes itself on perception.

Therefore, a symbol that is both Salient and Opaque presents a paradox. How can a gesture simultaneously be rich with multiple ambiguous meanings while also being immediately graspable?

This is the challenge of Artaud ([1938] 1958), where symbols are seized with force by the unconscious, an undefinable meaning that imposes itself on the mind. A question mark that seizes the brain.

For me, it has to do with the simplicity of the action, its directness and elegance. It is how the gesture interacts with the context, creating connections that are immediately recognizable, yet infinitely interpretable.

Dynamism

Dynamism refers to the extent to which the parameters of SSPG modulate over time.

I view Opaque Symbols as already in motion, with their meanings evolving through the co-participation of the perceiver. Unlike static paintings, however, SSPGs consist of moving symbolism: they are *animated*, allowing for the creation of multiple groups of connotations within a single, subtly fluctuating sound-producing gesture. For example, a gesture may carry multiple connotations, but Dynamism allows one particular connotation to

come to the foreground, modulating the Opacity so that clearer meanings can emerge.

Multimodality

Multimodality refers to how many senses a gesture invokes and how they are balanced in perception.

In musical performance, symbolism is inherently Multimodal. While a SSPG primarily engages with the visual and auditory domains, other senses are not excluded. Some actions naturally produce additional sensory stimuli, such as the physical impact of bass frequencies when amplifying sound. Ultimately, an SSPG does not reach the mind through a single sense but exists as an entity of its own: a Multimodal object.

Working with a SSPG is about finding a balance between these modalities, a point where sound and movement can be in balance in their aesthetic weight. This does not exclude that at times there can be emphasis on a certain sense.

Multimodality means that the auditory and visual senses can carry distinct, even opposing connotations. This allows for the creation of a paradox where contrast between the sacred and the profane is embedded within a single sound-producing gesture.

Emphasizing the visual sense often seems to be at the expense of musical possibilities, as I detail when analyzing SSPG in *Le Refuge Des Cordes*. Different Techniques can lead to the same Sound. The criterion of playability becomes crucial. While the physical relationship between a musician and their instrument can carry rich symbolism, if the configuration results in poor or uninteresting sounds, the potential is lost. At the same time, full playability cannot be the goal, as that would merely reinforce standard instrumental technique, which offers limited symbolic potential.

7.4 Representation and the Imaginal

Opacity, Saliency, Dynamism, and Multimodality provide a rich set of parameters for composing instrumental music theater. They serve as a way to compose attention, manipulating images in the mind of audience. While symbolism can connect a performance to a particular theme or intention,

these four parameters serve as tools to structure and shape that symbolism over time. With these parameters, the symbolism of SSPGs can be evaluated and graded, providing a useful framework for analyzing the artistic processes behind the artworks, which I will do in part IV.

In what I will term Animated Hieroglyphs, following Artaud ([1938] 1958), there is a specific configuration of these parameters that represents, for me, an ultimate goal; one that I see reflected in Artaud's vision of the symbol. A Salient symbol that imposes itself with full force on the mind as a revelation, yet carries an intensely Opaque ineffable meaning, is a fitting description of a sacred experience.

With Animated Hieroglyphs, I view the sacred in my artworks not only as represented but imaginal, what the philosopher Henry Corbin names the *mundus imaginalis* (Corbin 1989). Corbin used the term while analyzing Persian and Arabic texts on the subject of Sufi visionary experience. In this zone the perceiver no longer reads symbols for their meaning; instead, they inhabit the reality the symbols disclose. The *imaginal* realm is neither mere "imaginary" fantasy nor the material world; it is a third mode of existence. The term imaginal has particular importance in depth psychology, particularly in the works of James Hillman, who built on Jung and Corbin in defining "archetypal psychology" (Hillman 1983).

Therefore, in this thesis there are two different ways the sacred is represented, which is best understood in the extremes of what I have termed Clear and Opaque Symbols.

On the one hand, my artwork *Loudspeaker Baptism*, for example, specifically employs Clear Symbols to portray the loudspeaker as a Grotesque object. It uses connotations from Christian rites when, for example, the loudspeaker is lifted into the air, which can be seen as a reference to the elevation of the chalice during communion. Another example of a rather direct reference to the sacred is when Berlioz uses a Quotation of a sacred chant in the final movement of his symphony. Thus, in a rather circular way, representing something as sacred occurs when the symbol carries sacred connotations, linking the performance and the objects within it, such as a loudspeaker, to ideas of the sacred, through a process I call Contamination.

On the other hand, Opaque Symbols evoke the sacred by their similarity to other sacred symbols, through their opaque formal quality rather than

their content. For example, a gesture such as kneeling can be considered a ritual gesture when it is connected to a specific religious tradition. However, other gestures that, like kneeling, involve an extra Investment of effort in an action without a clear functional purpose, may be interpreted as part of a new ritual or as belonging to an unknown culture. They evoke the sacred and the ritual not through any direct connection, but through its formal qualities.

There is, however, a tension with representation. While such symbols do evoke external references, they can become independent symbols, free from association with pre-existing ideas of the sacred, disclosing themselves as sacred symbols in the imaginal. It is as if symbols could be detached from their representational function and strike directly at the unconscious. It is as if the meaning becomes sensed through emotional and bodily responses. From this perspective, to *evoke* the sacred reflects this tension. To evoke goes beyond merely “bringing to mind” an association (Merriam-Webster, n.d.-a); it also entails arousing emotion or even conjuring presence.

With what I have termed Animated Hieroglyphs, auditory and visual symbols become sacred not because they refer to other rituals or religious practices, but because they can potentially cause a sacred experience, something I will define as a Numinous experience in the next Domain.

Part III: Sacred Experience

Anecdote from the field of Grotesque Numinosity

Going to a Mass in Paris

Fragments from an autoethnographic note taken during a Mass at Church Saint-Paul-Saint-Louis, in Paris. 26.11.2022 at 11.am

The bells ring. Not really in the mood to go. What a drag. I'd rather go to the museum. This resistance to looking at oneself.

Bell of Saint-Paul Church.

Is it real or just representation?

Murmur from the loudspeakers. The mic's are on.

Sign of the cross. Perfume. It's cold.

Someone brings in large candles.

Small yellow and orange programs.

Telling us what will happen. But not everything.

The program is never complete.

Lots of people.

Organ!!

People rushing in.

A small bell, everyone stands.

Cheesy music. Jesus.

Procession with children. Incense.



Figure 7.1: Église Saint-Paul-Saint-Louis (2022). Image by the author.

Chanting the text on high notes.
The signal from the amplified voice is lost.
Wrong notes. Voice shaking... Too high...

Little monkey-like cries in the back.
While the priest speaks about truth.
Love.
Small organ.

I feel shivers, like the space itself began to awaken.
Communion. Love.

That visit to the Oratory in Montreal when I was 10 years old.
And that feeling. Of sacredness when I enter the huge space.
This feeling of truth. Of the real.

Fragments from an autoethnographic note taken in a café after the Mass. 26.11.2022 at 1.pm

Oh that Mass. Honestly, I was receptive.

An experience. Of gratitude. Gratitude, a worn-out word, as Crête says.⁹

Direct experience of the sacred.

A space that resonates in every direction. All my senses. A fullness. An overflow. Resonance. A space that vibrates.

A bit like what people got after watching *Room with Sticks*¹⁰ in the curling rink. The space still resonating after the performance.

A little surprising. But it's true.

Hard to understand how people can be indifferent to religion. And yet, I understand perfectly.

But that church. The artworks.

That sorrowful Mary, but without Jesus.

“Art as a stepping stone toward God.”

And the symbols?

And the real?

What happened?

The communion bread. The performance of piety.

The priest who spoke of reality, of what will remain when all else falls.

And the real. *The Real*.

It was a very performative thing. Truly a performance. The incense.

Though, it was the place itself.

The music. Celebration.

The music. Emotion.

The artworks. Emotions. Mercy.

⁹Crête (2021)

¹⁰Robinson, Henderson, and Quevillon (2014)



Figure 7.2: *La Vierge de Douleur* by Germain Pilon (1586). Image by the author.

Chapter 8

Numinous

I grew up in a Catholic family in the province of Québec. French-Canadians were known for their deep faith and the immense power the Church wielded in their lives before the *Révolution tranquille* of the 1960s. I remember that once the local priest came to have lunch with us at our house. The church was close to our home, and I went through the usual baptism and confirmation rituals. I recall laughing to tears with my mother during my confirmation training, upon learning the names of the church furniture: Calisse (Chalice), Tabarnak (Tabernacle), and Siboire (Ciborium). These are words I had only ever heard as swear words before. It was an early fascination with the clash of the sacred and the profane.

After moving to another town, my family mostly stopped going to church around the year 2000. As I entered high school, religion took up even less space in my life. Once I reached adulthood and started composing, religious ceremonies became aestheticized, and I began to see them as a form of entertainment. In early instances of profane representation of religion in my work, I even mocked religion by recording choirs, bells, and liturgical words and later repurposing these recordings in my first compositions.

I went to that Christian church Mass in Paris on a whim, having not attended a Mass in decades. I was genuinely surprised by its effect on me. I had been on a residency at the Cité des Arts in Paris for a few weeks, alone and without the responsibilities of parenting, spending days in museums and having time to focus on art. I went to the church because it was nearby, and I thought it might be interesting for this research. I think those days

on my own put me in the right mindset. As I wrote down in the café after the Mass, “I was receptive,” open to the experience.

When all was said and done, I had the feeling that the space was still resonating, the smoke of incense still casting a shroud of mystery over the architecture, the organ still echoing in my mind. It was in that state of mind that I looked at the Virgin Mary in a small adjacent chapel and realized that where a figure of Jesus should have been, there was none. This triggered in me a kind of confusion, a surge of emotion. I connected with the image as a mother without a child, relating it to the broader context of the Catholic religion, but also my own experience as a father.

How can I explain the effect that Mass had on me? Was it the organ, the art, the incense, or was it the entire moral framework of Christianity still exerting its influence on my life?

8.1 A Stepping Stone Toward God

The central question of this chapter is how musical instruments become sacred through their connection to sacred experiences. In the previous chapter I showed how musical instruments, through Sound and Technique, can become symbols whose connotations evoke an almost infinite amount of ideas of the sacred. Sacred experiences, however, introduces a unique dimension to this mechanism, which I will explore in this chapter.

In churches, art can be regarded as a means of spiritual elevation. As expressed by the priest at Église Saint-Paul-Saint-Louis in Paris, art is “*un marche-pied vers Dieu*,” a stepping stone toward God. In this church, the quality of the art was particularly exceptional. The sound of the organ, the expressiveness of the sculpture of *La Vierge de Douleur* (Pilon 1586), the incense, the songs, and the poetic text read by the priest all contributed to drawing me toward God, connecting my experience with the divine.

As if I myself were an object to be sacralized, I was elevated through a kind of Contamination with these sacred objects. The sculpture of the Virgin, the crucifix, and other elements in the church drew me toward the divine through association. These symbols, rooted in the history of the faith, communicate a moral order in such a way that when one looks at the sculpture, it is as if the entire weight and heritage of Christianity are

present with it and are drawing one into the sacred realm along with them.

This view, exposed in chapter 2, is that, for Durkheim, objects are sacred because society itself is integrated into the object, becoming a moral authority. This type of experience of sacred objects is based on a more rational, conscious process of association. It relies on a Clear form of symbolism and differs primarily in that the object of Contamination is the self. It involves a process of self-projection, of how one situates oneself within this moral order.

I cannot, however, explain the effect that the Mass had on me solely through this kind of associative process. For one, I am not a particularly fervent Christian, and while I can relate to certain values, I am also acutely aware of the Church's history, marked by numerous scandals. So, during the Mass, while there was certainly positive forms of Contamination that drew me toward the divine, there was perhaps even more prominent negative forms of Contamination.

There was something more abstract than my projection into the moral order of Christianity. The concept of the Numinous helps to bring into focus this "extra."

8.2 Awe and Dread

For me, as for Frédéric Lenoir, the root of the sacred is anchored in experience (Lenoir 2023, 7). I see sacred experience as the primal source of Contamination to which all pre-existing ideas of the sacred refer, merely replicating the physical qualities of sacred experience across different mediums. The qualities of sacred objects or spaces reflect an inner experience.

As previously mentioned in chapter 3, gallery spaces and Apple Stores carry sacred connotations, partly due to their association with the gigantism of churches. The question here is: what is the gigantism of churches associated with? Why is bigger perceived as better?

While there are many possible answers, such as the need to accommodate a congregation, to serve as an acoustic amplifier, or to function as a symbol of power, I argue that this gigantism is fundamentally linked to the feeling of the Numinous.

The *numinous* is a concept introduced by theologian and philosopher

Rudolf Otto in his influential work *The Idea of the Holy* ([1917] 1923). Otto begins his argument by distinguishing two dimensions of the religious experience: the rational and the non-rational.

My experience at the Mass is what Otto would describe as an experience of the *holy*: a combination of the encounter with sacred objects as rational moral authority, and something more (Otto [1917] 1923, 6). The numinous refers to this “extra” element.

The numinous is an experience that precedes association, a non-rational encounter with the sacred, accessible only through a first-person perspective. In a rather direct warning to the reader emphasizing this point, Otto writes:

The reader is invited to direct his mind to a moment of deeply-felt religious experience, as little as possible qualified by other forms of consciousness. Whoever cannot do this, whoever knows no such moments in his experience, is requested to read no further. (Otto [1917] 1923, 6)

The numinous is described as *mysterium tremendum* ([1917] 1923, 12). It is a dual experience: on the one hand, *mysterium*, which denotes “that which is hidden and esoteric, that which is beyond conception or understanding, extraordinary and unfamiliar” ([1917] 1923, 13). This mystery exerts a powerful fascination, which, on the other hand, is balanced by a kind of fear or *tremendum*.

Otto characterizes *tremendum*¹ as a sensation of *awe* mixed with *dread*. Awe has been first characterized by Immanuel Kant ([1790] 1987, 242–43), who argues that when humans encounter something overwhelmingly large or powerful, it induces a sense of cognitive overload. The mind recognizes its own inadequacy in comprehending the full scope of the experience, yet this very recognition evokes a feeling of awe.

Awe is a profound emotional response to perceived vastness that exceeds one’s current frames of reference. I vividly remember being awestruck when visiting Saint Joseph’s Oratory in Montreal at the age of ten. This memory resurfaced during the Paris Mass as a striking point of comparison. Standing beneath the massive dome inside the basilica, I felt something indescribable,

¹The word has similar roots as the word *tremor*, which means trembling or shaking, especially linked to the emotion of fear.

a sensation that has stayed with me whenever I reflect on sacred experience. It was as if something gripped me for a moment. This is the kind of emotion that the gigantism of churches can provoke, and I would argue that it is one of the reasons behind the sacred architecture of both churches and the Apple Store.

Dread is something I have (luckily) experienced only rarely, but which I can associate with feelings of the uncanny or deep existential fears. It is the contact with profound mystery or the possibility of death. This unsettling sensation arises from encountering something utterly strange and beyond comprehension, encapsulated in Freud's concept of the uncanny (Royle 2003). This sensation arises in extreme physical situations, but dread, especially through the lens of uncanny, comes from a sense of agency attributed to things that should not have it, such as automatons, which I have briefly discussed in chapter 2.

In the experience of awe, in this “overflow” of thoughts and sensations during the Mass, I felt—for a moment—a connection to and almost communication with something larger than myself. This is when the feeling of dread was most salient. I began to feel a certain eeriness, as though the space itself were resonating, vibrating, as if it had come alive.

8.3 Numinous Sound

I have found the term Numinous particularly fitting for music, especially in its more absolute form, where it is perceived as an abstract and mysterious play of emotions. Unlike other ways of defining the sacred experience, the numinous, as articulated by Otto, is something I can personally feel and potentially evoke in others—making it particularly relevant to my work as composer.

Numinous experiences are rooted in extraordinary emotion, and while composing music that evokes this mix of awe and dread is challenging, it does not seem impossible. As a first step, it is easier for me to begin with less exceptional and more commonly experienced emotions in music.

Dread is basically a kind of fear, which is a common emotion that has been depicted countless times in music, especially in horror films, such as the famous shower scene in Hitchcock's *Psycho* (Hitchcock 1960).

Similarly, awe can be connected to bliss or pure joy, emotions widely expressed in musical works, most notably in the peaks of intensity reached by Beethoven's Hymn to Joy (Beethoven 1824).

Another characteristic of the Numinous is, for me, how it happens over time. While it can occur in an instant, as in my experience of being suddenly gripped when I looked at the dome of the basilica at the Oratory. It is often something that builds over time, as in my experience during the mass where the overflow of the senses accumulated gradually.

When it builds over time, the Numinous can be felt in a kind of intense emotional release that can be linked to the experience of catharsis, which Aristotle likened to a medical treatment, a cleansing experienced by the audience through the emotions of pity and fear (Ford 2016, 27). Ravel's *Boléro* (1928) is a well-known example of a direct buildup of tension that culminates in a modulation that releases the energy build up over ten minutes.

Therefore, evoking the Numinous in music raises the question of how to simultaneously express opposing emotions (awe and dread, bliss and fear) woven into a cathartic crescendo. Could it be that expressing the Numinous is as simple as blending these feelings? A remix of Beethoven with the music from *Psycho*, woven into a crescendo *à la* Ravel's *Boléro*?

While I have not attempted this particular remix, which I reference here due to the familiarity of its elements, I will, however, detail a similar attempt executed in the second act of *Loudspeaker Baptism*, where awe and dread alternate and are ultimately fused into a single continuous flux.

While there is a certain artificiality in this kind of emotional engineering, it has become, for me, both an inspiring challenge and a defining aesthetic. Increasingly, through these attempts at blending, I sense that something in the mixture resonates with the experience of the Numinous.

This may feel forced, as the sacred experience is ultimately not something one can simply compose or provoke. Context plays an essential role in such experiences. As I mentioned in the anecdote, "I was receptive." Had I attended Mass at another time, or in a different place, I might have felt nothing but profane boredom. These aesthetic experiences can take this other dimension not because of their intrinsic qualities alone, but because they are part of a broader context.

8.4 Contextualizing Sacred Experience

Numinous is but one interpretation of experiences that could qualify as sacred. Throughout this research, I have explored multiple definitions of sacred experience and its various iterations across different fields of study. The name given to these experiences changes according to the interpretative frame. However, they have in common a feeling that is utterly different from the rest of my profane life.

If sound in the form of music evokes emotions, then sound as vibration can also have physiological effects, which can also potentially lead to mystical or religious experiences.

As an example, in my research I often encountered the idea of music as a technique for inducing altered states of consciousness, alongside more empirically supported methods such as psychoactive substances, sensory deprivation, and sleep deprivation.² However, the research on the subject remains inconclusive. Compared to psychoactive substances for example, music works more “indirectly” (Reybrouck and Van Dyck 2024).

I argue here that the effects of music are indirect because they are part of a larger context. When I reflect on my own sacred experiences of music, they are deeply tied to specific listening contexts. While the music itself plays a role, the circumstances in which it is heard are likely even more significant. Much like the experience of attending Mass, these moments have occurred when I was particularly receptive, whether due to personal life events or the surrounding social environment, which allowed emotions to be received or expressed in an unfiltered and profound way.

The publication of “Miraculous Voices: The Auditory Experience of Numinous Objects” (Tuzin et al. 1984) sparked strong reactions in anthropology and musicology by examining the ritual sounds of the Iahita Arapesh of Papua New Guinea. Drawing on evidence from neurophysiology, ethnomusicology, and psychoanalysis, Tuzin suggests that the feeling of the “mysterious” is linked to the human brain’s response to infrasonic waves, particularly those generated by distant thunder and the bullroarer, the ritual instrument of the Arapesh.

²For example, this is the case in the Wikipedia page for Altered state of consciousness (Wikipedia contributors 2025).

As evidence, Tuzin discusses the relationship between music and trance. Based on a study by Neher, Tuzin suggests that specific rhythms with “7–9 cycles per second [...] creates the conditions necessary (and perhaps sufficient) for states of religious apprehension” (Tuzin et al. 1984, 581).

However, these arguments have been challenged, notably by scholars like Rouget, whose meticulous study on the relationship between music and trance (Rouget 1980) refutes the idea that music has an inherent power to trigger trance. Instead, Rouget and others emphasize the importance of the context in which music is experienced, arguing that trance and other transformative states arise from the broader situational and cultural framework rather than from music alone.

To me, Tuzin’s strongest argument centers on thunder and infrasonic waves, emphasizing their subliminal properties, which can elicit “feeling of anxiety, dread, and disquieting vulnerability” (Tuzin et al. 1984, 586). Additionally, the absence of a discernible source may contribute to the sense of mystery and awe often associated with religious experiences. While the physiological effects of infrasonic waves remain under scrutiny, there is a compelling case to be made for bass amplification as a powerful tool for creating and shaping sacred experiences. This topic will be explored in the next Domain, that of Sacred Amplification (chapter 9). However, my argument does not rely on the inherent power of sound and its physiological effects, but rather on Channeling Energy, an experience in the amplification of sounds as a means to evoke the Numinous.

Among the many comments that accompany the article, many of which effectively refute key aspects of Tuzin’s arguments, Blacking emphasizes that “sounds affect human behavior and action as a result of the ways in which people make sense of them” (Tuzin et al. 1984, 589). This is a crucial point that I have raised several times: without the framework, or what I have termed myth, the experience of the sacred, trance, or the Numinous remains open to interpretation.

To use a popular reference, what I experienced as Numinous during the Mass could just as well be interpreted as a “glitch in the Matrix,” a term used in a Subreddit of the same name.³ Borrowing from the popular movie *The Matrix* (Lana Wachowski and Lilly Wachowski 1999), this forum

³https://www.reddit.com/r/Glitch_in_the_Matrix/

defines such events as occurrences that cannot be explained through critical thinking.

8.5 Numinous Saturation

There is much that could be unpacked about the phenomenology of the experience of the sacred, but such an exploration is not necessary for this investigation. Nor is it necessary to challenge the research on the physiological effects of sound. From an external perspective, whether the continuous rhythm of “7–9 cycles per second” induces a trance is irrelevant. What matters are the connotations of that rhythm, which for some people connects this rhythm to ideas of the sacred.

By referencing this rhythm in my musical works, I can connect a musical performance to this type of sacred experience. These references will appear in part IV, when I begin analyzing the connotations within the artworks. There, I will demonstrate how certain musical passages can evoke experiences associated with sacred sound.

This interpretation of sacred experiences is both subjective and heavily based on my inner experience, for which I find the term numinous most fitting. In the next chapters, I will continue to expose the musical means, the tools, harmonies, rhythm, symbols, and structures which for me connect to how the Numinous unfolds in my reality.

Because of its association with sacred experience, the musical device of a crescendo (connected to catharsis, as in Ravel’s ten-minute crescendo in *Boléro*) can evoke sacred connotations. Naturally, this effect depends on who recognizes the reference; a crescendo can appear in many different contexts, and its interpretation as sacred or profane relies on how it is contextualized, which is a central aspect of my compositional practice.

For me, the intriguing twist is this: the more convincing my representation, the more readily people recognize the reference. The more my crescendo makes the audience feel an intense emotional experience, the more they are coming closer to what can be called “numinous saturation”: the experiential threshold at which accumulated energy, from visual and sonic stimuli, becomes overwhelming, eroding symbolic distance and representation. Whether I wish to depict the Numinous or actually induce the ex-

perience, in both cases I rely on the same musical means. Representing the Numinous reveals the tension inherent in sacred representation, which I previously illustrated with the notions of the imaginal and Animated Hieroglyphs.

Therefore, a crescendo, in this framework, can be Grotesque in its reference to both the sacred and the profane. While this may be an extreme example, I believe there is potential in it. Nothing is more banal than a crescendo until it is not: until it ceases to be a representation, until it saturates the mind.

This tension between representation and reality mirrors the experience of the Numinous I had at the Mass. In my notes, I wrote: “Is it real or just representation?” While there were representations (depictions, images, speech), all of these stimuli blended into an experience that felt profoundly *real*, as if these representations merged with my inner experience. I experienced a saturation of representation filled with Numinous intensity that spilled into the experiential reality of the imaginal.

8.6 The Wholly Other

I can recall this feeling of *the real* coming back to me, especially as I sensed the space coming alive. A month after the Mass, I was reflecting in my journal on 3.1.2023:

Activating. Like when that church became alive. Resonate...
 Activate an object. It becomes alive. What is that feeling?
 That is kind of a sacred experience. The coming alive of things...
 They start to really have a kind of agency. That feeling is what
 I want to achieve with those objects. Turn them into. Make
 them resonate.

This sense of the space “coming alive” with resonance connects to the underlying intention of my artworks as a whole. The goal is to activate the objects central to my artwork: to make them come alive, so to speak. This “coming alive of things” becomes more complex when it comes to technology, which, unlike a church, appears to move, act, or communicate on its own.

It raises questions about the perceived autonomous agency of technology discussed in chapter 2.

However, with electronic sound amplification, I argue that the sense of perceived autonomous agency is felt rather than heard, much like how agency is experienced within the Numinous. In the words of Otto, this is the *wholly other*:

The truly mysterious object is beyond our apprehension and comprehension, not only because our knowledge has certain irremovable limits, but because in it we come upon something inherently *wholly other*, whose kind and character are incommensurable with our own, and before which we therefore recoil in a wonder that strikes us chill and numb. (Otto [1917] 1923, 28)

The kind of presence the *wholly other* evokes is “incommensurable with our own.” While it can feel like something/someone is there, this presence exceeds the mind’s capacity to comprehend, triggering a sense of wonder and awe that simultaneously gives rise to a profound fear.

As an electronic technology, I see electronic sound amplification as pre-figuring the perceived autonomous agency and religious imagination sparked by technology such as the telegraph. Instead of enabling dialogue, through sound, amplification can supercharge the sense of presence of the *wholly other*.

In this thesis, I show that giving this sense of presence to objects, activating them, is achieved by having the audience engaged in a multimodal way through Clear symbolic sounds and images, invoking more rational sacred associations. Equally important, however, is to aim for Numinous experience through compositional strategies to address this non-rational dimension.

While I pointed earlier to one of these strategies as Animated Hieroglyphs, in the next chapter I will focus on another strategy, for which I use the term Channeling Energy. Amplification gives the previously mentioned Ravel crescendo an extra boost, carrying the audience across the threshold of numinous saturation. I will now explore how this channeling of vast amounts of energy opens up the imagination through electronic sound.

Chapter 9

Domain of Sacred Amplification

The expression of the Numinous in music can also be conveyed through various musical means that may resonate differently with each listener. This is not to say that my way of expressing the Numinous is entirely subjective; rather, I seek to ground my interpretation in descriptions offered by others who have associated such expressions with feelings of awe or dread.

For example, Otto cites the Credo from Bach's *Mass in B Minor*, "which renders so well the sense of awe-struck wonder" ([1917] 1923, 73), or a well-placed silence, which is for him the most salient feature of the Numinous in music, constituting a "direct means for producing a strongly numinous impression," symbolizing the mystics' void or the "silence before the Lord" ([1917] 1923, 71–72).

While it is harder for me to relate to how Bach's Mass can produce the numinous, perhaps because I have become desensitized to the classical music concert and need more extreme sensations to bring me out of the mundane torpor, silence is definitely something I can connect with. This is especially true when performing with electronic music devices, where there is always the dreadful silence of technical failure. When sound fills the room, its sudden absence feels like an immense void. I argue that silence is the other side of sound amplification, and that "the Lord" before whom one stands in silence is, in fact, amplified sound.

Writing in 1756, Edmund Burke described how amplified sound can

evoke the feeling of the *sublime*, a term closely related to the numinous.¹

Excessive loudness alone is sufficient to overpower the soul, to suspend its action, and to fill it with terror. The noise of vast cataracts, raging storms, thunder, or artillery, awakes a great and awful sensation in the mind. (Burke 1998, sec. XVII)

In this chapter I will examine sound amplification, focusing particularly on the performance practice of Sunn O))), a drone metal band renowned for their deafening sound, one that can “overpower the soul” and “fill it with terror” as mentioned by Burke. I will also pay special attention to how electronic amplification can produce numinous impressions at the flip of a switch, while also addressing its historical developments, cultural associations, and the symbolic links that connect the amplifier to the sacred.

9.1 Thunder, Churches and Dynamo

To him, the dynamo itself was but an ingenious channel for conveying somewhere the heat latent in a few tons of poor coal hidden in a dirty engine-house carefully kept out of sight; but to Adams the dynamo became a symbol of infinity. As he grew accustomed to the great gallery of machines, he began to feel the forty-foot dynamos as a moral force, much as the early Christians felt the Cross. The planet itself seemed less impressive, in its old-fashioned, deliberate, annual or daily revolution, than this huge wheel, revolving within arm’s length at some vertiginous speed, and barely murmuring—scarcely humming an audible warning to stand a hair’s-breadth further for respect of power—while it would not wake the baby lying close against its frame. Before the end, one began to pray to it; inherited instinct taught the natural expression of man before silent and infinite force. Among the thousand symbols of ultimate energy the dynamo was not so human as some, but it was the most expressive.

¹Both terms are rooted in similar feelings of awe and dread, or, as Otto explains: “the sublime exhibits the same peculiar dual character as the numinous; it is at once daunting, and yet again singularly attracting, in its impress upon the mind” ([1917] 1923, 43).

— Henry Adams (1919)

Henry Adams (1838–1918) was born into the political elite of the United States, a privileged position that gave him direct access to technological innovations such as the massive twelve-meter (forty-foot) dynamos used to generate electricity for the Boston area.

I interpret Adams’s account of his encounter with the dynamo in his autobiography as an experience of the *holy* in Otto’s vocabulary, comparable to my own experience at Mass. Just as the image of *La Vierge de Douleur* connected me to the entire history of Christianity, Adams experienced the dynamo as “a moral force, much as the early Christians felt the Cross.” As previously discussed, this echoes Durkheim’s argument that sacred objects represent society itself (Durkheim [1912] 2009). Through rational association, the dynamo becomes a symbol of the entire lineage of societies and their technological innovations, as well as the vast resources and means of production that made them possible, from raw material extraction to the labor of factory workers.

However, I would argue that Adams also had a non-rational, Numinous experience, as though the object itself could erase any trace of its production through its overwhelming speed, size, and sense of power. His experience was anchored in emotion, referring to the dynamo as “the most expressive” symbol of a “silent and infinite force.” The dynamo conveys the Numinous in a way similar to how I was entranced during the Mass, overwhelmed by a flood of sounds, images, and scents.

I argue in this chapter that the intense feelings evoked by the dynamo arise from the way energy, especially the means of production, is concentrated to such a high degree that the object transcends its making. It becomes a symbol of something greater than ourselves, surpassing one’s current frames of reference and generating a sense of awe.

While the dynamo was impressive in its powerful speed, I will explore, in the words of Burke, how “loudness alone is sufficient to overpower the soul” (Burke 1998, sec. XVII).

Before technological innovations like the dynamo, thunder symbolized this condensation of raw energy: an outburst ripping through the sky. I was reminded of this one night while camping by a lake. Rain began to pour, and I scrambled, half-asleep, to put up a tarp over my tent. In the

middle of my hurried work, lightning struck just twenty meters away. The thunderclap that followed was overwhelming: a bolt of noise and light that sent a visceral shock through my body. Back in my sleeping bag, I felt so vulnerable in front of this unfiltered power of nature, yet also illuminated and refreshed. I felt both terrified but also in awe.

According to Murray Schafer, thunder is the “voice of the God” that humans attempt to recreate with sound amplification technology. Throughout his influential work *The Tuning of the World*, Schafer develops a theory of Sacred Noise, exploring the imbrications of noise and power. “Thus thunder, the original *vox dei* and Sacred Noise, migrated first to the cathedral, then to the factory and the rock band” (Schafer 1977, 179). Sacred Noises are often the loudest sounds in the soundscape, resulting from the immense energy and therefore power behind them.

Murray Schafer argues that the sound of thunder, transformed into the clamorous noises of bells and organs within church acoustics, found its way into Christian worship because “man hoped in his turn to catch the ear of God” (Schafer 1977, 51). According to Schafer, this hope drove the development of amplification technology and pushed societies throughout history to harness loud sound technologies, from musical instruments to architectural designs.

“To catch the ear of the god” is but one reason why the church would come to use musical instruments like the organ. This massive instrument, with its powerful sound and vibrations, has the ability to “touch” listeners; as Schafer puts it, “the bombardment of the organ made the pews wobble under the Christians” (Schafer 1977, 115). Like thunder, amplified sound channels energy to evoke awe, a sense of vastness that priests incorporated into their ritual arsenal. The use of the organ in the Christian mass can be seen as an example of how musical instruments can accentuate the priest’s discourse, punctuating it as if God were responding.

Before the organ, amplification through long reverberation time was a defining feature of church and cathedral acoustics. Massive energy, effort, and means of production is channeled into architecture, creating gigantic, awe-inspiring visual structures like Adams’ dynamo, a cathedral, or the Great Pyramids of Egypt. Through sound, sacred architecture is experienced and modulated in real time, activating the space through its resonance

and fostering a sense of community.

Channeling Energy through sound affords a sense of materiality: a viscous, enveloping presence that surrounds attendees and cannot be escaped. Sound amplification through church acoustics allows this energy to be diffused through a community that feels engulfed by it, connecting audiences in shared resonant experiences (Schafer 1977, 118).

Just as the gigantism of cathedrals serves as a symbol of power, in Schafer's theory of Sacred Noise the church bell, resonating throughout a village, not only requires a huge amount of energy to construct but also demands the authority to ring it. Schafer aptly points out: "Sacred Noise is not merely a matter of making the biggest noise; rather, it is a matter of having the authority to make it without censure" (Schafer 1977, 76).

However, with the transition from Vatican I to Vatican II, the church's acoustics, once a feature, became a problem. The new emphasis on the use of national language and the greater participation of the congregation required improved speech intelligibility. The long reverberation times and loss of high frequencies typical of church acoustics did not help. Thus, many churches today rely on electronic amplification to improve speech intelligibility, with varying degrees of success (Cunha, Smiderle, and Bertoli 2013). Traditional bells have also been replaced by recorded bell sounds. While electronic bells may not be louder, they are more reliable. In some places, the organ has even been supplanted by rock bands.

9.2 MAXIMUM VOLUME LEADS TO MAXIMUM RESULTS

If the association between noise and power seems less relevant today, it is perhaps because a century of advancements in amplification and loudspeaker technology has made powerful sound systems widely accessible. Thanks to technological progress and the global market, these systems are now so efficient and affordable that even the cheapest sound systems could possess enough acoustic power "to catch the ear of the god."

There are various ways to amplify a signal in electronics, though I will not go into the specifics here. Simply put, in electronics a weak signal (such as that from a microphone) is passed through an amplifier (a configuration

of electrical components) that uses an *external power source* to increase the signal before outputting it. The components at the center of this are transistors, which, in simplified terms, allow a low signal to modulate the external power source.

This external power source, like Adams's dynamo, along with its power plant and the electrical grid, is both the most hidden and the most vital part of the circuit. If the "few tons of poor coal hidden in a dirty engine-house" was hidden from the sight of the young Henry Adams, today neither the dynamo nor the machinery itself is experienced, but only the electricity produced by these vast enterprises. Every electronically amplified sound depends on a web of resources and labor, from raw materials to power plants, all converging to generate electrical power. The dynamos, now replaced with modern alternators, are still turning at vertiginous speeds to power sound systems, but are now represented only by the wall plug and the monthly electricity bill.

Perhaps more than anything, Adams' quote captures the power of novelty before what I have referred to in chapter 3 as the Pull of Habituation rendered the experience dull. He stood on the front lines of Boston's electrification, when these machines were brand-new. Through habituation, the impact of loud sounds is rarely as fresh or powerful as it once was. For musicians aiming to create an intense experience as fresh and impactful as the clap of thunder I encountered while camping, it would seem that sheer volume alone is not enough to evoke this sense of the sacred or mystical for their audiences.

Defying the Pull of Habituation to loud noise typical of 21st-century urban life, the drone metal band Sunn O))) offers the Quintessence of loud sound. Their slogan "MAXIMUM VOLUME YIELDS MAXIMUM RESULTS," suggests a direct correlation between decibels and the impact achieved.

Though Sunn O))) is quick to dismiss any religious or sacred connotations in their practice (Rothbarth 2019), it seems likely that these "results" refer to the power of their music to create some kind of sacred experience, which I will argue is Numinous. One might say that if you want to reach the divine, just crank up the volume.

In his study *Mysticism, Ritual, and Religion in Drone Metal*, Coggins

(2018) relates his experience as a participant-observer in concerts at Drone Metal concerts, a sub-genre of Doom Metal characterized by its slumbering to absent tempo melting into a continuous flow of distorted drones. The iconic band Sunn O))) is at the center of Coggin's research, which is rich in interviews with fans of the genre.

As I have already mentioned, the power of sound alone is never sufficient to create a Numinous experience. While Sunn O))) is primarily a music band, their performance practice situates loudness within a broader context of mythology, ritual, and community. These elements are conveyed through their concert format, album artwork, and their well-known slogan cited above. Coggin describes how these elements affect participants, who often recount their experiences in mystical terms.

9.3 Bass Energy

Before Sunn O))) there was The Beatles, whose unregulated sound levels left many young fans with hearing damage. In the words of Murray Schafer, "Beatlemania was actually stealing the Sacred Noise from the camp of the industrialists and setting it up in the hearts and communes of the hippies" (Schafer 1977, 115). Schafer specifically points to pop music's emphasis on the amplification of low frequencies, a trend that the rock and roll of the 1960s and 70s would further develop, ultimately reaching its pinnacle with drone metal bands.

The amplification of low sounds is the most energy-intensive in the spectrum. Subwoofers are specifically designed for low-frequency sounds (typically below 100 Hz). As these lower frequencies require moving a larger volume of air, they demand more electrical power. Subwoofers are often less efficient in terms of power-to-loudness conversion because low frequencies need larger, more powerful drivers.

Crucially, as shown in figure 9.1, human pain tolerance for low frequencies is significantly higher, as the top line in the graph shows. Sunn O))) rides the peak of this threshold, with bass frequencies often easily reaching 120 dB(A) (Lucas 2014). In short, because the ear is much less sensitive to 40 Hz than to 4 kHz, it takes about 100 times more electrical power to reach the pain threshold at 10 meters. This difference is even greater be-

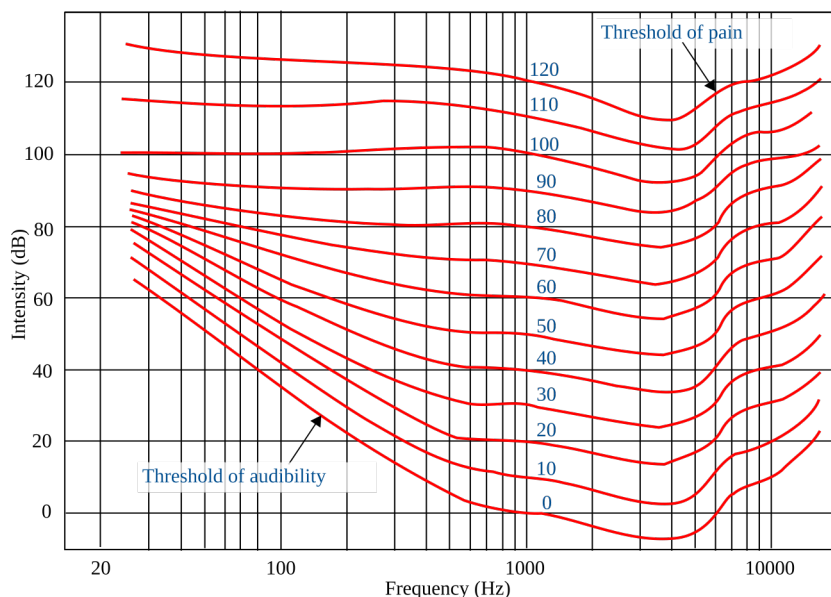


Figure 9.1: Equal-loudness contours from Fletcher and Munson. Source: Wikimedia Commons, CC BY-SA 3.0.

cause loudspeakers are usually less efficient at low frequencies and therefore require even more energy to amplify bass.

As Coggins describes, these amplified experiences enhance the sense of being enveloped by sound, as I mentioned in the previous section. However, Sunn O)))’s amplification taken to extremes adds a layer of materiality to sound, pushing it into the realm of physical sensation. As Coggins notes, the air becomes “thick with vibration” (Coggins 2018, 123). This is fostering a sense of shared community on an even larger scale, where thousands of drone metal fans can experience the “same almost tangible vibration,” leading to an “unavoidable feeling of communality” (Coggins 2018, 123).

Low frequencies, which are acoustically less localizable, enhance this feeling of a sound coming from nowhere, as if the air itself were activated. Kurt Blaukopf mentions this effect in relation to the sound in Gothic churches, where “the loss of high frequencies and the resulting impossibility of localizing the sound makes the believer part of a world of sound. He does not face the sound in ‘enjoyment’—he is wrapped up by it” (cited in Schafer 1977, 118). The non-locality of sound in Sunn O)))’s performance practice

is emphasized by staging their appearances so that they are only visible as faint, shrouded figures through dense fog. The sound seems to come from everywhere and nowhere at once.

This non-locality of bass sound is accentuated by its sustained quality in drone metal. Low sounds are challenging to locate, but continuous low sound are even harder. Moreover, this sustained quality further accentuates the illusion of infinite energy, so central to Adams experience of the dynamo. Similarly, by symbolizing a continuous flow of energy and evoking awe through its sensory impact, the amplifier can supplant the dynamo as “a moral force” (Adams 1919).

More than a mere symbol of boundless energy, drone music represents an eternal, universal vibration. This symbolism of vibration and sound, which has already been bent to fit numerous mythologies, adds another mystical layer to the object.

While such heavily amplified electronic drones had already been used, most notably in the 1960s in the works of La Monte Young and the theater of *Eternal Music* (Sword 2021, Sunn O)))’s reliance on distorted sound adds unique mystical overtones to the bass. In terms of electronic signals, distortion occurs when a signal’s amplitude reaches its peak, exceeding the medium’s capacity to contain it (Reed 2013, 291). The signal then folds back on itself, creating harmonics that result in a distorted sound, symbolizing, in a spiritual metaphor, the overwhelming of a communication channel.

Distortion also aligns Sunn O)))’s practice more closely with the lineage of metal, rather than with the underground experimentalism of Western contemporary music practices like those of La Monte Young. This connection may partly explain the interpretation of Sunn O)))’s music as religious, or, more precisely, as carrying the anti-religious symbolism and mythology stereotypically associated with metal music. With its raw power, Sunn O)))’s sound acts as a form of anti-music; like the tritone in the Middle Ages, it serves as a modern sonic symbol of the devil. Eugene Thacker develops this argument, suggesting that the use of droning low frequencies constitutes a negation of music: a raw, anti-Christian ritual (2019).

With this drone of heavily amplified and distorted bass, the channeling of energy in sound approaches the limits of human endurance. While Adams’ experience with the dynamo evoked awe, it may be more a sense of dread,

rather than wonder, that triggers the mystical experiences described by Coggins.

9.4 Amplifying Dread

A Sunn O))) concert can be seen as a ritualized use of “sonic war machines” (Goodman 2010, 12), evoking notions of ritualized violence found in many traditions (Girard 1972). With these “weapons” on stage, there emerges the symbolic possibility of death. As Coggins notes, “drone metal is violence, it is a representation of violence, and it is the ritual channelling of violence” (Coggins 2018, 170).

What is unique about Sunn O))) is the level of amplification, which, in many respects, brings the potential of death into the realm of entertainment. In a thought-provoking expression from Kittler’s history of technology in *Gramophone, Film, Typewriter*, entertainment is described as an “abuse of army equipment” (Kittler 1999, 97): a way of repurposing the raw power of destructive technologies to oversaturate the senses of popular culture consumers.

The origin of technology in warfare is another aspect that, to me, profanes technology, much like the Pulls of Habituation and Mass Production I discussed in chapter 3. To “crack open” the modern amplifier, one must trace its roots back to the military-industrial complex and the first amplified speeches in Nazi Germany. Goodman argues that the military origins of these technologies are concealed through “innovation,” and that “cultural deployments” serves “to camouflage a militarization of the minutiae of urban existence” (Goodman 2010, 54). In my argument, this process is further intensified in Sacred Consumption, where producers, through advertising, not only hide these origins but actively resist them by transmitting positive Contamination to their products, associating them with ideas of the sacred.

Goodman underscores this point by highlighting the extraordinary sound systems used to drive powerful vibrations through crowds at Drone Metal concerts, as well as in the Dub Reggae scene. He describes this as “the mobilization of a sonic ecology of dread: fear activated deliberately to be transduced and enjoyed in a popular musical context” (Goodman 2010,

50).

Sunn O))) concerts function as endurance tests, where “listeners seek catharsis and escape from the violence of society by submitting to the extraordinary noise of drone metal mysticism” (Coggins 2018, 170). Just as violence has been ritualized through sacrificial practices (Girard 1972), these dangerous sonic “weapons” are ritualized in concert settings. Sunn O)))’s amplification pushes the limits of what the human body can endure. Attending a 2–3 hour concert with constant high levels of sound, where “the air becomes thick,” can feel torturous.

Beyond the awe of amplification and the communal feeling of being engulfed, it is through dread that such experiences touch the Numinous. Sheer volume can overwhelm the body, exceeding the thresholds of comfort and control, and precipitate the sensation of letting go and surrendering to something beyond oneself. This feeling can be both tremendously liberating and daunting.

Such violence and sacrificial symbolism through loud sound has also been a hallmark of another rock band from the 1960s known for its excessive volume: *The Who*. Frontman Roger Daltrey recalls the sound of his bandmate Pete Townshend’s famous guitar smashing act as a “sacrificial lamb,” which “would scream” and leave them with their “ears bleeding” (Kielty 2019). By destroying his guitar and amplifier, Townsend unleashed a raw eruption of feedback and uncontrollable frequencies.

Destroying an amplifier would be considered sacrilege in Sunn O)))’s approach, where amplifiers are worshiped (Coggins 2018, 115–36) and revered for their power. The band is named after a brand of vintage guitar amplifiers that populate the stage, an altar for these towering monoliths.

Sound amplification is pushed to such an extreme that introducing randomness or cacophony, such as the kind resulting from Townsend-like gear destruction, could undermine the experience. The level of amplification to which Sunn O))) plays requires a kind of ritual precision: every gesture matters, each having a significant impact on the sound. A chaotic spectrum could break the spell, unbalancing the sonic environment and introducing unwanted frequencies that disrupt the immersive experience.

Listening to the beginning of *Troubled Air* from the album *Life Metal* (Sunn O))) 2019) reveals a meticulous attention to how the sonic spectrum

unfolds. The track is characterized by sustained, distorted power chords that hover perpetually on the threshold of feedback. This feedback is not accidental; it blooms in a controlled emergence, modulating the energy of the amplifier into the higher frequencies of the spectrum.

Furthermore, the transition to a new chord is not a high-pitched, percussive event. The attack possesses a thickness and weight. Lasting approximately 600 ms, it is over an order of magnitude longer than the 10–30 ms attack transient of a typical guitar strike. Rather than a sharp, clear-cut attack, it manifests as a low, distorted roar between chords.

This careful modulation of sonic pressure is like a massage. Just as a massage requires varying pressure on different areas of the body—pressing too hard on a finger compared to a thigh could ruin the experience—so too must sound pressure be applied with care across frequencies to maintain the balance on the edge of pain that the audience is enduring.

Danger is not only potential and symbolic but real at Drone Metal concerts, making the experience akin to an ordeal or self-sacrifice. Beyond the obvious risk of hearing damage, sustained loud bass sounds have documented physiological effects. Low frequencies are known to induce stress and anxiety, effects that have led to their use as weapons, particularly through infrasound (Goodman 2010). Additionally, low frequencies can impact the heart rhythm, making such concerts potentially hazardous for individuals with heart conditions (Basner et al. 2014). This real danger raises the stakes, heightening the sense of sacrifice and making the navigation between life and death all the more poignant.

The sacred connotations are numerous in the case of Sunn O))) . The amplifiers resemble towering monoliths, the shrouds make the performers appear like monks, and the smoke filling the space evokes the presence of incense. There is also symbolism in the sound itself: in the drone as a representation of eternal energy, and in distortion as a sign of excess and overflow.

This context supports and intensifies a communal experience of sound as channeling, concentrating energy to the point of numinous saturation where sound amplification evokes the *mysterium tremendum*: a sense of fear and fascination in the face of the mystery of vibration.

9.5 Extending the Self

Sound amplification can be understood as an extension of the body. It extends the voice, whether through the acoustics of a church or via electronic amplification in a stadium, enabling it to reach thousands of people. It also extends the human ear, much like a microscope, allowing one to hear minute phenomena, even invisible and mysterious ones such as variations in electromagnetic fields produced by an electric guitar.

I argue, following Davis, that a corollary of this physical extension is the extension of the imagination (Davis 1998, 90). Drawing on McLuhan's theory of media ([1964] 2013) and the idea that technologies extend human beings, Erik Davis argues in *Techgnosis* that "because the self is partly a product of its communications, new media technologies remold the boundaries of being" (Davis 2002, 17). This suggests that the human self, understood here as the locus of imagination ("the source of all mystical glimmerings" (Davis 1998, 16)), is profoundly shaped by these evolving forms of communication.

New media technologies, and I would include here sound amplification,² open a new and unknown expanded field of possibilities, mapped by the imagination as if its "horizon melts into a limitless question mark, and like the cartographers of old, we glimpse yawning monstrosities and mind-forged utopias beyond the edges of our paltry and provisional maps" (Davis 1998, 14). It is by opening new spaces on the map that new media technologies can be best understood as a technology of the sacred, enabling new practices and modes of thought that inspire fresh metaphors for articulating spiritual experience.

To me, the most obvious effect that sound amplification has on the imagination is related to its ability to create a communal feeling, which is central to all the practices discussed earlier. Whether in the acoustics of a church or the performances of Sunn O))), amplification serves as a force that binds a community together, though the meaning of that unity is interpreted differently depending on the context: a communion with god,

²While sound amplification is not usually classified as a "new media technology" in McLuhan's or Davis's sense, I include it here as part of the broader continuum of communication technologies, although it differs significantly from technologies such as the telegraph discussed in chapter 2.

or a communion with sound.

Amplified sound invites metaphors of connection through something invisible. Pushing this analogy further opens the way for interpreting sound as a bridge to other people's consciousness. Further still, it could be interpreted as a bridge to immaterial realms such as heaven, gods, or deities. Eventually, even the boundary between life and death can be transcended through sound. These are the kind of "yawning monstrosities" on the edge of the "provisional maps" that Davis mentions (1998, 14). Such imaginary spaces are continually expanded by the new possibilities made available through communication technologies.

It is rather difficult to pinpoint the moment when sound amplification emerged, and thus to identify the specific effects it had on the imagination. Unlike the telegraph, which marked a clear paradigm shift and sparked the spiritualist movement discussed in chapter 2, sound amplification developed much more gradually. The history of organology, the study of musical instruments, beginning with the earliest instruments, can be seen as a continuous exploration and expansion of amplified sound as it fits to different community gatherings.

What is specific to electronic amplification, compared to acoustic instruments or resonant spaces like churches, is its scalability, accessibility, and the ease with which it can be modulated and applied to virtually any sound. To me, the most striking effect of these affordances is that they allow any sound to reach monstrous dimensions: an extension of the imagination that is, in many ways, more dreadful.

The best way I found to describe the effects that amplification can have on the imagination is through the movie cliché of a monstrous shadow lurking around a corner. As it approaches, the shadow grows larger and more imposing. It is at its peak, when the shadow looms like a monster, when the beautiful play of shadows turns terrifying, that imagination takes center stage in perception. At that moment, the sense of dread is most intense. This feeling collapses in on itself when the source is revealed: a cute kitten.³

Amplification, by Channeling Energy, grants any object or phenomenon the power to assume a supreme dimension. It gives any beautiful thing the

³This example is inspired by J.F. Martel's thought experiment, presented in an episode of the *Weird Studies* podcast (Martel and Ford 2024).

power to become terrifying: like a gentle smile growing larger and larger until it deforms the face. Sound becomes monstrous and dreadful, conjuring imaginal visions of death and violence.

And, of course, in this contemporary world where I am constantly in contact with amplification, where everything is amplified and tailored to my senses, dread is most poignant when amplification disappears, when it suddenly stops.

Contrary to the cute cat, silence has no clear causal relationship to the monster I was just engaged in. The cause of electronically amplified sound lies in a vast network, almost too complex for the mind to fully grasp. This “long social process” mentioned by Baudrillard concerning the TV in chapter 3 is similarly erased in the experience of the “miracle” of amplification, much like Henry Adams standing before the dynamo. The object transcends its making, but when it stops its materiality returns abruptly, confronting us with an incomprehensible magnitude. A technical problem exposes not only the presence of the amplifier but also the energy it channels into sound.

The silence caused by a technical problem is the other side of the coin of amplification. Technical failure evokes dread—it raises the unsettling question: What else in my life is subject to sudden shutdown? What other systems am I so deeply entangled with, so entranced by, that everything could vanish in an instant? The dread of a technical problem is a visceral reminder of death.

Like everything, this eventually becomes business as usual. When I power on my amplifier to play electric guitar, I barely think about it. The point of my artworks is to resist this Pull of Habituation, to activate the imagination and make the experience feel fresh again, like a clap of thunder.

Anecdote from the field of Grotesque Numinosity

FACETS

Among the highest-stakes performances of my career was *FACETS*, a piece created with Tedd Robinson, Angie Cheng, James Gnam, Ame Henderson, Thierry Huard, Simon Renaud, and Riley Sims and produced by 10 Gates Dancing Inc. *FACETS* premiered at Ottawa's National Arts Center (NAC) in 2015.

Moments before the curtain rose, Robinson accepted the Walter Carsen Prize for excellence in the performing arts. Before the special guests who had come for the occasion, he gave a brief speech, thanked the audience, the lights dimmed, and we began.

I performed live, singing, playing guitar and drums over a pre-sequenced electronic track. Roughly eight minutes in, just as I was settling comfortably into the sound, the entire amplification system and the track shut down.

It was as if the air had been sucked out of the room. I heard the audience gasp, and the rustling noises that were once masked by the soundscape were now laid bare.

I held my position on stage, picturing the technician in the control booth, a friend I had hired to run the sound. What was happening in there?

Meanwhile, I was trying to give my performance an edge that would compensate for the loss, strumming my electric guitar harder and screaming louder. Nothing returned. Seconds stretched into what felt like hours.

Because my friend was working on my personal rig, I alone understood its quirks. After a few agonizing minutes, I slipped offstage, pretending it

was choreographed.

I knew a secret passage to the control booth. Navigating the NAC's backstage maze, I sprinted up a narrow red steel spiral staircase and dropped in behind my friend, who stood frozen at the mixing board. I quickly saw that my computer was the culprit; we restarted it, and the system revived. A deep relief washes over me.

I hurried back, re-entered on cue, and the dancers, who had continued through the silence, looked relieved.

It only worked for two minutes before the sound collapsed again and again and again... The cycle repeated seven times, each breakdown sending me racing through corridors while the dancers pressed on. A nightmare.



Figure 9.2: *FACETS* (2015). Image by Rod MacIvor, featuring Simon Renaud, Ame Henderson, James Gnam, Simon Renaud, Angie Chang, Charles Quevillon and Riley Sims.

By the final failure, I was in a frenzy that matched the complete choreographic chaos unfolding on stage. The repeated technical disasters had driven me into a strange, ecstatic state, and I refused to abandon the score I had spent months crafting. I kept my guitar slung, strumming chords that rang out as I shoved doors open through the maze, climbed the red staircase, and rebooted the computer.

By the end, the piece had acquired an unintended layer, an inadvertent meta-performance born of catastrophe, a study in resilience and improvisation under stress. Yet it left an aftertaste, a mixture of exhilaration and trauma, that still resurfaces whenever a stage monitor so much as flickers.

Chapter 10

Interlude C: Analytical tools

In *The Believing Brain* (2011), skeptic Michael Shermer develops a theory on why religion has evolved and how the brain is wired for religious belief. He focuses on one trait of human psychology, *patternicity*, which is “the tendency to find meaningful patterns in both meaningful and meaningless data” (2011, 7). Recognizing patterns is essential for survival, and Shermer argues that the ability to detect patterns within noise is a trait observed across the animal kingdom.

Patternicity is illustrated in Shermer using B.F. Skinner’s experiment with pigeons (Shermer 2011, 35), often referred to as the “superstition experiment,” which is a famous study in behavioral psychology. Conducted in 1947, Skinner’s experiment investigated how behaviors might arise in the absence of a clear cause-and-effect relationship between actions and rewards. He placed pigeons in a controlled environment where food was delivered at random intervals. Skinner observed that the pigeons began exhibiting repetitive, ritualistic behaviors: turning in circles, bobbing their heads, or making specific movements before the food appeared. The pigeons seemed to believe that the pattern they were making caused the food delivery.

About ten years ago, while I was working on my master’s thesis on my computer, I had the experience of my computer crashing a few times for unexplainable reasons, making me lose an hour’s worth of work or more because I did not save my document. This kind of light trauma caused me to develop behaviors similar to what Skinner, in his experiments with pigeons, called ritual (Skinner 1948). Even though now modern software includes

automatic save functions and my computer performs regular backups, I still find myself obsessively, ritually saving copies of a document multiple times.

When confronted with a complex mechanism that I do not fully understand, one that provides positive or negative reinforcement (losing my work in my case, receiving food in the pigeons'), I am driven to develop irrational behaviors.¹ The pigeon does not know that Skinner is behind the lever that dispenses food, just as I do not fully grasp the intricate code crafted by engineers that shapes my experience. Or, at the very least, I can easily forget about it.

The extent to which I expend effort on precautionary measures is proportional to the perceived risk. My automatic saving behavior is relatively benign, as is losing an hour of work, which affects only me. In contrast, the precautions I take before a live performance are far more extensive.

Like in *FACETS*, I often perform live with a computer that I control remotely. In these situations I experience stress and anxiety, as I am unable to respond directly to any problems that may arise. I exist in a continuous state of amazement whenever my program runs without crashing. However, when a crash occurs or something inexplicable happens, dread overtakes me: the feeling of being small and powerless before this vast, hidden system behind the screen.

Not knowing the source of the problem, watching it repeat itself unpredictably during *FACETS*, I truly felt the urge to pray to this seemingly uncontrollable, unknowable force within the computer. Other complex systems have similarly given rise to ritual behaviors, such as rituals performed to summon rain in the face of unpredictable weather. Just as people once sought to influence natural forces through ritual, I find myself engaging in my own digital rain dance: compulsively saving files, running backups, and performing precautionary routines in an attempt to ward off technological failure. As an experimental electronic musician, part of my practice has been to develop strategies for staying at ease with technical problems.

The current wave of Artificial Intelligence may similarly give rise to ritual behaviors, driven both by the immense power that companies and states are now granting these systems and by their inscrutability. In *New*

¹I use *irrational* here to denote action contrary to reason or evidence; *non-rational* designates domains that lie outside the scope of reasoning without necessarily opposing it, as discussed in chapter 8.

Dark Age, James Bridle (2019) compares modern AI systems to black boxes: opaque mechanisms whose inner workings remain largely unknowable. Despite ongoing research in AI interpretability, these systems remain far too complex to fully trace where their decisions and outputs originate (Samuel 2025). As AI increasingly governs my daily life, one must ask: what kinds of sacrifices will be made at the altar of networked computer data centers?

In that very basic sense, some technologies are sacred in my daily life: complex objects before which I pray, as they govern crucial aspects of my existence. I rely on them for sustenance, yet, like the gods of ancient Greece, they can never be fully trusted unless I act according to their flimsy and erratic whims.

10.1 50 Hz

The electronic technologies I engage with in this thesis are somewhat less complex in their information processing than the digital counterpart, with fewer potential points of failure. When problems arise, they tend to be hardware-related. Such problems, unlike software failures, can often be heard, seen, touched, or, in the most dreaded cases, smelled. Digital objects, on the other hand, process information in ways that remain entirely hidden from my senses, operating as a structured language with grammar, symbols, and syntax. Unlike digital coding, electricity flows predictably through components such as resistors and capacitors, following physical laws rather than linguistic and symbolic rules. However, in large networks of these electronic objects weird phenomena happen without any clear cause.

In performance contexts, ground loops, a phenomenon where a low hum is heard through the loudspeaker, are notorious for this, having ruined more than one analog performance. In some cases, this can lead to superstitions and ritualistic behaviors surrounding ground loops and their avoidance by, for example, purchasing very expensive cables.

It is perhaps because of this connotation with technical problems that the ground loop takes up such a large space in the artworks that I will now focus on in this final part of the thesis. This ground loop sound, the 50 Hz hum, ever-present in my soundscape since moving to Finland (where the electrical frequency differs from Canada's 60Hz), inevitably colors the har-

monies of my environment, becoming an inescapable presence, especially in my live performance. Through this sound, the presence of the alternator in the power plant is felt: a massive object rotating at a speed of 50 revolutions per second, sending its magnetic pull on electrons across vast distances.

My obsession with this frequency, used as the basis for tuning the strings in *Le Refuge des Cordes* and as the main droning frequency in *Electric Unconscious*, stems from a desire to engage with these ground loops, the uncontrollable presence of electricity, radiating from the network of electronic devices in which I am enmeshed. In *Loudspeaker Baptism*, this 50 Hz hum becomes the ultimate embodiment of the Raw: an unfiltered sound that evokes the dread of technical failure, a confrontation with reality that cuts through carefully crafted imaginary soundscapes.

In the following chapters I will present and analyze these artworks in relation to the research question that has guided me in writing this thesis:

To what extent can instrumental theater compositions articulate the entanglement of the sacred and the profane through the artistic exploration of Numinous and Grotesque representations of electronic music devices, in the context of contemporary consumer society?

Answering this question will come gradually as I progress through this part. In the next two chapters, I focus on the mechanisms that connect my musical performance with ideas of the sacred, exploring how, through Contamination, objects such as loudspeakers can acquire sacred connotations. More specifically, I will examine how Symbolic Sound-Producing Gestures were developed, using *Le Refuge des Cordes* to illustrate the artistic process that led to its main gestures. I will detail how I created, selected, and discarded various attempts.

Then, I will turn to *Electric Unconscious*, where I will explore how the same gestures, using the same Technique and Instrument, can take on different meanings due to the surrounding Context provided by the dramaturgical arc of the work.

Before examining the final artwork, *Loudspeaker Baptism*, I will introduce one last conceptual tool: the categories of Cheesy and Raw, which

structure the work and serve as foundational building blocks that evoke awe and dread in their “proto-numinous” form.

10.2 The Table of Sacred Connotation of SSPG

I will use two basic tools in order to dissect the connotations of Symbolic Sound-Producing Gesture in the first two artworks: the table of sacred connotation and the evaluation table.

In Interlude A, I established that music is inherently multimodal in my practice of instrumental music theater, with symbolic references emerging through four Symbolic Channels: Instrument, Sound, Technique, and Context.

Using these categorize, I propose the Table of Sacred Connotations of SSPG, where connotations are noted across these four Symbolic Channels. Starting with a musical gesture, I can uncover its symbolism by examining how each of these Channels connects to the sacred, by listing connotations.

While the majority of the connotations I list have been more or less thoroughly explored in this thesis, those that have not been addressed are explained in footnotes. These connotations may be subtle or explicit, weak or strong, or even subjective and context-dependent. This flexibility allows for wide-ranging associations, and the challenge for me as a composer is to find a balance between keeping the connotations open and contextualizing the gestures.

As a first example, I will use The Rusty Metal Rod mentioned in Interlude A.

Table 10.1: Table of Sacred Connotations of SSPG: The Rusty Metal Rod

Channel	Gesture Description	Sacred Connotations
Instrument	Suspended metal rod at center stage.	<i>Axis Mundi.</i>
	The old bone.	Symbol of death.
Sound	The resonance of the metal rod.	Mystery, magic.
Technique	Rubbing the bone against the rod.	Erosion, nature vs culture.
	The solemnity and precision of Matthias.	Hieratic posture.
Context	Matthias.	
	The barn.	

10.3 Evaluation Table of SSPG

In Interlude B I established the four Parameters of SSPG: Opacity, Saliency, Dynamism, and Multimodality. Using these parameters, I can examine the reasoning behind certain artistic choices, why some SSPGs were discarded and others retained.

To illustrate this evaluation, I will use a simple comparison based on the concept of the Animated Hieroglyph, which I emphasize as a form of symbolism closely tied to the experience of the Numinous. In table 10.2, it is evaluated as a symbol that is Opaque, Salient, Dynamic, and Multimodal.

Table 10.2: Evaluation of Animated Hieroglyph

Parameters	Yes	No
Opacity	x	
Saliency	x	
Dynamism	x	
Multimodality	x	

As an opposite example, a symbol like the number “2,” while also Salient, is Clear, unimodal (purely visual), and static.

Table 10.3: Evaluation of SSPG: Number 2

Parameters	Yes	No
Opacity		x
Saliency	x	
Dynamism		x
Multimodality		x

I did not use these categories during the creation of the work, which was carried out intuitively; rather, the categories are a framework I developed afterward to unfold this process on paper. There is potential creative value in developing such conceptual tools, as they can bring more awareness to the creative process: something that may be beneficial, but could also risk constraining spontaneous impulses. Creating SSPGs is a messy process,

and while these categories are useful, musical gestures often slip beyond rigid classifications.

I recognize a certain bias in these tools, as it is easy to select only the symbolism or the evaluation that supports my argument. This evaluation is inherently subjective. However, these tools are useful as an arbitrary connection point between me, the reader, and the artworks, offering insights into the artistic decision-making processes.

Part IV Artworks

Chapter 11

Le Refuge des Cordes: Making SSPG

Le Refuge des Cordes

Installation/performance, 35', 2019–2020

Solo performance with six suspended electric monochords and electronics.

Sound Sculpture: metal, rope, LED lights, guitar pickups, piano wire, rocks and wood chips.

Work by Charles Quevillon

Premiered at the gallery Forum Box, Helsinki (FI) during *Immortal's Birthday* (Tammi and Quevillon 17.6.-12.7.2020), an exhibition created in collaboration with artist and researcher Maija Tammi (17.6–12.7.2020).

“Secular Version”

Kunstraum Walcheturm, Zürich (CH), (14.9.2022)

MuTe Fest Black Box, Musiikkitalo, Helsinki (FI), (29.11.2022)

Video documentation on Research Catalogue:

<https://www.researchcatalogue.net/view/3554062/3801575>

Le Refuge des Cordes is an installation/performance consisting of a room-sized interactive sonic sculpture. The sculpture is five meters tall and around two meters in circumference. Six custom-made electric monochords are suspended around a thick rope. Six heavy rocks are suspended under the monochords, creating the tension in the strings. A layer of wood chips covers the floor beneath the stones. Above each string is a small halo of 16



Figure 11.1: Installation of *Le Refuge des Cordes* (2020). Image by Miikka Pirinen.

LED's, and a hexagonal structure hovers above the whole room.

The title comes from the idea of creating a kind of sanctuary (*refuge* in French) for strings.

During the installation, audience members are invited to pluck the strings using their hands, guitar picks, or feathers. The low sounds of the strings resonate through the 6.1 surround sound system. They can also climb the rope and play the strings from it. Climbing the rope allows for light and sound sequences to be triggered when plucking the strings.

During the performance, an audience of between one and twenty persons sit around the sculpture and watch a performer execute a series of actions involving the sculpture.

I performed the work every day for 26 days. When I was not performing, gallery visitors came and experienced the work as an installation. Over 200 people witnessed the performance, and over 640 people came to see the exhibition. Those were good numbers, despite the COVID-19 pandemic. The popularity of the exhibition was in part due to the press coverage, in particular a review of the exhibition in Helsingin Sanomat (Mononen 2020).



Figure 11.2: Performance of *Le Refuge des Cordes* (2020). Image by Maija Tammi.

After the premiere, I had the opportunity to perform the work in two different contexts, which led to the development of the “secular version.” Performed in Zürich and Helsinki, this version differed from the premiere primarily through the removal of certain ritualistic elements. For instance, whereas the audience was originally positioned in a circle, the secular version adopted a more conventional frontal presentation where I placed the audience farther from the sculpture and arranged them in half circles instead of a full one. I also added pre-recorded sound materials to punctuate and support the music I was performing live. In short, I added a fourth wall, making it clear that this was a representation. Additionally, I further developed and embraced the work’s profane connotations, which I will explore in the following sections.

11.1 The Instrument: Electric Guitar

The starting point for each artwork presented in this thesis is an electronic music device that I commonly use in my music-making practice. As a trained guitarist, beginning with the electric guitar felt like a natural entry point

for the first project of this doctorate.

In 2013 I had already created the work *Corde à Vide*, which, similar to *Le Refuge des Cordes*, aimed to renew the audience's perception of the fundamental musical gesture at the heart of guitar playing: plucking strings. As shown in figure 11.3, to achieve this I developed a scenic device that made plucking the strings as difficult as possible, thereby drawing heightened attention to this otherwise simple action.



Figure 11.3: *Corde à vide* (2013). Image by Anne-Marie Amyot.

The idea was to create a chime of suspended string instruments: guitar, banjo, ukulele, and others. I would then play these instruments while suspended from a rope ladder positioned in the midst of them. The work was presented as a 25-minute performance in which I sometimes had to adopt extreme physical postures to pluck a string and produce the desired sound.

Although I felt that this work was one of the most original ideas I have had, I was not satisfied with the outcome. The design of the sculpture made it difficult to install and rehearse, and the use of ready-made string instruments introduced multiple cultural references that disrupted the performance's cohesion as a unified artwork. Additionally, the integration of lights and electronics could have been much more seamless. I also noticed



Figure 11.4: Chime of Suspended String Instruments in *Corde à Vide* (2013). Image by Anne-Marie Amyot.

that many audience members wanted to interact with the instrument after the performance, suggesting that an installation version, where people could climb the rope and pluck the strings themselves, would be a rewarding direction to explore.

After nearly six years, I felt it was time to create a second version of this work. In September 2018 I participated in a workshop led by Yuri Landman at Aalto University where students built an electric string instrument using very simple materials. This experience gave me the impulse to develop a new work that would further expand on the concept of *Corde à Vide*.

Making the instrument

The process of creating Symbolic Sound-Producing Gestures (SSPG) is one of discovery, play, and trial and error, which can be carried out alone (with video recording) or collaboratively with musicians in a studio. It is driven by curiosity about sound and a “what if?” approach; manipulating objects, exploring alternative ways of playing them, and remaining attentive to the connotations that emerge from the interaction between bodies and musical gestures.

It is very difficult for me to approach this kind of work by simply imagining a situation, writing it down, and having a musician “play” it. These gestures are often based on extended techniques: ways of playing that are highly unfamiliar, as the objective is not just to produce sound but to find a Multimodal balance between sound and movement. Moreover, they are often developed in relation to complex scenic devices, which take time to install.

Le Refuge des Cordes is an extreme example. The instrument itself occupies an entire room, meaning I could only rehearse in the same space where it was performed. Installing it took two days. The setup consists of a large hexagonal metal frame suspended four meters above the ground. At each corner of the hexagon hangs a suspended electric monochord, each consisting of a magnetic pickup, a piano wire (100–200 cm long), and a heavy rock (weighing 5–10 kg) hovering just above the ground.

The idea was to transform the electric guitar into a sacred space by constructing a monumental, elevated, and open structure reminiscent of the gigantism of a church. The six strings of the electric guitar were ex-

panded into the surrounding space, redefining its presence. In *Sacred and Profane* (Eliade 1959), Mircea Eliade emphasizes the role of the central pole in shamanistic practices, which, much like the thick rope at the center of the sculpture, serves as a connection between heaven and earth, *the axis mundi*.

This conception of sacred space was also influenced by the aesthetics of Zen Buddhism. The juxtaposition of the suspended rock's rawness with the clean circle of wood chips reminded me of a Zen garden, evoking a sense of balance and contemplation. In constructing this sacred space, I sought to connect the electric guitar with the connotations of other significant sacred spaces I had experienced.

The choice of the stone took a long time to settle on. In hindsight, it seems like an obvious decision, one that was there from the start. However, I remained open to the possibility of other objects that might better convey the sense of electrical mystery, such as computer parts or batteries. In the touring version of the work, I used metal plates instead, as traveling with heavy rocks proved cumbersome. The plates maintained the sense of scale and balance, while the stones evoked something more cosmic: the feeling of planets, the harmony of the spheres.

A detailed account of the construction can be found in *Making of Le Refuge des Cordes* on Research Catalogue:

<https://www.researchcatalogue.net/view/3554062/3802054>

An instrument built for one gesture

The central gesture in *Le Refuge des Cordes* is a musician suspended from a thick rope, two meters above the ground, supported by a harness, striking amplified strings with a feather; their low sound resonating powerfully through the subwoofer. The symbolism of a suspended musician playing suspended strings was the core idea, and the entire instrument was constructed to realize this vision. This concept excited me from the beginning, and I was eager to experiment with it.

As previously mentioned, what intrigued me in my 2013 work *Corde à Vide*, which explored a similar concept, was the tension created in the simple act of plucking a string. When playing the guitar, one rarely thinks about this tension, as the strings are so close at hand. In *Le Refuge des Cordes*



Figure 11.5: SSPG in *Le Refuge des Cordes* (2020). Image by Maija Tammi.

I wanted this single gesture to become the crux of the piece: a moment of heightened focus, where the tension mirrors that of a circus performance, keeping the audience on the edge of their seats, almost praying for the performer to succeed. Even though there is no real danger (the safety net is always there), the act can still feel precarious in the moment of execution.

Tedd Robinson would call this effect “minimal circus,” which was exemplified in his performances of simple yet highly charged balancing acts, such as balancing a stick on one’s head for a long period.

Therefore, in *Le Refuge des Cordes*, one of the earliest and most crucial decisions in building the instrument was in determining the distance between the central rope, from which the musician is suspended, and the strings that need to be plucked. This was done by cutting and resizing the hexagonal frame from which the strings were suspended.

This spacing directly shaped the physical challenge, the performative tension. One way to create an SSPG is by modulating the effort required to produce a gesture, what Délécraz calls *eccentricity* (2019). A key method for modulating effort is adjusting distance. Strings that are too close together would make the action too easy, offering no real challenge, while



Figure 11.6: Tedd Robinson balancing a stick in *Room with Sticks* (2014). Image by Rod MacIvor.



Figure 11.7: Hexagonal Frame (2019). Image by the author.

those placed too far apart would be overly difficult, making the gesture nearly unplayable. I opted for a relatively distant string, which, based on my previous experience, would require full arm extension to pluck.

11.2 Creating Animated Hieroglyphs

This was hard. I first set up the sculpture in a barn in the countryside near where I was living during the COVID pandemic. After that first attempt, I quickly became disenchanted. The action was so physically demanding that I felt I would never get anything meaningful out of the instrument. It risked becoming just a gimmick, a mere trick. I had to find a way to make it work.

I intuitively knew from my past experience with *Corde à Vide* that this SSPG was potentially both Opaque and Salient. The image I had in my mind carried rich connotations, sacred and ritualistic, while also retaining a sense of playfulness. It embodied a symbolism that was deeply meaningful to me, something I felt compelled to explore. The image was fixed in my mind, and I became obsessed with it; the entire instrument was built around it. The challenge, however, was that I still did not know how to make this symbolism Multimodal and Dynamic. In this section, I will detail the process that led to the final SSPG of *Le Refuge des Cordes*, by using an accompanying video,¹ which can be found in the media repository of this thesis.

0:00–0:16 First Try in Barn. 16.0.2019

As can be seen in the first seconds of the accompanying video, I was excited to try the instrument for the first time. However, there were many improvements to be made. As mentioned, the gesture lacked Multimodality and Dynamism due to the difficulty of playing the instrument and my physical limitations. Moreover, the symbolism of the Technique channel did not carry the sacred connotations that I was seeking. Instead, it felt more like a playful game, which while it was something I later appreciated for its profane connotation, was not what I was initially looking for.

¹See Video *Looking for SSPG* in Research Catalogue: <https://www.researchcatalogue.net/view/3554062/3801572#tool-3801921>

Table 11.1: Looking for SSPG: Barn

Channel	Gesture Description	Sacred Connotations	Profane Connotations
Instrument	Sonic Sculpture	Church	
	Rope	<i>Axis mundi</i>	
Sound	Bass sounds	Church Bells ²	
		Amplified bass	
Technique	Plucking the strings		Playfulness
	Two meters in the air		

Table 11.2: Parameters of SSPG: Barn

Parameters	Yes	No
Opacity	x	
Salience	x	
Dynamism		x
Multimodality		x

0:16–0:41 Rehearsals in Circus Helsinki 25.11.2019

After my initial attempt, I quickly became discouraged, doubting whether I would be able to achieve my goals. Early rope training proved extremely difficult, even when “cheating” by adding knots to the rope. Although the training was beneficial, after a month I realized that without additional equipment I could only stay on the rope for two minutes. How could I possibly pluck strings for five minutes, let alone ten?

The process that followed can be distilled into a single question: How can I make a situation where making music seems impossible feel as effortless as possible? Indeed, to achieve Multimodality and Dynamism, I needed to develop strategies that allowed for greater control and variety of the sound.

0:42–2:40 Rehearsals in MuteLabs Bulevardi 4.3–6.3 2020

The opening of the *Immortal's Birthday* exhibition (Tammi and Quevilon 17.6.-12.7.2020) was now scheduled for June 2020. In March of that year, I had the opportunity to install a reduced version of the sculpture, allowing me to conduct numerous experiments. On the one hand, I was exploring

²A colleague during a doctoral seminar where I presented the work said it sounded as though I were ringing bells, which makes sense: if that space is a church, then I am the one ringing them.

and developing new techniques for the instrument, using various objects and different body parts to pluck the strings. I also experimented with altering the sound by placing objects on or around the strings, though only a small fraction of these techniques made it into the final work. On the other hand, I was also experimenting with my voice and singing. Singing was important to me because it transformed me into a string myself, symbolically intertwining my fate with that of the instrument. It also introduced a layer of vulnerability, as I am not a trained singer.

2:40–4:15 Rehearsals in MuteLabs Bulevardi 14.3.2020

This improvisation at 2:40 marked a turning point, perhaps the first time I truly enjoyed playing the instrument. All my previous experimentation had led to two key discoveries. First, I began using a feather to pluck the strings. The feather provided freedom of movement by reducing impact and absorbing the shock of my hand gestures. It diffused the force of my strikes, naturally compressing the dynamic range. This meant that no matter how hard I struck a string, the feather would soften the attack and prevent unwanted distortion, a recurring issue I had encountered. At the same time, the feather allowed me to play as softly as I wanted, which, combined with the highly amplified strings, proved to be an effective solution.

At the same time, the feather introduced a new sacred connotation, its symbolism contrasting with the weight of the stone. Lightness and heaviness, two opposing forces, resonated with the idea of a body suspended in mid-air. Moreover, feathers carry rich mythological and symbolic associations, such as that in the Greek myth of Icarus or the Christian imagery of angels, offering additional conceptual dimensions to explore. Feathers became a structuring element of the performance.

The second discovery was the use of a microphone to amplify my voice. Its signal was processed through a pitch-correction plugin (an auto-tune effect), which quantized my vocal pitch to a pentatonic scale in tune with the strings. The six strings were tuned to a pentatonic scale based on G (G A D C F G). I selected this tuning for its close association with rock 'n' roll guitar playing, subtly invoking the genre's cultural and musical connotations.³

³The pentatonic scale allows for simple five-note patterns used in almost every iconic guitar solo and riff in the genre. As my former teacher Jean Rocco would say, "The pentatonic scale IS rock 'n' roll!"

In this example I used a hydrophone, singing with it in my mouth. I eventually replaced this setup with a more conventional and physically comfortable wireless headset microphone. I appreciated the contrast between the dark, resonant sound of the strings and the auto-tuned voice, which blended both Cheesy and Raw qualities, an interplay to which I will return when analyzing *Loudspeaker Baptism* in chapter 14. At the same time, the auto-tune functioned as an analogy to weight, anchoring pitch in an otherwise loose string and stabilizing my untrained singing voice.

Moreover, I developed an algorithm that introduced variety in the pitch of the auto-tune, as always singing the same five notes became somewhat monotonous. Whenever I struck a chord, the algorithm would change the scale to which the auto-tune tuned my voice, ensuring that it remained harmonically connected to the strings while constantly introducing variation.

There is a certain lightness and freedom afforded by both the auto-tune and the feathers. Whatever I was doing at that moment felt natural to me. With this setup, I found that I could achieve the Multimodality parameter of SSPG. The problem with the initial gesture was that the musical possibilities were so limited that there was an imbalance between the visual and the sonic elements. The music lacked aesthetic weight. and there was no real potential for something musically compelling to emerge. Now, however, I had potential musical materials that could stand alongside the striking visual I was aiming for. The problem now was how to achieve this ease while being suspended.

5:05–6:10 Rehearsals in MuteLabs Bulevardi 22.3.2020

Knowing what works and what does not in the moment is incredibly difficult, and what now seems like an obvious choice took me a long time to finally accept. Using a climbing harness allowed me to completely let go and relax in the air. It enabled me to surrender fully while still producing sound.

The symbolism of letting go, this kind of softness found in extreme situations, resonates with many of the ritualistic themes I had in mind: from the Hanged Man of medieval Tarot decks to the surrender depicted in images of Christ on the cross (Ronnberg and Martin 2010, 746–49). In a way, the process of incorporating feathers, auto-tune, and the harness was ultimately about making things easier for myself, creating a system where

effortlessness could emerge from an otherwise intense situation.

The harness allowed for greater Dynamism. While letting go was essential, the harness also enabled me to shift easily into positions of struggle, hyperextending my body to strike distant strings. The struggle could be seen as an antagonistic relationship with the instrument (Délécras 2019, 254–58), whereas letting go carried a different set of connotations, emphasizing softness and surrender.

The Dynamism parameter of SSPG refers to how variety can be achieved within a single musical situation, allowing for modulation and expanding the possibilities for symbolism. With the harness, I had a broader expressive range: I could completely relax, releasing every muscle, or I could make the action intensely difficult, setting up tasks for myself where my body exerted itself to the extreme. This modulation of effort transformed plucking a string from a simple, effortless gesture into something that at times felt like an almost impossible task.

Table 11.3: Parameters of SSPG: Final

Parameters	Yes	No
Opacity	x	
Saliency	x	
Dynamism	x	
Multimodality	x	

In hindsight, it seems I took a long detour, exploring numerous possibilities before ultimately returning to the core idea, which was now refined and supported by additional tools. One reason I was initially reluctant to use these additional tools was a certain puritanism I had in mind regarding the gesture. These tools carried profane connotations that seemed at odds with the ritualistic elements I was exploring. They seemed more like by-products. Something I had to deal with.

For example, while the auto-tune helped me sing in tune (an especially challenging task while suspended in the air) and granted me greater freedom, it is also widely associated with pop music, introducing a layer of profane symbolism. I eventually came to embrace these profane connotations, lead-

ing to the creation of the “secular version” of *Le Refuge des Cordes*, in which I expanded on the use of auto-tune with an additional harmonizer plugin.

Fine-tuning a gesture so that its meaning remains both precise and ambiguous, Salient and Opaque, avoiding clear references while allowing for plurality, is the central challenge in creating this Animated Hieroglyphs. The image of me suspended on the rope evokes multiple associations: echoes of the Norse god Odin’s self-sacrifice, the Hanged Man figure of the Tarot, a kind of Antichrist (an inverted Christ on the cross), and mythological figures such as Icarus with his wings and Hermes with his feathered feet. Yet, the work never fully settles into these images or explicitly references them. The real challenge lies in achieving simplicity while having a meaning that remains open to multiple interpretations.

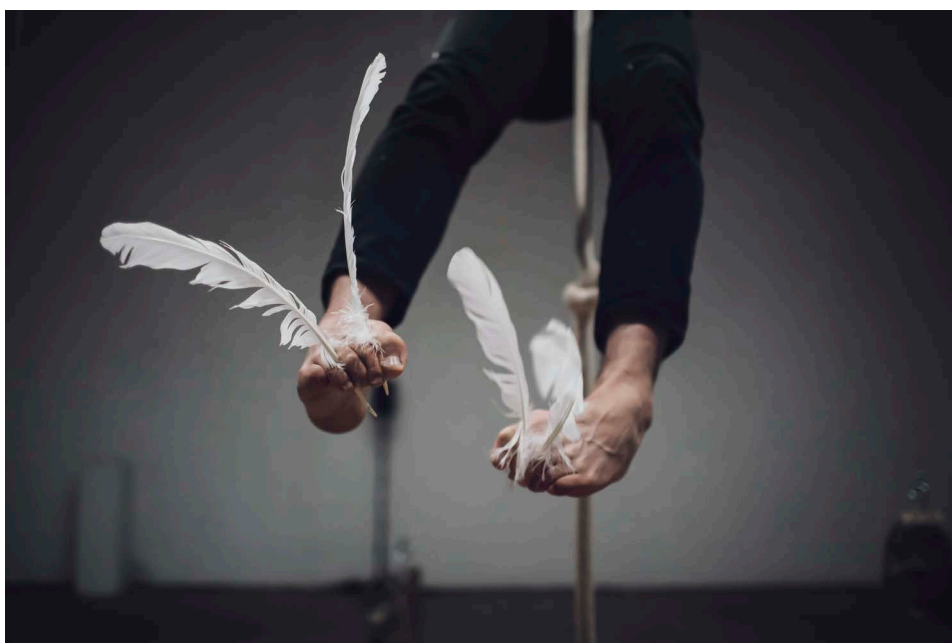


Figure 11.8: Detail of *Le Refuge des Cordes* (2020). Image by Maija Tammi.

Table 11.4: Looking for SSPG: Final

	Gesture		
Channel	Description	Sacred Connotations	Profane Connotations
Instrument	Sonic Sculpture Rocks	Church Planets Zen garden	Electric Guitar

	Gesture		
Channel	Description	Sacred Connotations	Profane Connotations
	Wood chip	Destroyed Guitar	Circus ⁴
	Rope	<i>Axis mundi</i>	
Sound	Bass sounds	Bells	Rock music (Pentatonic scale)
		Amplified bass (Awe and Dread)	
	Autotune		Pop music
	Just intonation	Harmony of the sphere	
Technique	Suspension	Christ on the Cross	Playfulness
		Odin's self-sacrifice	
		Hanged Man in Tarot	
	Feathers	Myths of Icarus	
		God Hermes	

11.3 Non-Patterns

The previous process illustrates the first stage of creating an SSPG: finding the balance between the sound and movement (Multimodality), defining the range of expressiveness (Dynamism), and fine-tuning as well as expanding the connotations of the gestures (Opacity and Salience). Once I had settled on the gesture, I wanted to explore its Patterns and how they unfolded in time.

Once the gesture is defined and its symbolism balanced, Patterns can introduce a second level of symbolism, shaping meaning through their structure and development. In an absolute music paradigm where music is seen as a language, the notes are the words and the patterns are its grammar. By analogy, SSPGs can become words in a sentence.

Despite my attempts, this specific Animated Hieroglyph remained restrictive, allowing me to create only simple patterns. The precarious and unpredictable nature of being suspended in the air made composing structured motifs or specific sequences nearly impossible. Even alternating between two notes proved extremely difficult due to the axis of rotation: I was constantly spinning slightly away from the string I had just struck.

As a result, the sections where I am suspended are structured around two contrasting gestures, as reflected in my score in section C: the tension

⁴Wood chips were traditionally used in circus shows.



Figure 11.9: Upside Down in *Le Refuge des Cordes* (2020). Image by Anna Autio.

between a single note and everything else, between struggle and release. In some passages, I strike a single string continuously, like a constant bell ringing; swinging back and forth, calling for something, propelling the heavy bass vibrations to resonate through the space, trying with my whole body to focus on a single string, sometimes missing it. Then comes the moment of letting go, improvising while maintaining a specific quality, a soft *errance* between notes.

The core idea of an SSPG and its Multimodality parameter is to find a balance between the visual and the sonic elements. It is about managing the flow of information between the visual and auditory channels. In *Le Refuge*

des Cordes, this balance was a constant struggle, as I was always trying to compensate for the inherent limitations of playability. I was continually striving to reach a viable level of musicality within the instrument, making adjustments to ease my physical engagement until musicality became possible without compromising the symbolic depth of the performance. As the effort required for a musical gesture increases, sound production begins to spill into other mediums, engaging additional senses and modes of perception.

The sacrifice of musical expressivity is inherent to this type of gesture, since it necessarily restricts technical possibilities. If the techniques are executed too perfectly, the symbolism will fail to emerge. The challenge of working within musical constraints, of engaging with the inherent limitations of a given situation, has been a recurring theme in my work with SSPGs.

Le Refuge des Cordes serves as an extreme example of this approach, where patterns, the fundamental building blocks of musical grammar, become nearly impossible to establish in such a situation. Perhaps with more rehearsal time, the musical possibilities could have been expanded. After all, this is a new instrument, and like any instrument it can take years or even decades to master, whereas I had only a few months to learn to play it. In the case of *Le Refuge des Cordes*, however, the sheer scale of the instrument made rehearsals particularly challenging, limiting the opportunities for extensive practice.

Often in this kind of process, especially in my solo performances, the lack of inherent musicality in a situation is compensated by the use of electronics and recorded sounds. The musicality emerges through additional elements and supporting technology, much like how the feathers, auto-tune, and harness provided more freedom.

Eventually, in the “secular version,” I integrated more electronics, recorded sounds, and effects, which introduced a new layer of musicality. However, the addition of recorded sounds also made the piece feel more like theater, distancing it from the raw immediacy of ritual that I had aimed for in the first version.

Another way of compensating for this lack of musicality is to use a more narrative approach. Due to the absence of clear musical patterns,

the work cannot be listened to in the same way as a conventional piece of music. Instead, its development follows a dramaturgical logic. The work is not understood through structural elements or the sequencing of motifs, but rather through the way events unfold in a loosely constructed dramatic narrative.

The obvious solution to developing more structured patterns is to share the work with other performers. I am now working on a new work using similar instruments. The work *Librations* includes a collaboration with two circus artists and a singer. This approach allows me to preserve the purity of the gestures (avoiding the use of harnesses, feathers, or auto-tune), while giving me the opportunity to focus on creating a more structured form with richer musical patterns, one that is not primarily driven by dramaturgy.

Despite this, it is always valuable to strive for creating Patterns in these unconventional musical situations. Even simple ones, such as repeatedly striking a single string, help to give shape to the performance, preventing it from being perceived merely as a demonstration of different techniques.

Recently, I encountered a similar challenge with a new work. Much like *Le Refuge des Cordes*, it began with a strong image in my mind: me singing and producing sound with my head submerged in a bowl of water, like in figure 11.10. This is an image I am committed to realizing, and I sense musical potential within it. However, the situation is extremely delicate, with highly constrained possibilities, making the entire process about exploring variations within these limitations.

I pushed myself to rehearse, and although this instrument is simpler and requires less setup time, it remains physically uncomfortable. Submerging my head fully in water more than once a day quickly becomes overwhelming. The challenge, once again, lies in balancing the visual and the musical. If the visual is compelling, but the sounds remain underdeveloped, the work feels unbalanced. The process, then, is about finding equilibrium between these two forces.

This is interesting because most often the opposite occurs: an action may possess Multimodality and Dynamism but lack meaningful symbolism. Conventional techniques often fall into this category, where the gestures are engaging, producing visually and sonically appealing results, yet they lack deeper significance. In such cases, meaning can emerge from the Context in



Figure 11.10: Performance of *Head in Water* (2025). Image by Maija Tammi.

which the action is embedded, as I will detail next when analyzing *Electric Unconscious*.

Chapter 12

Electric Unconscious: On/Off

Electric Unconscious

Staged Concert, 55', 2023

For electric guitar, flute, alto saxophone, mini-fridge, and electronics.

Created by Charles Quevillon with kollektiv international totem

Charles Quevillon: Composition, Stage Direction, and Performance

Nuriia Khasenova: Flute

Kay Zhang: Saxophone

Léo Collin: Guitar

Leandro Gianini: Technical Director

Set and Light Design by Charles Quevillon / Leandro Gianini

Premiered at Kunstraum Walcheturm, Zürich (CH) 22–24.6.2023

Other Performance:

Electric Unconscious, Black Box, Musiikkitalo, Helsinki (FI) 30–31.10.2023

Commissioned by kollektiv international totem

Supported by SSHRC, Stadt Zürich, Kanton Zürich, Fondation Nicati-de Luze, and Uniarts Helsinki.

Video documentation on the Research Catalogue:

<https://www.researchcatalogue.net/view/3554062/3801541>

Electric Unconscious is a collaboration with the Zürich-based trio *kollektiv international totem*, a group specializing in new music theater. The project revolves around the theme of energy: specifically, the energy expended in making music. This includes the energy derived from food, the air humans breathe, and the electricity that powers electronic instruments.

For example, psychic energy is consumed in the intense concentration required to read the precise rhythmic score. Physical energy is expressed through the performers' physicality, where the simplest tap on a table contrasts with the exertion of jumping as high as possible. Electric power is harnessed through the hyper-amplification of musicians' sounds and breathing.

The performance also seeks to heighten the audience's awareness of electricity's role in their lives by incorporating symbols of electricity as compositional materials and structuring a dramatic form in which electrical current plays a central role. The primary motif is the On/Off state of electricity and sound amplification, which is applied both to the musicians' actions and also to shaping the overall structure of the piece.

12.1 The Instrument: Mini-Fridge

If *Le Refuge des Cordes* was always intrinsically tied to the electric guitar, in *Electric Unconscious* the path leading to the amplifier, and eventually to the mini-fridge, was far less straightforward. I initially intended to work with a synthesizer, and, much like in *Le Refuge des Cordes*, envisioned deconstructing it, expanding it beyond its casing into a room-sized interactive installation.

The goal was to use the synthesizer as a means to experience electricity with all the senses: cracking open its mundane casing and feel the movement of electrons. This idea persisted deep into the creation process, where I envisioned two separate spaces: a performance space and an installation space, where the audience would be guided backstage, into the *Electric Unconscious*. Though some elements from this remained, this installative and participatory aspect of the project was ultimately abandoned. In the end, the focus shifted beyond the synthesizer itself to electricity as a phenomenon, an interest that was sparked by reading Erik Davis's *Techgnosis* (1998).



Figure 12.1: *Electric Unconscious* (2023). Poster by Antti Ollikainen.

I also always had this image from Luigi Serafini's *Codex Seraphinianus* (1993), a dance around a refrigerator, that remained stuck in my mind. It is a strikingly unique yet relatively banal image compared to the rest of Serafini's wild imagery, where a group of children are holding hands around a fridge glowing with lights. For me, that image contained everything: the contrast between sacred and profane, electricity, Sacred Consumption, and the innocence of children encircling the fridge, which took on a god-like presence. In that sense, the image became a question mark; an unresolved enigma that lingered in the background of the creative process. A reinterpretation of that image ended up on the promotional image for the show, which is also used in a modified version as the cover of this book.

For me, the fridge became an icon of energy, representing both electricity and food. While electricity remained the central theme, it was placed within a broader context of energy as a whole.

The fridge itself took on an ambiguous presence, both sacred and profane. Much like the towering speaker stacks in Sunn O))) concerts, the fridge stood as a monolithic structure, droning at the center of the stage. In Sunn O))) performances, these imposing black boxes evoke an aura similar to the famous monolith in *2001: A Space Odyssey* (1968). Like the monolith, they radiate a sense of mystery; their technical origin is undeniable, yet remains unintelligible.

The fridge is well known for its droning qualities, often either praised or despised for the persistent hum of its compressor. As I have shown, sound amplification and the drone symbolize eternal energy, and in many ways the fridge operates similarly. Both the amplifier and the fridge are heavy electrical power consumers, drawing their power from the electrical grid. Fridges, in particular, require substantial amounts of electricity, with their compressors condensing refrigerant vapor into high pressure to enable heat exchange. This process mirrors a similar kind of energy condensation in the amplifier, though its result is experienced not as amplified sound but as cooled food.

These sacred connotations were contrasted by the fridge's undeniably profane qualities. Like the amplifier, it stood throning and droning at the center of the stage. However, its mundane, everyday presence added a touch of humor and irony, foreshadowing the rest of the work—especially in the scene featuring the literal enactment of fridge worship in a central section of the performance.

This fusion of fridge and amplifier goes even further, as they ultimately become a single entity. In a final twist, the end of the show reveals that an amplifier is hidden inside the fridge, transforming it into a hybrid, multi-headed monster; an object that embodies both power and absurdity, oscillating between the sacred and the profane.

12.2 On/Off

If the central gesture in *Le Refuge des Cordes* was to heighten the tension of plucking a string and infuse it with symbolism, in *Electric Unconscious* the primary gesture is the act of turning the amplifier on and off. The meaning of this gesture constantly shifts throughout the piece, its symbolism evolving in response to the dramaturgy.

This On/Off action is primarily enacted through the pressing of a switch: a simple, passive ABC guitar pedal. This pedal routes the amplified signal of each musician's instrument to three different paths, each leading to a distinct amplification chain:

1. No amplification
2. Minimal amplification
3. Full amplification through the main PA



Figure 12.2: ABC pedal (2023). Image by the author.

This On/Off gesture is a trickster's gesture, shape-shifting as the piece progresses. Over the course of the performance, this seemingly banal action accumulates weight, gradually acquiring a sacred dimension. The entire first half of the piece, which I will now detail, builds toward a single moment: the pressing of a pedal that takes on a Numinous significance.

12.3 Dramaturgy of the Pedal

On October 31st, 2023, members of the esteemed kollektiv international totem took the stage to perform *Electric Unconscious* a musical work for electric guitar, saxophone, and flute.

The performance began with a sustained drone of heavily amplified instruments, all tuned to a low 50 Hz, the frequency of AC electricity in Europe. This drone¹ filled the space as the musicians introduced subtle variations by shifting their instrument left and right, modulating their effort with precision and control.

After 15 minutes of that heavy monolithic drone, the musician's amplified sound began to stutter before abruptly cutting out, leaving the room empty as if all the air had been sucked out. My role in the performance was to operate the mixing board and computer, triggering sounds and managing sound levels. At that moment, as the technician of the show, I had to act. There was obviously a technical problem. The stakes were high, this was my doctoral concert, a jury was present, and even my mother was watching via livestream from Canada.

After discussing this technical issue with members of the audience, it became clear that many, if not the majority, experienced stress and discomfort at that moment. They wanted to help, feeling empathy for me and the musicians. For my mother, who was helpless on the other side of the world, it was especially difficult to watch. So much so that she nearly turned off her son's doctoral exam. It felt like a complete failure on my part. After all, I was in the Music Technology department at the Sibelius Academy, where the technical aspects of my concert were under evaluation. If anyone was

¹See Video *Electric Unconscious: Drone* in the Research Catalogue: <https://www.researchcatalogue.net/view/3554062/3801572#tool-3801933>

to blame for this failure, it was me who was now foolishly attempting to fix the issue by unwrapping the Velcro around a new power cable.



Figure 12.3: Trying to Fix the Technical Problem in *Electric Unconscious* (2023). Image by Maija Tammi.

This problem persisted, making it impossible to continue without amplification, as the show relied on it heavily. Meanwhile, I was desperately trying to fix the issue while the musicians did their best to keep playing, following their increasingly complex score.

The musical score excerpt shows three staves: Nur (violin), Kay (flute), and Léo (bass). The time signature is 12/8. Measure 57 starts with a *ppp* dynamic. The Nur and Kay parts have a *p* dynamic in measure 57, which then changes to *<f sp* in measure 58. The Léo part starts with a *(mf)* dynamic in measure 58. The score continues through measures 59 and 60, with dynamics of *<f sp* and *sp mf* respectively.

Figure 12.4: Excerpt from the score of *Electric Unconscious*

Technical problems happen, but a scapegoat is always needed. Someone must be at fault. When I attend a concert and an obvious technical issue arises, I notice how easily frustration creeps in. I find myself thinking harshly

about the technician. “What an amateur!” I say to myself. Judgments come quickly, and the technician often becomes the obvious culprit. But then, much like the audience that night, empathy sets in. I begin to hope that the issue would be resolved swiftly so that I could fully experience what I had invested my time and effort in attending.

Meanwhile, the musicians of *kollektiv international totem* were trying to keep playing as if nothing had happened, aside from occasionally pressing their ABC pedals, thinking that might be the issue. They must have been telling themselves, “the amplification will come back, it has to come back.” But the tension in the room was undeniable.

Minutes passed as I frantically tested different cables, unplugging and plugging them back in. At one point, I even went on stage to locate the problem, only to create a burst of harsh feedback that rang in my ears. The musicians kept going, growing more desperate as they repeatedly stomped on their pedals, hoping to restore the sound, but the panic only escalated. As their attempts to identify the problem in their pedals grew increasingly desperate, I turned to the audience and said, “I think we have a technical problem.”

When it became clear that the technical problem was more serious, the musician’s actions took on a ritualistic quality. Their movements became less focused on producing sound and more symbolic, as if enacting a ceremony rather than troubleshooting a malfunction. Effort was spent in ways that no longer aligned with the usual flow of a musical performance. The musicians’ presence shifted; no longer centered on following the score or creating sound but on something more intangible. Pressing the pedals became a kind of magical gesture, an act of belief and hope.

Desperate for the show to continue and for the amplification to return, while the musicians contorted into increasingly extravagant positions, fixated on their pedals, I turned to the audience and said, “I think we don’t have enough energy. We need more energy.”

Drawing an analogy between electricity and Hinduism, I addressed the audience: “If we sing, if we sing Om, the sacred syllable... Ommm. Together now... Ommm. Yes, sing with me.” The audience joined in, their voices resonating in a collective Ommmm. “Ohm,” I continued, “the symbol of electrical resistance.” I held up the Omega sign. “If we sing Ohm, we can



Figure 12.5: *Electric Unconscious* “I think we have a technical problem.” (2023) Image by Maija Tammi.



Figure 12.6: Nuriia Pressing a Pedal in *Electric Unconscious* (2023). Image by Maija Tammi.

generate more energy... Ohmmm.”

From there, the performance took on a new shape. I transformed into a kind of preacher, speaking in electrical tongues, while the musicians, caught in a kind of trance, began gathering around the fridge as if drawn to it by some unseen force.

I kept urging the audience to participate, to sing, to clap their hands, building momentum, as if summoning the energy needed to restore the current.² Eventually, there was enough energy, not just from the audience, but from me, from the performers. The musicians pressed on their pedal and the power returned. The musicians could finally play again, their instruments once more amplified. But now, something had shifted as the audience became aware that this was not just a traditional concert, but a staged event where anything could happen.

²See Video *Electric Unconscious: Feel the fridge* in Research Catalogue: <https://www.researchcatalogue.net/view/3554062/3801572#tool-3801930>



Figure 12.7: Ohmmm... (2023). Image by Maija Tammi.

12.4 Evaluation

The previous section was written to make the readers of this thesis, much like the audience in the performance, momentarily believe that a real technical problem had occurred. Despite the obvious artificiality of this narration, I now wish to revisit this dramaturgy and examine how the meaning of the SSPG, namely the pressing of the ABC pedal to turn the amplifier on and off, evolved throughout the beginning of this performance.

Like *Refuge des Cordes*, symbolic Opacity can emerge from how a gesture is performed, the Technique. Indeed, such connotations arise, for example, when performers use unusual body parts to press the pedal. However, the deeper, more charged meaning in *Electric Unconscious* stems from the contextualization of that gesture.

The act of pressing the ABC pedal to control amplification is easily forgettable. Much like flipping a light switch, it is a mundane, habitual action in music performance. It is so commonplace that it rarely carries any symbolic weight. I will explore how its meaning was modulated by the Context, transforming its connotations from this profane connotation to more sacred ones. It is the dramaturgical framing that transforms this ordinary action

into something opaque, layered with multiple symbolic significances.

In this section, I will examine the shifting symbolism during the first half of *Electric Unconscious*, using the video as a reference with corresponding time codes. While the connotation of a gesture may vary depending on the musician’s interpretation, the time periods I propose mark significant shifts in meaning that transcend individual interpretation. They are paradigm shifts: moments where the meaning of the pedal click passes a point of no return.

0:00–16:40 Modifying gesture

Since *Electric Unconscious* begins as a proper experimental drone music performance, the act of pressing the pedal exists purely within that musical context. It functions as a *modifying gesture* in Godøy’s typology of musical gestures (see Appendix A), serving solely to alter the sound. For example, the audible “click” when a pedal is pressed is often perceived as noise in such performances. In fact, this action can even become an annoyance, particularly when watching guitar players fixate on their pedals without being aware that these click sounds disrupt the perceived flow of performance.

Table 12.1: Pedal as Modifying Gesture

Channel	Gesture Description	Sacred Connotations	Profane Connotations
Instrument	Amplifier		
Sound	Amplification On/Off		
Technique	Pressing on the pedal with foot		Modifying gesture
Context	Experimental drone music performance		

A simple gesture such as pressing a pedal is highly flexible, allowing for Multimodality, Dynamism, and Salience. First, as a simple gesture, it is Salient, easily understandable. However, without any Opacity, Salience remains empty and lacks the depth necessary to impose meaning onto the mind. Second, Multimodality is context-dependent: the emphasis placed on the different meanings of visual and sonic elements is shaped by what the audience believes they are witnessing, making it a potentially Multimodal gesture. Finally, because it is so simple and effortless, pressing a pedal is Dynamic, as its symbolism can unfold in multiple directions.

Table 12.2: Parameters of SSPG: Pedal as Modifying Gesture

Parameters	Yes	Potentially	No
Opacity			x
Saliency		x	
Multimodality		x	
Dynamism	x		

16:40–19:35 Finding Technical Problem

As I have shown in the dramaturgical account of the first half of the work, as the performance unfolds, the amplification of the instruments is cut off. As with the anecdote of *FACETS* mentioned earlier, encountering such technical problems often sparks a feeling of dread in me.

Moreover, the act of pressing the pedal now takes on a new meaning. No longer merely a musical gesture, it is now perceived as an action (perhaps even one that exists outside the realm of music) serving instead as an attempt to locate the source of the technical problem. The musicians, struggling to restore the sound, transform the gesture from a routine part of a performance into an act of troubleshooting.

Table 12.3: Pedal Technical Problem

Channel	Gesture Description	Sacred Connotations	Profane Connotations
Instrument	ABC pedal		
Sound	Amplification Off	Dread	
Technique	Pressing on the pedal with foot		Finding a technical problem
Context	Experimental drone music performance		

19:35–22:50 Music of Clicks

After a while, the repetitive and obsessive nature of the gesture reintroduces ambiguity. It can no longer be perceived as merely a functional action. The symbolism emerges through the exaggerated, almost ritualistic movements of the musicians. Simultaneously, the audible “click” of the pedal begins to take on a musical quality, shifting from an incidental noise to an integral sonic element within the performance.

This is also when the assumed experimental drone music performance context starts to shift.

Table 12.4: Pedal “Click”

Channel	Gesture Description	Sacred Connotations	Profane Connotations
Instrument	ABC pedal		
Sound	Amplification On/Off Click of the pedal		Music
Technique	Pressing on the pedal. Unusual positions. Using different body parts.	Ritual gesture	
Context	Experimental drone music performance		

22:50–26:24 Theatrical Clicks

Once I reveal the Ohm sign, everyone comes back onto the same page. For both those who believed in the technical problem and those who doubted it, it now becomes clear that the entire situation was staged. At this point, the act of pressing the pedal shifts fully into the realm of theatricality. As repetitions accumulate and the overload of information intensifies, the gesture loses its emerging musical quality, becoming instead a movement detached from both its functional and musical significance.

Table 12.5: Pedal Humor

Channel	Gesture Description	Sacred Connotations	Profane Connotations
Instrument	ABC pedal		
Sound	Click		
Technique	Pressing on the pedal. Unusual positions. Using different body parts.		Humor, theater
Context	Theater		

26:24–26:35 Numinous Click

After a crescendo, where I attempt to draw energy from the audience, we reach the most significant instance of pedal pressing, one contaminated with sacred connotations. This act transforms into a metaphor for the switching On and Off of electrical current, mirroring the vast, invisible network

of the electrical grid. The stark contrast between this binary action and the surrounding performance heightens the audience’s awareness of Baudrillard’s “long social process of production” (Baudrillard 1998, 32). This On/Off action is confronted by the overwhelming, seemingly infinite energy of the loud, heavy bass drone, which returns with full force in a final release: an eruption of energy that potentially results in an experience of awe and catharsis.

Table 12.6: Pedal Catharsis

Channel	Gesture Description	Sacred Connotations	Profane Connotations
Instrument	ABC pedal		
Sound	Amplification On	Awe, catharsis	
Technique	Pressing on the pedal with foot		
Context	Staged Musical Performance		

Table 12.7: Parameters of SSPG: Pedal Catharsis

Parameters	Yes	Maybe	No
Opacity	x		
Saliency	x		
Dynamism	x		
Multimodality	x		

The technical problem in *Electric Unconscious* was central to the piece. It is something I knew I wanted, something that felt risky, and that truly excited me about the project. However, it only gained meaning through collaboration with the musicians. It was through discussions that this technical problem resurfaced, allowing us to collectively find its significance. Even though a great deal of work followed, in figuring out the mechanisms to articulate this form and refining the craft, it was within this collaborative process that the dramaturgy emerged.

12.5 Patterns and Objectification

We were now 25 minutes into a theatrical music performance that lasted 55 minutes. So what about the next half hour? This marked the beginning of the development section. Dramaturgically, the goal in composing this next section was to play with and “objectify” this primordial loss of amplification, as if reenacting a myth.

I use the word *myth* in its more traditional sense to indicate how this event suspended chronological time, marking a moment of major significance with sacred resonance within the context of the work. I use *myth* in a metaphorical sense because it echoes ancient narratives in which a powerful force vanishes, leaving behind a void that must be confronted.

Following the score, the musicians create musical gestures centered around their ABC pedals, triggering the amplification to turn on and off. The entire musical discourse began to revolve around this action, reliving the initial loss of amplification multiple times in different musical forms.

“Objectification” here suggests that, through Patterns, SSPGs are used to create meanings beyond the inherent significance of the gesture itself. When an action is repeated multiple times, it loses its original meaning and takes on new one within a musical framework, shifting from symbolic expression to structural function. This is similar to how gestures and extended techniques are structured in *Match* by Kagel, where an explosion of technique is abstracted into a serialist musical structure.

When using Patterns within SSPGs, the Pattern can overpower the symbolism of the action by subordinating the meaning of music-making to the musical structure itself. The pattern becomes symbolic in its own right, eclipsing the gesture. This shift in focus obscures the original meaning, turning the gesture into a compositional object rather than an expressive act. In the conceptual framework of Délécraz (2019, 506), the gesture loses its symbolic function and takes on a structural role, as notes on a scale.

When Pierre Schaeffer (1966) coined the term *sound object* it was specifically to detach sound from its source and its connotations. The goal was to hear sound purely for its musical qualities rather than recognizing it as, for example, a car or a bell. This was the fundamental challenge Schaeffer faced: creating music using recordings, which inherently carried references. The concept of the *sound object* emerged as a way to neutralize these associ-

ations, treating recorded sounds as interchangeable musical elements rather than as signifiers of their origins.

In *Electric Unconscious* the mythical On/Off in the first 25 minutes, with its evocation of dread when it turned off and awe when it came back on, is now objectified. Spanning all layers of the work, from macro events to the micro-manipulation of musical details, pressing a pedal loses its symbolic function and becomes a musical object.

Table 12.8: Pedal Musical Object

Channel	Gesture Description	Sacred Connotations	Profane Connotations
Instrument	ABC pedal		
Sound	Amplification On		
Technique	Pressing on the pedal with foot		
Context	Music Performance		

Initially, the sound produced by the pedal is irrelevant, perceived as mere noise. However, after the first power break, this sound becomes sonified, integrated into the musical language. It transforms into a non-symbolic sound-producing gesture. Through this process of objectification, it loses the symbolism it previously carried when the musicians were searching for the “bug,” stripping it of its initial narrative significance.

The SSPG becomes interchangeable: one pedal press is equivalent to the next, and meaning arises from the differences between them rather than from the gestures themselves. In this section of *Electric Unconscious*, this effect is enhanced by the presence of multiple levels of amplification. It is not simply a binary of sound and absence of sound, but a continuum of intermediate stages. Amplification becomes a musical parameter, akin to rhythm and pitch, forming a scale of varying intensities.

For example, in the score I develop simple amplification motifs using a scale of seven different levels of amplification by combing instruments and electronic amplification. One such motif is illustrated below. Each performer has two staves: one for their instrument, and one for the ABC pedal that changes the level of amplification.

The objectification is further reinforced by disembodiment of the action from its source through electronics. The click of the pedal is not only musical-

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Nur.

Kay

Léo

G R

G R

G R

f

Figure 12.8: Amplification Motif.

ized but also digitized, recontextualized within the sound recordings alongside other clicks and switching noises. The switching sound of the On/Off function becomes entirely detached from its actual effect on amplification, transforming into a sound element to compose with.

Ultimately, toward the end of the piece, the sound of engines starting begins to roar through the loudspeakers. The audience is now in the “electric unconscious,” caught in an indefinite, continuous restarting phase: a liminal space between the On and the Off.

Anecdote from the field of Grotesque Numinosity

Energy and Peace of Mind

Biking through the center of Helsinki in the spring of 2021, I came across an ad from Helen Oy, one of Finland’s largest energy companies. Displayed on a Helsinki tram alongside a figure that reminded me of a yogic guru were the words: “Energy and Peace of Mind” (*Energiaa & Mielen rauhaa* in Finnish).



Figure 12.9: Advertising on Helsinki’s tramway (2021). Image by the author.

Chapter 13

Interlude D: Grotesque Numinosity

This ad is part of a larger campaign that portrays a guru–disciple relationship between the man in the image and a younger aspirant seeking to understand the guru’s power and learn about energy (Helen Oy 2020a).

Helen plays on the double meaning of the word “energy”:

- Materialistic interpretation: energy and electricity seen as physical phenomena; quantifiable, empirical, objective.
- Vitalist interpretation: energy and electricity is seen as a life force; subjective, experiential, intangible.

It is an interesting example because, unlike the Apple Store, which seeks to evoke the grandeur of churches to elevate the perceived value of its products, here the sacred connotations appear as intentionally ridiculous. They are profaned through their association with humor, irony, and consumer culture.

The representation of the Guru is a caricature: extravagant, ridiculous, and superficial. His long mustache and hair appear blatantly fake. In another ad, when asked if the aspirant can follow him, the Guru replies, “Yes, on Instagram” (Helen Oy 2020b).

This ironic representation emphasizes the futility of the concept of vitalist energy, which can be tapped into just by reaching for it, already there. It is precisely these connotations that Helen tapped into: Peace of mind.

I view this ad as employing a form of Quintessence, one of the sacralization processes I outline in chapter 3. It attempts to elevate electricity to a sacred status by implying: “Electricity is a solved mystery. You don’t need to worry about it. Let us take care of it. You plug into the wall, and it’s there.” Instantly available, electricity is presented as a magical essence, detached from the complex network that enables it, the mining, the infrastructure, the hardware, all of which the user is encouraged to ignore.

The story of electrical development is emblematic of this tension between the two conceptions of energy use, as deployed by Helen in their ad. Electricity, especially before the 19th century, went through a push and pull between the vitalist and the materialist interpretations. Initially carrying sacred associations, such as its link to thunder, it gradually became demystified and transformed into a commodity (Fara 2003). While one could say that the materialistic interpretation has won the battle, the vitalism is still alive on the fringes.

In the 21st century, one might think that electricity is a solved mystery, hidden behind walls and harnessed to power everyday technology. However, as Davis points out, “electricity is mysterious; the more intensely we probe its mutant edge of mind and matter, the more our disenchanting productions will find themselves wrestling with the rhetoric of the supernatural” (Davis 1998, 58). As a fundamental force of nature, electromagnetism still holds mysteries yet to be uncovered.

The tension between the materialist and vitalist interpretations of the term “energy” reflects different relationships with the many unknowns in the world. It reflects broad philosophical questions that I grappled with in the process of creating these artworks. How should I engage with mysteries such as electricity? Should I preserve them as mysteries and ritualize them, or should I set them aside until science elucidates their mechanisms?

I position myself somewhere between these poles, seeking a philosophy that negotiates both the enigmatic and the explicable. My position aligns with the “weird naturalism” that Davis describes as “a zone of materialist indeterminacy [...] whose recourse to experimental protocols and biophysical theories complicates a strictly mystical or supernatural identification of the field” (Davis 2019, 188). It acknowledges an enchanted world while remaining anchored in materialist principles.

13.1 Two Strategies Aimed at the Numinous

In *Electric Unconscious*, sound amplification and its double, the silence stemming from the technical problem, are tools for probing electricity’s “mutant edge,” mentioned above by Davis. The work tries to put a question mark in the audience’s mind, open up the imagination, freeing it up from this basic assumption that the Helen company tries to reinforce: electricity is not mysterious.

Like the ad, *Electric Unconscious* plays on the word *ergy* as a basic means of connecting the material and the supernatural, ridiculing age-old spiritual practices. This constitutes a form of the Grotesque: a clash between the sacred and the profane. These kinds of Grotesque symbols are numerous in *Electric Unconscious*, especially when the mini-fridge throning and droning on the stage is involved. The most striking Grotesque moment occurs during the “fridge ritual,” where performers, entranced, sing the 50 Hz tone while holding hands around the fridge, as I scream, similarly entranced: “Feel the fridge!”

At the same time, beyond these Grotesque representations there are attempts at making the mystery of this fridge come alive. In my performances, these attempts translate into the two compositional strategies aimed at creating numinous impressions that I have explored in previous chapters:

- **Animated Hieroglyphs:** As seen in chapter 11, I exposed the artistic process behind Symbolic Sound-Producing Gestures in *Le Refuge des Cordes* to create Animated Hieroglyphs: symbols that are Opaque, Salient, Dynamic, and Multimodal operate like a surgical intervention on the mind.
- **Channeling Energy:** In chapters 8 and 9, I exposed how the Numinous resulted from the concentration of energy achieved especially through sound amplification and the accumulated force of a cathartic crescendo.

The fusion of the Grotesque and the Numinous into the single expression, Grotesque Numinosity, reflects the “weird naturalism” (Davis 2019, 188) stance toward the unknown in the world. The Grotesque fridge ritual caricatures the vitalist impulse to elevate mysteries into irrational practice,

while the effort to evoke Numinous awe is an attempt to reintroduce wonder and terror, awe and dread, into what has been rendered banal.

I see the Numinous as a kind of transcendence of the Grotesque. In a more rational play of associations, the perceiver of these actions oscillates between: “Is this holy or ridiculous?” The two strategies aim to elevate this dichotomy, in which ultimately the object ceases to be perceived as representation and is apprehended as presence. The sacred is no longer mocked or toyed with; it simply is, and its being is overwhelming.

The Numinous serves as a kind of grounding force. It guides my final choices and tips the balance; favoring it over irony, which is often the result of the Grotesque blend of sacred and profane elements within the artworks. It is almost like a Disney movie, where everything ultimately resolves harmoniously; everything, in the end, leads to the Numinous.

13.2 Cheesy and Raw

I not only tend to think in oppositions, but also compose through contrasting extremes. This reflects both a natural inclination evident in my earlier compositions and a deliberate direction I have chosen to emphasize and explore throughout this research.

Until now, I have employed numerous conceptual dichotomies. For example, the Grotesque emerges from a contrast between sacred and profane connotations, while the Numinous is conveyed through the emotions of awe and dread. In this thesis, the Grotesque and Numinous are complementary, as illustrated in this table.

Table 13.1: Grotesque and Numinous

Grotesque	Numinous
Sacred and Profane	Awe and Dread
Clear Symbols	Opaque Symbols
Rational	Non-rational
Contamination	Emotion

I conceptualize these terms as two distinct modes of representing the sacred, set against the profane in the classic Durkheimian sense, or as ex-

pressions grounded in lived experience. One relies on rational associations characteristic of the concept of Contamination; the other, on non-rational emotion. While these conceptual territories have been clearly demarcated in this thesis, in my daily life and in the artworks it is much harder to neatly separate them, hence the term Grotesque Numinosity. Experiences are both rational and non-rational, the play of association of the Grotesque influenced by the emotion I try to convey in the artworks.

Cheesy and Raw emerged as categories in my attempts to express the Grotesque and the Numinous. I have emphasized that the Numinous experience is always dependent on a context. As the composer making a work for the concert hall, or when working at my table, I work with crafting materials that might suggest, evoke, and perhaps provoke numinous impressions. I can only attempt to express, to translate whatever I felt during the Mass in Paris, to use a previous example, into sound and images for others to interpret and process.

In doing so, I was confronted with two different types of material. Some materials were Cheesy. They felt overcooked, overprocessed, overly polished, overtly sentimental, and excessively sweet. They present emotions in a way that feels too direct. This quality is often present, with all due respect, in the kind of relaxation music commonly heard in massage therapy and spas. I also think of the Cheesy as the sound of angelic voices singing a major chord accompanying the cliché image of the sun bursting through the clouds, representing the presence of god.¹

The other type of compositional material was Raw: unfinished, untamed, and powerful, like out-of-tune voices singing in quasi-unison. It is the rawness of white noise where all frequencies fire at once, or the 50 Hz hum erupting from an unplugged guitar. It is like standing before the ocean during a raging storm. The emotions associated with the Raw are more elusive, less easily defined and more visceral. They are experienced as a raw force, something sensed in the gut rather than felt in the heart.

¹Despite its colloquial nature, I have chosen to keep the term “cheesy” over more standard academic terms such as “kitsch.” Much like the anecdotes included, the use of this word functions as a form of literary grotesque, injecting a profane element into an otherwise serious text. I acknowledge the term’s ambiguous meaning, particularly its relationship to the term “cliché,” as the two concepts overlap within my thinking about artistic practice in ways that remain difficult to fully articulate.

The Cheesy and Raw make more sense to me as “proto-numinous” emotions of awe and dread.

I associate the Cheesy with the awe of the Numinous. Cheesy comes “after” emotions like joy, it is like being conscious that you are manipulated to feel certain emotions, like music is being used in advertising. For me, Awe starts with simple expressions of joy, something which then needs to be worked “backward” before it forms into clear emotion.

I associate the Raw closely with the non-rational fear and dread of the Numinous. For me, Raw also hovers at the edge of emotions like fear or disgust, but stops just short of fully entering them, before the emotional energy materialized into fixed forms that can be interpreted.

I cannot bypass this initial state of the compositional material I work with. Cheesy and Raw are the building blocks toward the Numinous, that are in a form that is not yet counterbalanced and channeled into the intensity of the Numinous.

Materials that I associate with awe, when isolated, often felt cheesy. Without the right context, they seemed cliché, overly sentimental, as if they were stripped of their potential depth. I find the greatest excitement, and a touch of the Numinous, when these two emotional forces are woven together until they become inseparable and balance one another. The best way for me to bypass the feeling of cliché is to contrast Cheesy material with Raw material. This effect follows a simple principle of contrast: light appears brighter when set against darkness. For me, combining them gives me the freedom to push each to its limits. I can fully indulge in the Cheesy, pushing it to its expressive limit, knowing it will be counterbalanced by the Raw.

For example, in *Le Refuge des Cordes*, especially in the “secular version,” I found a sense of freedom in counterbalancing the rawness of the amplified strings with my cheap-sounding auto-tuned voice. Similarly, in *Electric Unconscious*, the singing of a cheesy children’s lullaby sung toward the end only works for me because it is set and counterbalanced by the rawness of the 50 Hz hum, and the badly recorded and distorted sounds of machines.

In *Loudspeaker Baptism*, this Cheesy/Raw contrast became systematic. At the top of my to-do list for the show was a guiding principle, a reminder that informed every decision I made. Whenever a choice had to be made, this was the framework I followed and the directive I shared with my col-

laborators. It felt almost like an inscription carved above the entrance to a sacred space:

Cheesy and Raw, Sacred and Profane in opposition. Everywhere.
Puppet, stage, costume, etc.

I see Cheesy and Raw as a way to give affective quality to the representations of the sacred and profane. For me, the Cheesy and the Raw are two different expressions of the sacred that can be found in art. For example, in Christian sacred imagery, I see representations of Jesus fall into two extremes. In one, he is shown in profound suffering, bloodied and crucified (Raw). In the other, he appears as a serene infant in a crib, surrounded by angels (Cheesy).

However, the most poignant depictions tend to blend both elements, like *La Vierge de Douleur* in the Paris church, which struck me deeply because, unlike the typical sentimental portrayals of Mary with the chubby baby Jesus, he was notably absent. I found in this combination a way to work toward the Numinous: the simultaneous expression of awe and dread.

Chapter 14

Loudspeaker Baptism: Fusing Opposites

Loudspeaker Baptism

Delivery — Memories — Suffering — Sublimation

Chamber opera in four acts, 60', 2024

For soprano, accordion, Genelec 8020D, puppeteer, and electronics

Created by Charles Quevillon with Sawtooth Duo (Sarah Albu and Matti Pulkki)

Composition and Stage Direction: Charles Quevillon

Lights: Erno Seppälä

Stage: Erno Seppälä and Charles Quevillon

Video graphics: Jan Rosström

Libretto: Charles Quevillon with inspiration from Eino Leino and the Genelec user manual. Editing by Maija Tammi.

Performed by: Sarah Albu (soprano), Matti Pulkki (accordion), and Charles Quevillon (puppeteer and electronics)

*Loudspeaker Baptism*¹ aims to crack open the mundane perception of a loudspeaker as a mere commodity and activate its latent sacred meanings. Through a playful, yet earnest approach, this opera connects the consumerist and technological framework of a loudspeaker with religious and spiritual symbolism. For instance, Act I: Delivery is inspired by the modern baptism of technological objects seen in “unboxing” YouTube videos. The opera questions how to meaningfully integrate a loudspeaker, with its “soul” and darker facets, into human spiritual life.

¹The title can be translated into Finnish as *Kaiutin Kaste*.

Premiered at Ooperakesä in the Aleksanterin Teatteri, Helsinki (FI) 30–31.8.2024

Other Performances:

Loudspeaker Baptism, Akousma, Montréal (CA) 12.12.2024

Loudspeaker Baptism, La Semaine du Neuf, Montréal (CA) 13.3.2025

Loudspeaker Baptism Short Version, ONSOUND Squeezefest, St-John's NL, (CA) 21.7.2023

Commissioned by Sawtooth Duo.

Supported by SSHRC, Canada Council for the Arts, Kone Foundation and Uniarts Helsinki.

Video documentation on the Research Catalogue:

<https://www.researchcatalogue.net/view/3554062/3801531>

14.1 The Instrument: Loudspeaker Genelec 8020D

The loudspeaker is the central object in *Loudspeaker Baptism*. While it was present from the very beginning of this research, it was initially paired with its counterpart, the microphone. Loudspeakers and microphones have been extensively explored in sound art and experimental music. Cathy van Eck, for instance, has dedicated both a book and a thesis entitled *Between Air and Electricity* to examining the microphone and loudspeaker as musical instruments (Eck 2017).

I also encountered numerous artworks that explore sacred connotations through the use of loudspeakers and microphones. For example, in Gordon Monahan's *Speaker Swinging* (Monahan 1982), performers twirl loudspeakers in a physically demanding and sustained performance. Beyond its connection to drone and sound amplification, as previously discussed, this exertion evokes the physical intensity associated with trance states or the ritualistic use of bull-roarers: primordial instruments employed in ceremonial contexts, as noted in Tuzin's article (Tuzin et al. 1984) in section 8.4.²

²Other inspirations for the work include Dick Raaijmakers' *Intona*, which systematically destroys microphones (Raaijmakers 1992), and the architectural works of Benoît Maubrey, such as *Temple* (Maubrey 2012).



Figure 14.1: *Loudspeaker Baptism* (2024). Image by Maija Tammi.

Personally, I wanted to explore the intimacy of loudspeakers. After all, they are the most familiar electronic technology to me. I often walk around the city with headphones, experiencing an intimate connection with voices and music emerging from those tiny loudspeakers. When I think of intimacy, I recall the connection I share with my children. Thus, the idea of a baptism emerged as a ritual framework for exploring this intimate link between technology and the human.

With the idea of baptizing a loudspeaker, the microphone was no longer part of the picture. I began to explore the loudspeaker as a kind of autonomous entity, anthropomorphizing it. In this sense, the newborn loudspeaker did not need a microphone as its input; it was generating sounds on its own.

The idea of a newborn loudspeaker then led me to consider the birth of a loudspeaker in a literal sense: its manufacturing process. Naturally, I also began to think of the loudspeaker as a consumer object, something I was becoming increasingly concerned with at the time.

Bringing in a specific brand and model of loudspeaker was a way to tap into the context of consumer society, which took on an increasingly prominent role in the work as it developed. Choosing the loudspeaker to be baptized was straightforward, as I used what I already had: the Genelec 8020D. Genelec is a popular Finnish high-end loudspeaker brand, known for its distinctive rounded design and commitment to sustainability. I felt a particular attraction to Genelec when I first arrived in Finland, having already seen the brand in Canada. I eventually bought a pair of 8020D speakers for my home studio, making them the perfect choice for this baptism.

The choice to specify a brand reveals a central tension in my research. On the one hand, I have the stated goal of “cracking open” technological devices to demystify them and challenge the perception of these tools as mere neutral utilities. On the other hand, specifying a brand like Genelec could be seen as doing the opposite: it appears to fetishize or elevate the object. However, in the context of *Loudspeaker Baptism*, the use of the Genelec 8020D serves as a mirror of consumption logic; the brand is named precisely so that its status as a commodity can be critiqued.

Ultimately, my aim is not to strip these objects completely of their mystery or their fetishized quality but to play with their inherent ambivalence,

as the term Grotesque Numinosity emphasizes. To me, the loudspeaker remains mysterious, but that mystery does not originate from branding or marketing. Instead, its power resides in its capacity for amplification as explored in chapter 9. Rather than allowing the brand to be the source of the object's mystery, the artwork aims to transform the device into the foundation of a numinous experience.

14.2 Collaborative SSPGs

In analyzing *Le Refuge des Cordes* and *Electric Unconscious*, I have detailed the processes at the core of the sacred representation of technology in my practice of instrumental music theater. I have detailed how Symbolic Sound-Producing Gestures are created, discarded, and shaped, as well as how they are linked to the musical and dramaturgical contexts of these works. Before going into the main subject of this analysis of *Loudspeaker Baptism*, I would like to show how this process happens through close collaboration with musicians.

For me, the music must emerge organically from the theatrical situation, from a specific physical context. The process is not about imposing music onto an existing scene, but allowing sound to arise naturally from the physical action itself.

While in the studio, finding ways to play music that resonates with symbols has been the most stimulating part of my work. The process with Sarah and Matti of Sawtooth Duo typically went like this: we create a strange evocative musical situation, recognize its affordances, and identify the sonic possibilities within that gesture. I then leave the studio with these images, and later develop them into scores. In that way, SSPGs are often “custom-made” for the musician, the Salience of a gesture often dependent on how comfortably and convincingly the performer inhabits it.

There are numerous examples of Symbolic Sound-Producing Gestures in *Loudspeaker Baptism*. Sometimes, creating these gestures requires a lot of work. The action might feel forced or disconnected, requiring constant adjustments over a long period of time to make it work, similarly to the creation of Animated Hieroglyphs illustrated in *Le Refuge des Cordes*.

Other times, everything aligns perfectly. One can tell: the image is strik-

ing, the sound is compelling, and the connotations are clear and profound. These are discovered hidden gems, low-hanging fruit within the instrumental practice. One such example is when Matti plays the accordion on the ground in the last act of *Loudspeaker Baptism* (see figure 14.2).



Figure 14.2: Matti in Act IV of *Loudspeaker Baptism* (2024). Image by Xavier Madore.

The symbolism is strong, evoking for me the grotesque deformation of the hands of *Nosferatu* (1922) or the imagery of covering oneself with a blanket. I remember feeling exhilarated when we first began exploring that musical situation. The sound itself is powerful, creating a competitive dynamic with the Genelec speaker. There is also a connection to weightlifting, an interpretation I had not initially considered, which Matti came up with. We decided to further emphasize this connotation, making the competitive aspect more explicit, by adding a sports bandana Matti wears on his head.

Table 14.1: Collaborative SSPG

Channel	Gesture Description	Sacred Connotations	Profane Connotations
Instrument	Accordion		
Sound	Cluster	Raw	
Technique	Accordion on the ground, pulled from the top.	Blanket, Nosferatu	Weight lifting

Channel	Gesture Description	Sacred Connotations	Profane Connotations
Context	Competition with Genelec		

The potential of that image and its connotations is not as fully developed in the piece as it could be. During the workshop with the musicians, we discovered many different approaches together; often subtle, bodily variations trigger new connotation. In the end, we opted for the most “secure,” bulletproof version of the gesture, without exploring, for example, its fragility when Matti pulled the whole accordion with one finger.

The most serendipitous moment with that gesture came when we were pondering what to do next, where to go from there in the piece. Sarah and I came up with the idea of placing a box over Matti. In that position, it fit perfectly, providing a powerful conclusion to Matti’s character: the boxing of the human in Act IV as a counterbalance to the unboxing of the loudspeaker in Act I.

14.3 Act I: Cheesy and Raw Juxtaposed

Act I is titled *Delivery*, referring both to the process of delivering goods and the delivery of babies. The cardboard box functions like the fridge in *Electric Unconscious*: a profane object tied to consumption and the utilitarian treatment of goods, to the way they are packaged and shipped daily as a basic action of the capitalist economy.

But, just like the fridge, the Grotesque emerges from how the box is interacted with. Its appearance from the sky, like a gift from the gods, as if an invisible stork had dropped it, gives it a sacred aura. The box takes on a sacred character through the way it is manipulated, especially in the unboxing scene, where the moment of revelation—when the speaker emerges from the box—is elevated by the emotional energy channeled through the music. This is a clear example of Grotesque Numinosity I was mentioning in the interlude D, where the Grotesque representation and its resulting irony is transcended through Channeling Energy with sound amplification and crescendo.



Figure 14.3: Unboxing in *Loudspeaker Baptism* (2024). Image by Maija Tammi.

In this section, I will show how this climactic moment in Act I is foreshadowed from the very beginning of the act. I am particularly interested in how the emotions of awe and dread emerge in a proto-numinous form that I conceptualized as Cheesy and Raw.

As previously mentioned, a sound I have continuously associated with the Raw throughout my artistic work is the 50 Hz hum. It first appeared as an unwanted sound that I had to learn to work with in *Le Refuge des Cordes*, eventually integrating it into the piece by tuning all the strings around that frequency. Then, the 50 Hz tone became central in *Electric Unconscious*, serving as the tone for the drone. In *Loudspeaker Baptism*, the 50 Hz tone became the starting point for the harmonic structure: a steady wall against which I could push and pull.

More than the frequency itself, it is perhaps the timbre of a 50 Hz rectangular wave that strikes me as Raw. The cutting quality of its sound, with higher frequencies shimmering in a slightly disagreeable way, adds to its rawness. For me, it carries the roughness of a guitar being abruptly unplugged from the amplification chain, the striking presence of high amplitude, the slow phasing of a sawtooth wave. It is a disruptive noise signaling the eruption of the technical network.

This timbre and frequency serve as the binding thread in the first two acts of *Loudspeaker Baptism*, with every harmony either working against or alongside them. They symbolize the raw essence of sound, evolving as other timbres and materials attach to them.

In contrast, *Loudspeaker Baptism* opens with a cheesy sound: a soft, sustained C major chord. Major chords are clichéd, carrying a sweet, overused quality, particularly in the context of contemporary music, where they can feel almost taboo, especially when presented in a bare manner.

The alternation of these two materials, juxtaposed against each other, forms the foundation of the first act of *Loudspeaker Baptism*. The table below illustrates this interplay in the first section of the work. The timings refer to the recording and the starting measure refers to the score.

Table 14.2: Cheesy and Raw Juxtaposed in Act I of *Loudspeaker Baptism* before the Unboxing

Starting Measure	Timing	Raw or Cheesy	Sounds
4	0:53	Cheesy	Major and major 7th chords
33	5:21	Raw	50 Hz, plastic noises, vocalized animal sounds, spitting, out of tune.
40	6:50	Cheesy	Major and major 7th chords Lush reverb
63	8:50	Raw	50 Hz, plastic noises, vocalized animal sounds, spitting, out of tune.

Following the initial major chord by the accordion, the soprano's beautifully cheesy voice singing vowels merges with it, forming a major 7th chord. Then, the 50 Hz tone enters, doubled by the accordion, to which the soprano's mouth noise and plastic sounds gradually attach. The major chord returns, a bit more articulated and enhance by the lush reverb. The 50 Hz returns again with the similar sound world.

As the act unfolds, more elements reinforce these contrasting qualities, with an accelerated pace of change. This culminates in the unboxing section, where a polyphony of elements (soprano, accordion, Genelec loudspeaker, electronics, and the giant puppet) converge and rapidly alternate between the Cheesy and the Raw. The Raw is further accentuated by two new elements: noise and octaves.

Table 14.3: Cheesy and Raw Juxtaposed in Act I of *Loudspeaker Baptism* after the Unboxing

Starting Measure	Timing	Raw or Cheesy	Sounds
109	13:46	Raw	Octave, 50 Hz, noise
113	14:13	Cheesy	Major 7th, minor 7th
115	14:22	Raw	Noise, octave
116	14:28	Cheesy	Minor 7th
118	14:35	Raw	Noise, octave
119	14:40	Cheesy	Minor 7th
121	14:50	Raw	Noise, octave



Figure 14.4: Raw Plastic in *Loudspeaker Baptism* (2024). Image by Maija Tammi.

For me, this juxtaposition between the Cheesy and the Raw remains unresolved in Act I. It serves more as a presentation of the opposing forces at play in the opera. The true Numinous moment, in my view, emerges at the end of Act II, where these emotions are more fully blended together.

14.4 Act II: Cheesy and Raw Superposed

The development of Cheesy and Raw sounds continues in Act II. The alternation between Raw and Cheesy loses its structuring role, instead functioning as a palette of sonic colors. The Cheesy and Raw are juxtaposed in a more fluid manner, as if they were part of the same sound world.

Act II is titled *Memory*. The Genelec loudspeaker takes on anthropomorphic qualities, merging with the mother figure into a shared memory space. These memories alternate between sacred and profane representations: the Genelec’s cosmic origin in the birth of stars in the first memory, and, in the “Summer Holiday” section, the soprano’s recollection of their vacation together at the beach (measure. 75–92, timing 24.04”-25.32”).

The table below illustrates how the simple alternation of 50 Hz and major chords develops into a rich palette of additional material, accumulating around these fundamental elements and heightening their respective Cheesy and Raw qualities and merging them into a unified sound world.

Table 14.4: Cheesy and Raw Juxtaposed in Act II of *Loudspeaker Baptism* “Summer Holiday”

Raw	Cheesy
50 Hz	Cheap soundscape of a beach, waves and birds
Octave	Fake digital strings
Electronic sounds sweeps	Major 7th chord, major 9th chord

In *Loudspeaker Baptism*, contrasting the Cheesy and the Raw became a systematic approach, not only in the sound world but across multiple modes of perception: in time, space, visuals, and video. It was the first time I explored these notions in such a systematic manner, driven by a desire to understand, to break through these concepts, see how far I could push this opposition and to see what remained beyond them.

If I first detailed what this means in the realm of music, these properties also extend to other channels of symbolic communication. A striking example of this contrast can be found in the act titles designed by Jan Rosström (see figure 14.5). The fonts themselves embody the Grotesque: the sacred, represented by a Rotunda-style Blackletter font evoking biblical scripture, and the profane, symbolizing the earthly, tech-infused modern world through a sans-serif typeface. Each, on its own, carries an element of cheesiness, as these elements are overused, but the rawness of their stark juxtaposition creates a powerful expression emphasized by the colors.



Figure 14.5: Title for Act II (2024). Still from Video by Jan Rosström.

In the beginning of Act II, the contrast in the sound world is mirrored visually by Matti, who has transformed into a cheesy representation of an angel, complete with fake feather wings, while Sarah sings from within a Raw, taped-up cardboard box. The beginning of Act II serves as a transition into the Multimodal superposition where these qualities do not simply follow one another but rather coexist, competing for attention.

14.5 Act II: Cheesy and Raw Fused

In this section I will examine this superposition in the second half of the Act II, the soprano's Aria. Just as the act title is composed of two strikingly different fonts in superposition, the aria features a line of cheesiness

in the soprano's singing, constantly punctuated by eruptions of Raw material. Here, the sound material stabilizes: on the one hand, the Cheesy evolves into lush pads of arpeggiated synths, while on the other, the Raw 50 Hz tones are now accompanied by sounds of explosions and the distorted sounds from the *Digidion*, a self-made instrument I developed for this opera.

Polyphony in music is challenging, especially when different lines aim to express contrasting qualities. When one line is Cheesy and the other Raw, it easily creates a cluttered acoustic spectrum, making it difficult to distinguish between them. From a purely musical perspective, parsing out each line becomes even harder when the materials differ significantly in sonic quality.

Therefore, despite attempts to create a diaphony between the Cheesy and the Raw, the most striking superposition of these qualities likely occurs across different media. While the previous table provided a glimpse into how Cheesy and Raw are juxtaposed in the Sound channel, in this table I expose how they are superposed across different modality.

Table 14.5: Multimodal superposition of Cheesy and Raw in the Aria of Act II of *Loudspeaker Baptism*

	Cheesy	Raw
Sound	Lush arpeggiated synth	Explosion, distortion
Technique	Union between Sarah and Genelec	
Instrument	Beautiful operatic voice	Digidion
Text	Cliché phrasing	Memory retrieved by the computer
Lights	Soft blue lights	Flashing strobes, cardboard box
Costume		Matti as hooded figure
Video	Images of beach holiday	Images of mining, pollution and apocalypse

This part of the opera serves as a good example of how I was able to fully indulge in the cheesiness of the aria while also granting myself the freedom to release raw energy; manifested in the design and sound of the *Digidion*. I seek to elevate the Cheesy and the Raw to a cathartic emotional peak through Channeling Energy via sound amplification.

On the one hand, I aimed to create a beautiful aria for the soprano, with lush harmonies inspired by the third movement of Górecki's *Symphony*

No. 3 (1976). Together with Sarah, we explored cheesy gestural qualities, with the Genelec cradled like a child in her arms, symbolizing the fusional union between mother and child. We also incorporated cliché text into the libretto, such as “Oh my Genelec 8020D, Pure and Divine, may thy sonic waves resound across the universe.”

On the other hand, there is the Digidion: a rough grouping of a dirty computer keyboard, a cardboard box, a piece of metal salvaged from a mini-fridge, and microelectronics held together with duct tape. The fact that this uncanny instrument produces such a powerful, distorted sound feels almost miraculous, as if powered by some dark wizardry, which usually makes a strong impression on the audience.³ This instrument erupts in the midst of the soprano’s beautiful aria.

The contrast between the accordionist’s different costumes also reinforces this interplay of the Cheesy and the Raw. Previously, the accordionist was adorned as a cherub, with rosy cheeks and a pair of fake feathered wings. Now, however, Matti is dressed in a black raincoat, wearing a hood and a face mask, resembling a rider steering the monstrous digital accordion through a storm.

The Digidion embodies the Raw, disrupting the aria’s dreamy sound world with stark facts about pollution and mining, introduced through Polaroids. The cheesiness is further amplified by the libretto, which reaches its most exaggeratedly sentimental phrases (“Born Anew in Sound”), reinforcing the contrast. This tension is also heightened by the soprano’s relationship with the Genelec loudspeaker, which she cradles like a baby, fully immersed in the illusion of the aria.

All of this culminates in a moment of powerful affect, perhaps approaching something of the Numinous. Like a hydra with multiple heads, the Raw emerges: the dread of the uncanny in the technology of the Digidion, instilling a sense of vertigo and oscillating between fear and bliss. The Cheesy, counterbalanced by the Raw, is now channeled into heightened intensity through sound amplification.

This is especially evident in the soprano’s character, as her aria is gradually polluted by the rawness of the Digidion. When she reaches the highest pitch, her once-beautiful voice contorts into a scream: she has crossed the

³I received numerous comments from audience members regarding this aspect.



Figure 14.6: Cheesy Aria in *Loudspeaker Baptism* (2024). Image by Maija Tammi.



Figure 14.7: Raw Digidion, *Loudspeaker Baptism* (2024). Image by Maija Tammi.

threshold between fascination and fear.

14.6 Toward a Dramaturgy

There are numerous other instances of the contrast between the Cheesy and the Raw throughout this work. This interplay not only manifests in individual moments but also shapes the overall dramaturgy and structure of the work.

For example, the libretto and its delivery serve as the most structuring elements of the dramaturgy. The giant puppet⁴ embodies the “voice of God,” playing on the inherent authority of recorded voices, which stereotypically take the form of a deep male voice. I sought to subvert this by using a more androgynous voice; one that sounds slightly tired and higher-pitched. Embodying this voice in a puppet that looks comical further undermines

⁴More information and pictures of the puppet can be found in Research Catalogue: <https://www.researchcatalogue.net/view/3554062/3802115#tool-3845048>



Figure 14.8: Threshold, at the end of Act II of *Loudspeaker Baptism* (2024). Image by Maija Tammi.

the stereotype. A puppet is, by definition, something that is manipulated. This mirrors the role traditionally ascribed to God, but inverts it with irony.



Figure 14.9: Giant Puppet in *Loudspeaker Baptism* (2024). Still from Video by Xavier Madore.

There is also a contrast in the levels of language used between the characters. The puppet delivers the libretto in a consistently Raw manner, either by reciting the Genelec User Manual, retrieving memories like a computer, or listing sins in a way that feels like text generated by a chatbot. This starkly contrasts with the soprano, particularly in the previously explored Act II, where she sings an overtly cheesy text.

Another layer of contrast emerges between acts: Act II, steeped in lyrical cheesiness, is immediately followed by Act III, where the soprano shifts dramatically: she is now screaming into a handheld microphone like a death metal singer.

This contrast extends to the formal qualities of the acts. While Act II is more polished, musical, and lyrically sung, it sharply contrasts with Act III, which is rough-cut, marked by abrupt transitions and spoken text resembling dialogue in a theater play. Act III is the Raw act. This is evident not only in its libretto but also in its very structure. Much like the Digidion, it is a Raw grouping of sections that seem hastily pieced together, as if held by duct tape.

Perhaps the starkest contrast of Cheesy and Raw is attained in the final

act.⁵ In a ceremonial fashion, the Genelec rises above, becoming king, only to plunge into hell. Supported by the highest, loudest, and most intense rhythm and bass, the image of a cute white speaker appears on the screen. Seconds later, cockroaches also appear. By the end of the sequence, it becomes clear that the cockroaches are eating the cute speaker, an apocalyptic vision of destruction.



Figure 14.10: Final Scene of *Loudspeaker Baptism* (2024). Still from Video by Maija Tammi.

⁵This new ending was added after the premiere in Helsinki.

Part V Discussion and Conclusion

Anecdote from the field of Grotesque Numinosity

The Sun

In the year 3233, a new product arrives on the market: The Sun. Literally, it is the Sun, compressed and bottled, like fresh orange juice, but infinitely more potent. The container barely restrains its radioactive explosion, trembling on the supermarket shelf.

To be experienced by mere mortals, its raw energy is released in a tamed form through a filtering process that plugs directly into the brains. Yet, even then, the product pushes the boundaries of physical and perceptual experience, overwhelming the senses at the slightest turn of its sensitivity knob. The effect of this object feels like a divine gift, beyond the mind's comprehension, as if its origin was on a scale too vast to grasp. How could the Sun be bottled this way?

It is only when the experience subsides, after waves of aftershock following the first encounter, that it becomes possible to begin thinking about the entire network that produced this object. A thought overwhelming in itself, and one that is perpetually concealed by the bombardment of advertising. In an effort to sell this product of consumption, it is marketed simply as "The Sun: transformative energy in a bottle," making this object appear miraculous.

This advertising attempts to erase the product's origins in human labor and natural resources, in the armada of spaceships that captured the sun and brought it to Earth. Revealing its origin would expose the scale of destruction: entire planetary systems reduced to a sun-bottling product,

which, after a few years of habituation, is casually purchased at the supermarket for a fresh morning kick. The Sun, once revered for millennia, has been effectively reduced to a commodity.

Soon, it is no longer bought for the miracle of its initial experience (which has long faded), but because an influencer began using it every morning, advertising it to their followers. The Sun is now consumed to fit into a peer group, serving as an object that reflects one's identity and social status. In some cases, it becomes the object of a cult having nothing to do with The Sun's original power exerted over the mind and imagination. No, in fact, it is said, rather ironically, that The Sun is in fact an object from another galaxy, a product created by extraterrestrial intelligence to control humans.

⁶The image was created in an iterative process with the following prompts: Make advertising images of The Sun. literally I want the sun in a bottle that is very sturdy but still can be on the shelf of a supermarket. /more sturdy bottle almost like a bomb./more sturdy. like under a vice./Maybe the bottle should seem more alive as if cracking a bit. barely containing the product/ can you make more science-fiction, futuristic

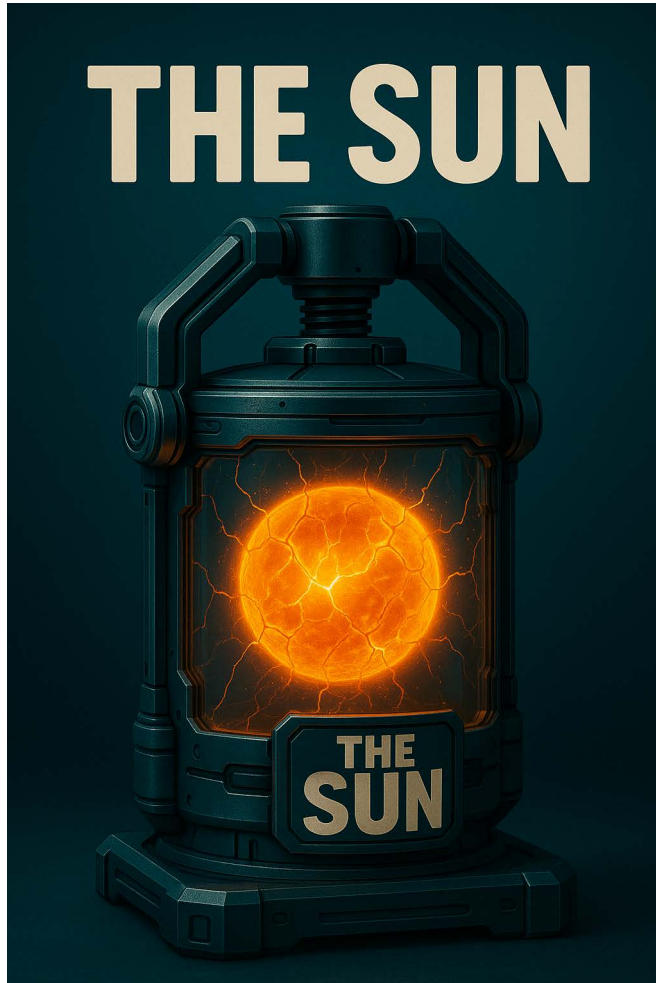


Figure 14.11: The Sun. Image generated by ChatGPT-4o on 17.5.2025⁶

Chapter 15

Discussion

I began this research with the desire to create new rituals, something transformative. At the time, I was not entirely sure what I meant by transformation, but I sensed that some of my earlier work connected to “something bigger.” I wanted not only to connect to that “something bigger,” but to interact with it, hoping that, through this interaction, transformation might occur. Over the course of this research I came to understand this “something bigger” as myth: the stories I tell myself about my identity, value, and place in the world. Symbols became the means through which I could engage with myth.

Staging this desire to create a transformative ritual, especially in *Le Refuge des Cordes*, proved difficult. The work was symbolic and deeply personal, but when I performed it, something felt off. It was too vulnerable, or perhaps too serious. The circle of stones, the slow gestures: they all felt too obvious, too sincere. And that is the word that kept haunting me: cheesy. The cheesiness of trying too hard to be profound.

I see some artists embracing that sincerity. For them, cheesiness transforms into a kind of quintessence: a trust in simple forms, in inherited traditions that can be infinitely deepened. It works for them. But not for me. I do not have deep roots in any living tradition, except perhaps for Catholicism and classical music: both of which reached me already fractured, deconstructed, and polluted. So now, when I try to create a serious ritual, it feels fake—or worse, like marketing.

Perhaps that is the real pollution: consumption has made sincerity feel

suspect. Even when I compose, I sense the capitalist incentive lurking. I question my own sincerity, aware that my artistic choices might be shaped by the drive to create an optimal commodity. The same suspicion arises at times when I perform, and even when I witness performance.

The one truly serious, unquestionable aspect of my life, the thing that came unfractured, was consumption. As a child, the most intense moments of collective effervescence were centered around the appearance of Santa Claus and the consumption rituals around it. That was the ritual. That was the sacred.

So, when I set out at the beginning of this research to connect with something “bigger,” I did not expect it to be consumption. I arrived at consumption from two different directions. On the one hand, the failed ritual of *Le Refuge des Cordes* revealed the layer of consumption embedded in some of my musical performances. On the other hand, my attempts to connect technology to the sacred led me to see that examining the birth of a loudspeaker revealed an undeniable framework of consumption. It was only in the process of writing this thesis that these two paths began to converge. The latter became a lens through which to investigate the former. That is also when consumption began to fracture for me, revealing itself as a myth.

In this hall of broken and fractured myths, perhaps the only honest thing left is contrast: to juxtapose the sacred beside the profane, to mix them together. After *Le Refuge des Cordes*, this contrast, conceptualized here as the Grotesque, offered me a way to acknowledge the ambiguity of intention behind ritual gestures, especially those that felt too sincere.

However, Grotesque does not quite capture it: it could be interpreted as a form of cynicism, a way of ridiculing these gestures. It risks being read as irony, similar to what is found in Kagel’s instrumental theater, as discussed in chapter 6. Yet, there remains, for me, a form of transcendence that I cannot dismiss, an essential aspect of my practice that persists beyond irony. This is where the Numinous arises within my fractured personal myths. The Numinous offers a sense of direction in this morass. From a more personal point of view, this is the Grotesque Numinosity my artworks seek to embody: a blend of awe and absurdity, sincerity and artifice, where the sacred leaks through the cracks of the profane.

In the widest perspective, this is how my artworks can articulate the

entanglement of the sacred and the profane in electronic music devices. They reflect how I perceive some technology as Grotesque and Numinous. While the Grotesque aspect is, to my eye, quite prominent, their Numinous side must be unearthed, the energy these devices channel must be redirected.

15.1 Logic of Sacred Consumption

The fictional story of *The Sun* crystallizes my view of technology as Grotesque within consumer society. Objects like the sun—immense, radiant, unknowable—are transformed into products. The sacred is reduced to utility, as one gets their daily “morning kick” from The Sun. The mysterious becomes a commodity. Despite its overwhelming power, the sun becomes just another experience to be habituated to.

The excitement I feel when unboxing a new device follows the same logic. I protect it, admire it, project my hopes onto it. Then the magic fades. The mirage of Quintessence evaporates: the real object becomes a pale shadow of the imagined product. This is the Pull of Habituation explored in chapter 3. I experience its immense transformative power, only for it to become mundane. It is absorbed into the everyday and rendered business as usual.

From my perspective on marketing and consumption, habituation is not good for business, yet it is essential. This paradox is reflected when an object is marketed as “just a device,” while simultaneously being hailed, like Apple’s Mac computer, as “the most powerful tool you’ll ever own.” Producers seek both myth and the mundane: elevating the product through its association with ideas of the sacred, while emphasizing its utility. Sacred in imagination, profane in use.

There is similar paradox with what I have called the Pull of Mass Production: the product appears as if it no longer draws its power from entanglement with nature, from the silent awe of planetary motion in a solar system. And for good reason: nothing is more disenchanting to me than being reminded of the pollution, exploitation, and ecological destruction involved in the making of a loudspeaker or an electric guitar. This is why, in my view, products are presented as if they came from nowhere. As if they had not been mined, assembled, shipped, and sold. It is as if they simply appeared, clean and perfect, a little miracle of design, quintessential.

This dynamic is now unfolding before my eyes with a relatively new technology: generative AI. Like *The Sun*, creating an AI image means tapping into the brains and muscles of thousands of humans: software engineers, miners, artists, digital forced labor, and more. The scale of energy involved is astounding. This vast network channels power and aims at enabling me, at best, to be more productive, and at worst, to generate profane images of cute cats. Since the beginning of this project, AI has shifted from speculative promise to mass adoption. I see it marketed much like *The Sun*, godlike in power, yet “just a tool.”¹

This is the Grotesque as it manifests in consumption from the producer’s side, attempting to sell their product to the consumer. Articulating these sacred and profane entanglements in the artworks means bringing these sacralization processes into full conscious view; revealing, in some cases, their absurdity. The same strategies used by producers, such as Contamination, Quintessence, and the Channeling of Energy, are reappropriated in the performances. My artworks aim to articulate these entanglements not by escaping the logic of consumption, but by mirroring it, refracting it, and redirecting it.

Things become even more interesting when considering electronic music devices, such as amplifiers, which carry rich symbolic baggage, historical significance, and mythological resonance, as explored in chapter 9. Moreover, music technology can communicate the sacred dimension of music explored in chapter 5. These multiple facets allow these objects to connect with many Domains of Sacred Technologies, multiplying the possibilities for Grotesque representations.

15.2 Articulating, Cracking Open, and Activating

Cracking open the mundane casing and revealing the Grotesque embedded in objects of music technology is achieved in my artworks by connecting them to the sacred through Contamination, and by playing with these associations. This is a fundamental principle at the core of what I have termed

¹At the time of writing, the marketing discourse around AI remains unsettled. Companies continue to experiment with different approaches: some lean into anthropomorphic framings, presenting AI as an *agentic assistant* with quasi-human traits, while others emphasize neutrality, portraying AI as a transparent “tool.”

Symbolic Sound-Producing Gestures (SSPG) in my practice of instrumental music theater.

SSPGs are gestures that can be made through and with music technology that connect music performance to ideas of the sacred. They emerge through four Symbolic Channels: Instrument, Sound, Technique, and Context. They are inherently Multimodal. A sound might feel sacred, while the technique that produces it may be profane: awkward, banal, even ridiculous. This allows the Grotesque to be encapsulated in a single musical act, such as pressing the ABC pedal in *Electric Unconscious*, which restores sound amplification after a technical failure: a mundane action of mythical resonance as explored in chapter 12.

I see my artworks as a way to represent how technological objects are suspended in an in-between state, between sacred and profane, a liminal space that, for me, is a site of potential transformation. That is the space where something might still happen. It is through these cracks that the Numinous begins to leak.

This is when SSPGs can become Animated Hieroglyphs: Opaque Symbols that resonate in the unconscious, in the non-rational. These objects become the center of a kind of ritual; their interaction suggests something deeper. They become strange, charged, and Numinous.

Animated hieroglyphs offer a way to transcend Grotesque representation. Such symbols emerge from the dynamic interplay of the sacred and the profane, and at times suddenly crystallize into an irreducible, Salient image. This is the moment when symbols acquire imaginal reality: when representation no longer feels external but internal, heightened by awe and dread. This is Grotesque Numinosity: when the cracks of the Grotesque become a springboard for numinous impressions. While the Grotesque cracks open, the Numinous activates.

Through Animated Hieroglyphs, I feel that electronic music devices come to have a symbolic charge that transcends their status as tools. While the Opaque Symbols of Animated Hieroglyphs reach the Numinous and the non-rational through a surplus of significations, there is another strategy aimed at the Numinous that functions differently. The Channeling Energy strategy operates prior to symbolism, emerging not from meaning but from intensity, from the raw force that precedes interpretation.

15.3 Channeling Energy

In this thesis, I focused on sound amplification, which I generalized as a form of Channeling Energy. Like *The Sun*, Channeling Energy is, to me, one of the key processes that renders a technology sacred. However, while this energy is often directed toward utility, I attempt to redirect it toward the Numinous. This becomes a way of turning the technology back on itself and evoking the mystery of amplified sound.

For me, music is a way to modulate and redirect the energy channeled through an electronic music device. Music removes the cap from the bottle of *The Sun* and pours its contents into experience. It hacks the infrastructure of power, turning utility back into awe in order to summon something useless, beautiful, perhaps even sacred.

It is like experiencing the Sun not as a commodity, but as Numinous. Unfiltered energy reaches deeply, with a multisensory flood of smells, sounds, and sights blending into one another, saturating consciousness. These are moments when one stands in awe before a 12-meter dynamo, the Sun, or a guitar amplifier.

This is where I situate my agency as a composer: in using tools such as the amplifier, electric guitar, and loudspeaker not as mere utilities, but to turn their energy back on themselves. Through the reframing of energy release within the tools of instrumental theater, the mystery returns. The objects reconnect to the sacred. Their symbolic charge reactivates.

In *Electric Unconscious*, when the power failed, it was not just a technical issue, it became mythic. The grid, the socket, the invisible infrastructure: all of it transformed into narrative. The failure created space for symbolic weight. Suddenly, electricity had meaning again. It had a story.

The same happens with the electric guitar in *Le Refuge des Cordes*. It is not just an icon of rock 'n' roll, but a sacred space; a site where the electric guitar unfolds into a cosmology, where the act of sound amplification evokes the orbits of planets.

In *Loudspeaker Baptism*, the role of amplification is different, less explicit, more dramaturgical. The loudspeaker remains a consumer object, a commodity, yet it also becomes a baby, a mirror, a vessel of sound, and memory. Through music, through performance, through the systematic use of emotions like awe and dread, both Cheesy and Raw, supercharged

by amplified sound, the loudspeaker becomes transformed into a Numinous object.

Thus, for me in this thesis, I see my music performances as a way to redefine the framework for experiencing unleashed energy by first breaking the frame of reference through the Grotesque, then pushing toward numinous impression by Channeling Energy and creating Animated Hieroglyphs. It is an act of unboxing: cracking open the familiar and repackaging it according to new myths and symbols.

15.4 Unboxing / Packaging

Perhaps the biggest obstacle to this kind of activation of technological objects is the context in which it takes place. Despite these intentions, I feel that the three performances occurred within environments where music is pre-packaged. Whether in black boxes or opera houses, my work generally adopts the framework of the classical concert hall as embodied by seating arrangements, lighting conventions, ticketing systems, and expected audience behaviors. The cap from *The Sun's* bottle is removed, only to have its contents poured into another standardized experience, which is itself a ritual of consumption.

The exception to this format is *Le Refuge des Cordes*, which I performed 26 times in the same space with a small audience seated in a circle. It was an attempt to bring more context into my practice. Throughout this doctoral project, I have repeatedly sought to further open up my work to contextualization, often aiming to develop site-specific, community-based artworks tied to a particular temporality. Despite the force of this intention, these efforts did not fully materialize.

The potential of music to evoke the Numinous, as discussed in chapter 8, and of sacred experience more broadly, lies in context: who performs, where, when, and why. But if context is essential, fully embracing it felt somewhat beyond my reach in terms of preserving my artistic identity. While art offers the freedom to reinvent the package from the ground up, I did not take that step.

What I found instead was a middle path by not rejecting the concert format, but by working within it. I see my work as situated between ritual

and product, using the familiar package of a concert while bringing ritual intentions, symbols, and myth into it. This allows me to inhabit the medium more comfortably, while still engaging on a deeper level with the myth of consumption, without the need to fully reconfigure the performance space.

While *Electric Unconscious* engaged directly with the themes of consumption and energy, seeking to surface implicit myths by staging a technical problem, it was only in *Loudspeaker Baptism* that I became more conscious of, and actively engaged with, the myth of consumption inherent to my performances in concert halls.

Loudspeaker Baptism showed the sacralization process on stage in the Contamination of the loudspeaker being treated like a newborn baby and in the unboxing ritual. It also highlighted the consequences of mass production and questioned whether love could exist despite an object's industrial origin. Perhaps *Loudspeaker Baptism* is my helpless attempt to fill the consumption ritual with deeper meanings in order to reclaim and transform it.

In doing so, the aim was to allow for a possible transformation in the ideas and ideals of the consumer community, or at the very least, to pose the question and bring it into awareness. To enter into a dialogue with the myth of consumption through the shifting sacred and profane representations of technology. Not to escape consumption, but to pass through it by using the concert hall, itself a context of consumption, to question consumption.

In the fictional story of *The Sun*, the manufacture of a single consumer object erases entire planetary systems. But what a waste it would be if that destruction yielded only the fleeting pleasure of purchase, or the means to produce more of the same.

Art can unbottle it. Crack it open. Repackage it with new symbols. Let the energy spill. As a non-rational encounter with the unfiltered power of technologies, art can return mystery to what has become utility. Opening up the imagination, and leaving it open.

Chapter 16

Conclusion

This thesis set out to answer the following question:

To what extent can instrumental theater compositions articulate the entanglement of the sacred and the profane through the artistic exploration of Numinous and Grotesque representations of electronic music devices, in the context of contemporary consumer society?

This question has shifted multiple times over the course of this doctoral project, particularly during the writing of this thesis. Rather than settling on a single formulation, the process of finding a question became a way of discovering how to package the knowledge I have gathered over the past eight years, during which I conducted practice-based research and autoethnographic documentation, primarily investigating my own perspective as a composer and performer of instrumental music theater.

The question functioned like an arrow, providing direction while continually redirecting itself as the doctoral project progressed, in a continuous feedback loop with my writing, readings, and the artistic works created between 2019 and 2024: *Le Refuge des Cordes*, *Electric Unconscious*, and *Loudspeaker Baptism*.

The results, concepts, and perspectives I have offered here are not definitive conclusions, but propositions I have sought to substantiate through this personal account. They can be distilled into three interconnected aims that this thesis pursued:

1. To expose the mechanisms by which the sacred and the profane are entangled, in consumer culture, within performance practices that involve electronic music devices such as the electric guitar, loudspeaker and amplifier.
2. To theorize and contextualize the original concept of Symbolic Sound-Producing Gestures and demonstrate its application in my performance practice in relation to the representation of the sacred.
3. To articulate another original concept, Grotesque Numinosity, as the aesthetic lens through which I frame my performance practice within the entanglement of the sacred and the profane.

While the question kept changing, the throughline during these eight years was the title *Sacred Technologies*. Despite its wide-ranging scope, it served as the spark for everything, giving rise to the questions that have haunted me over this entire period:

- What is sacred to me?
- How are technologies sacred to me?
- How could technologies become sacred to me?

This was the itch I wanted to scratch, the doubt that instigated the inquiry. These questions extend beyond artistic practice, encompassing my lived experiences as a musician-researcher, a perspective that I have reflected upon in the Anecdotes dispersed throughout the thesis. Although this thesis has offered me some answers to these larger and personal questions, they remain the ones I will continue to grapple with. The conceptual map surrounding these questions has transformed, branching into more precise inquiries that are now interwoven with the work of earlier artists and researchers. These questions remain open, but they are now more like mysteries to live with than problems to solve.

16.1 Contributions

This research offers a new concept for instrumental music theater and other sound-based performance practices in multidisciplinary settings. By focusing on the symbolism of music-making beyond the paradigm of absolute

music, it introduces the notion of Symbolic Sound-Producing Gestures as a potentially valuable concept for sound creators, thereby extending the lineage of instrumental theater pioneered by John Cage, Mauricio Kagel, and Dieter Schnebel.

This research contributes to the anthropology of music and ritual by offering a first-person perspective on sacred music. It examines sacredness in performance without reliance on sacred texts or the explicit religious or spiritual intentions of the performer or composer. I frame sacredness as a form of Contamination conveyed by symbols embedded in sound and music-making, while also underscoring its experiential and emotional dimensions through the concept of the numinous (Otto [1917] 1923).

By examining the classical music concert as a ritual (Small 1998; Lévi-Strauss 1964; Tröndle 2020), and in contemporary culture as a ritual of consumption (Ungeheuer 2020), my first-hand account elaborates the notion of the concert hall as a site where consumption shapes ritual enactment. Because these dynamics also apply to other contexts of musical performance and live arts, this analysis offers insights for artists who wish to craft artistic rituals and sacred performances, particularly by revealing how consumption influences the myths that a ritual engages with and, consequently, constrains its transformative potential.

I introduce the concept of Grotesque Numinosity as an aesthetic lens for articulating the entanglement of the sacred and the profane in technologically mediated theater, music, and art. In my framework, Grotesque representation, grounded in rational symbolic association, serves as a springboard for numinous impressions. I outline two strategies for evoking the Numinous: Animated Hieroglyphs and Channeling Energy.

This study foregrounds sound amplification as a technological process that opens pathways to sacred experience. I argued that amplification, by overwhelming the senses and extending perception beyond ordinary thresholds, can induce potential Numinous states. In doing so, my analysis builds on Erik Davis's research into the spiritual ramifications of electronic technology (Davis 1998) and extends Coggins's exploration of the mysticism of drone metal (Coggins 2018).

Finally, this research has enabled me to define and better articulate the concepts of Grotesque Numinosity and Symbolic Sound-Producing Gestures,

which are central to my compositional practice, offering valuable guidance for my artistic collaborators and future investigations.

16.2 Limitations and Future Research

The context in which my performances took place, which I broadly categorize as variations on the classical music concert, restrict the potential to experience technology as sacred. For me, this represents the biggest limitation of the practice-based aspect of this research and the extent to which it can fully articulate the entanglement of the sacred and the profane. At the same time, it opens exciting avenues for future projects where these experiences could become more personal, and more singular in the context they are placed in.

Another limitation is the focus on sound amplification as the central electronic technology. While this choice gives the research its unique character, it also makes it less timely. Much of the current discourse surrounding electronic technologies and their connections to the spiritual, religious, and mystical revolves around their perception as autonomous agents; domains more directly relevant to digital technologies like the internet or AI. Even so, I have argued that considering sound amplification as a form of channeling energy remains a relevant and potent avenue for exploring contemporary manifestations of the sacred in technologies.

On the theoretical and methodological side, this research is limited by its geo-cultural scope, which is predominantly grounded in European concert contexts. It would be both interesting and challenging to explore how other cultural frameworks might interpret or challenge these findings. I briefly engaged with perspectives from animism and Buddhism during the course of this research. These avenues were promising but not fully pursued.

Another limitation is that the thesis is autoethnographically centered, with the composer-performer as the primary subject. No formal interviews were conducted with performers or audience members. While such inquiries might have provided additional empirical support for the claims regarding the perception of the technological devices or further grounding for the conceptual framework, they would have taken the thesis in an entirely different direction.

Art is a complex and shifting topic, and reflecting on my artistic work without becoming too broad is a balance I tried to strike. My aim was to do justice to the complexity of musical performance and the works I created. I sought to uphold their value as research objects while maintaining theoretical cohesion. In doing so, I developed a theoretical framework much larger than I anticipated. This expansive conceptual edifice emerged naturally from my desire to interconnect multiple theoretical domains.

Concepts crystallized from initial uncertainties, gaining definition through the writing process itself. What readers make of this conceptual apparatus will necessarily differ from my own understanding, shaped by their distinct perspectives and experiences. Following the theme of consumption central to this thesis, concepts function as products that are consumed, imagined, and projected upon rather than as neutral vessels of meaning.

16.3 To Buy Without Consuming?

I have described my research question as a way to *package* the knowledge I have gathered, a metaphor that aptly describes how I view this thesis. The question provides the range of concepts I wish to interconnect: the Grotesque, the Numinous, instrumental theater, consumer society, the sacred, and electronic music devices. Yet, lived experience always exceeds the boundaries of the concepts that refer to it. In this sense, the metaphor of bottling *The Sun* also applies to how I view this research: an attempt to contain complex, multifaceted experiences so that they may be shared with and consumed by readers.

I see concepts like the Numinous as products on a supermarket shelf, neatly packaged in rows, ready to be picked up and consumed. Packaging signals to the consumer what the product is, allowing them to anticipate, based on experiences with similar products, what they are going to receive before buying and consuming it.

I recently led a workshop titled *Ritual and Sound* on the theme of consumption. During one of the workshop days, a group of students and I enacted a ritual of *useless buying*, carried out with the intention of discovering whether it is possible to buy without actually consuming.

Leaving all our belongings behind, we walked toward a shopping center, a kind of pilgrimage, each with only a single euro in our pocket. Eventually, we purchased a piece of clothing from a second-hand shop and almost immediately brought it to the basement parking area of the shopping mall. There, we donated the items by putting them into a collection bin for another second-hand shop.

This pilgrimage revealed to us the role of imagination in the act of buying. We did not consume the product itself, only the idea of the product. The process of selecting an object (even something useless, something we had no need for) and trading it for the value of 1 Euro revealed something about ourselves. This made clear that in buying something we consume, but what is consumed is less about the object itself and more about imagination: how we project hopes onto a product, how it relates to our daily lives and identities. The idea of a product, and its representation in our mind, is far richer than its actual usefulness.

This role of imagination in consumption is fundamental, an idea I have previously discussed in relation to Sacred Consumption, particularly through the concept of Quintessence and Baudrillard's expanded notion of commodity fetishism (Baudrillard 1981a).

Continuing my analogy between concept and products packaged on a supermarket shelf, buying without consuming or accepting a concept like the Numinous without projecting prior knowledge onto it is neither possible nor necessary. Once a concept is chosen, it inevitably carries expectations. The packaging reduces and distorts the experience it refers to. At the same time it expands it in the reader's imagination, connecting it to their own experiences and knowledge.

Concepts even change how I experience my memory of those events and experiences which have shaped the concepts in the first place. Such moments come back in my mind as I write this: being awestruck when visiting Saint Joseph's Oratory in Montreal at the age of ten, the feeling of the Church becoming alive during Mass in Paris, the feeling of the sacred and ritual with Matthias in the Barn playing the rusty metal rod. As I focus on these mysterious feelings, now given words and attached to concepts, they acquire new qualities that I, in turn, project back onto them. This is a challenge inherent to this autoethnographic research.

Concepts shape the imagination and vice versa. There is no danger of confusing the map with the territory, because concepts and experiences, the imaginary and the real, both participate together in a dance. This is a fairly crude way to put it, and the metaphor of map and territory has been used, expanded, and deconstructed ever since Korzybski declared that “a map is not the territory” (1933, 58).

For example, Baudrillard writes about commodity fetishism and suggests that consumption substitutes “a manipulation of forces for a manipulation of signs” (Baudrillard 1981a, 91). In *The Consumer Society* (1970) he describes consumption as a “self-fulfilling prophecy” (Baudrillard 1998, 127). These ideas point to a logical trajectory that led him to articulate the notion that signs no longer even pretend to refer to an underlying reality—a copy without an original—thus arriving at the hyperreal, a central concept of *Simulacres et Simulation* (Baudrillard 1981b).

Similarly, the distinction between map and territory dissolves once one accounts for the *imaginal*: maps are not merely reductions of the territory but portals into imaginal participation, where the imaginary and the real co-constitute each other.

Personally, I arrived at the term *imaginal* through my attempts to represent the sacred and to describe this process. Just as the role of the imaginary in consumption became vivid for us through the ritual of useless shopping, the notion of the *imaginal* became concrete for me over the course of this project.

What surprised me most while writing this thesis was encountering a point where a concept seemed to be missing. This occurred in chapter 8, where I describe how, no matter if I was attempting to represent a Numinous experience or to generate such an experience for the audience, I found myself using the same expressive means.

I see representation as the power to place reality within the imaginary, where something stands in for a real object or person. The site of this operation is the imagination, through which audiences and readers establish connections.

However, the sacred is not a simple object to represent. It is a complex and shifting target. I attempt to delineate it by distinguishing between the rational and the non-rational, as Otto does in his book (Otto [1917] 1923),

but this does not fully capture it either.

Representing an emotion such as joy is, at the same time, an act of arousing that feeling in the audience. The term *evoking* is therefore apt when thinking about the sacred, as it involves both alluding to it (the rational dimension) and making it felt by the audience (the non-rational dimension).

In this sense, representing emotion always takes place within the imaginal realm, encompassing both representation and feeling. Yet, I reserved this term only for certain heightened moments, when imagination becomes so intensely present that it collapses unto itself. This, for me, is the imaginal; this is the Numinous.

This fluid boundary between the real and the imaginary requires further scrutiny, and what I present here are fragments of thought that reflect my current concerns after researching the topic. The point is that imagination makes it impossible to buy without consuming, to use a concept without altering the experience, or to represent the sacred without also sensing a flicker of it.

Appendix A

Functional Categories of Musical Gestures

- Sound-producing gestures are those that effectively produce sound. They can be further subdivided into gestures of excitation and modification [...].
- Communicative gestures are intended mainly for communication. As will be discussed later in this chapter such movements can be subdivided into performer–performer or performer–perceiver types of communication [...].
- Sound-facilitating gestures support the sound-producing gestures in various ways. As will be discussed and exemplified in a later section, such gestures can be excitation subdivided into support, phrasing and entrained gestures [...].
- Sound-accompanying gestures are not involved in the sound production itself, but follow the music. They can be sound-tracing, i.e. following the contour of sonic elements [...] or they can mimic the sound-producing gestures.

— Jensenius et al. (2010, 23)

Appendix B

Research Catalogue Links

Research Catalogue Exposition:

<https://www.researchcatalogue.net/view/3554062/3801545>

The links below are shortcuts to sections of the exposition

Videos Examples Referenced in the Thesis

Chapter 11

Looking for SSPG:

<https://www.researchcatalogue.net/view/3554062/3801572#tool-3801921>

Chapter 12

Electric Unconscious: Drone

<https://www.researchcatalogue.net/view/3554062/3801572#tool-3801933>

Electric Unconscious: Feel the fridge

<https://www.researchcatalogue.net/view/3554062/3801572#tool-3801930>

Pages for Each Artwork

Le Refuge des Cordes:

<https://www.researchcatalogue.net/view/3554062/3801575>

Making of:

<https://www.researchcatalogue.net/view/3554062/3802054>

Electric Unconscious:

<https://www.researchcatalogue.net/view/3554062/3801541>

Making of:

<https://www.researchcatalogue.net/view/3554062/3802114>

Loudspeaker Baptism:

<https://www.researchcatalogue.net/view/3554062/3801531>

Making of:

<https://www.researchcatalogue.net/view/3554062/3802115>

Appendix C

Glossary of Conceptual Framework

This glossary defines the conceptual framework developed throughout this thesis, which is summarized in the Conceptual Map. Terms are categorized according to their central role in parts I, II, III, and IV.

Domains of Sacred Technologies

The Domains represent the different contexts where electronic music devices can be represented or experienced as sacred. Different facets of electronic music devices connect to different Domains. This thesis focuses on four Domains:

- Domain of Sacred Consumption: Electronic music devices as consumption objects (chapter 3)
- Domain of Sacred Sounds: Electronic music devices as musical instruments (chapter 5)
- Domain of Sacred Symbols: Electronic music devices as symbols in instrumental theater (chapter 6)
- Domain of Sacred Amplification: Electronic music devices as sound amplifiers (chapter 9)

The Domain of Sacred Sounds and the Domain of Sacred Symbols are both explored through the main concept of Part II: Symbolic Sound-Producing Gestures. The Domain of Sacred Amplification, through what

I term Channeling Energy, is central to the concept of Parts III and IV: Grotesque Numinosity, alongside Animated Hieroglyphs and the Grotesque.

Part I: Sacred Consumption

Sacred Consumption: A Domain wherein electronic music devices are analyzed as consumption objects. In this context, “consumption can become a vehicle of transcendent experience; that is, consumer behavior exhibits certain aspects of the sacred” (Belk, Wallendorf, and Sherry 1989, 2).

Sacralization processes

There are three mechanisms by which consumption objects are perceived as sacred:

- **Contamination:** “The ability of the sacred to transmit its power to that with which it comes into contact” (Belk 2012, 70). Symbols and their connotations act as the vehicle for positive or negative contamination, depending on whether they link an object to the sacred or the profane.
- **Investment:** Following contamination, Investment manifests in efforts directed toward linking an object to the sacred. These include ritual, gift-giving, and collecting, all of which are used to sacralize consumption objects.
- **Quintessence:** An outlier process in Sacred Consumption where the mundane casings of technologies are revered for their pure utility. Quintessence can also be understood as similar to the Marxist concept of *commodity fetishism* (Baudrillard 1981a), where the sacredness attributed to technological objects is viewed as a fetishized surplus: a symbolic overlay that obscures the conditions of their production.

Profaning Forces

There are two forces pulling a consumption object toward the profane:

- **Pull of Habituation:** The process by which something initially new or striking gradually becomes dull through repeated exposure.

- **Pull of Mass Production:** A form of negative Contamination that profanes an object because of its association with mass production.

Part II: Symbolic Sound-Producing Gestures

Symbolic Sound-Producing Gestures (SSPGs): Physical actions performed in the context of music performance that carry extra-musical meanings and connotations emerging from the interplay between the Four Symbolic Channels.

The Four Symbolic Channels

- **Instrument:** The physical object on stage, including its brand, design, color, lighting, and positioning.
- **Sound:** The acoustic result of performer–instrument interaction, including timbre, pitch, loudness, rhythm, melody, and texture.
- **Technique:** The instrumental technique, or how the body interacts with the instrument, including touching, striking, bowing, or manipulating it to create sound.
- **Context:** Everything else surrounding the act of performance, including venue architecture, ticketing rituals, lighting, audience behavior, institutional frameworks, and the performers themselves.

The Four Strategies for Symbolism in Sound

Symbolism in the Sound channel is categorized into four strategies:

- **Onomatopoeia:** The imitation of environmental sounds using musical instruments or voice.
- **Quotation:** The borrowing of elements from another piece of music or sound work, an early form of *sampling*.
- **Instrumentation:** The historical and cultural associations tied to a particular instrument, similar to what I term the Instrument channel, but only within the realm of sound.
- **Patterns:** How musical patterns create references to rhythms or temporal structures found in other contexts.

Symbols

In this framework, most symbols exist on a continuum between two poles:

- **Clear Symbols:** A category of signs where the connection between the signifier (the symbol itself) and the signified (the concept it represents) is arbitrary and culturally learned. Examples include numbers and letters.
- **Opaque Symbols:** This pole is best encapsulated in the work of C. G. Jung, who viewed symbols as representations of something unknown: things that cannot be fully grasped or made entirely clear. A symbol's opacity depends on the density of its cultural connotations and how these interact with individual perception.

The Parameters of SSPG

There are four parameters, analogous to musical parameters such as pitch or rhythm, that can serve as compositional tools to modulate and structure the symbolism of SSPGs within a piece of instrumental theater.

- **Opacity:** The placement of a symbol along the continuum between Opaque Symbols and Clear Symbols.
- **Saliency:** How easily a symbol is grasped, how readily the mind latches onto it, or how strongly it imposes itself on perception.
- **Dynamism:** The extent to which the parameters of SSPG modulate over time.
- **Multimodality:** The number of senses a SSPG invokes and how they are balanced and weighted in perception.

Part III and IV: Grotesque Numinosity

Grotesque Numinosity: This concept is an aesthetic lens through which to view and reflect upon artworks. It is an expression consisting of two terms:

- **Numinous:** According to Otto ([1917] 1923), it is *mysterium tremendum*: a dual experience of mystery and fascination alongside terrifying awe and dread.

- **Grotesque:** In my framework, the term is used to express the clash between sacred and profane representations.

As a unified concept, Grotesque Numinosity describes the experience that arises when sacred intensity emerges from the collision of awe and absurdity, when the dissonances of the Grotesque become a catalyst for Numinous impressions.

Numinous Strategies

There are two strategies for creating numinous impressions:

- **Animated Hieroglyphs:** Drawing on Artaud, these are SSPGs that are Salient, Dynamic, Multimodal, and Opaque. They act as surgical interventions on the mind, imposing themselves as revelations without settling into a fixed meaning.
- **Channeling Energy:** A strategy where the Numinous is reached through the concentration of energy. In this context, it is achieved especially through sound amplification.

Proto-Numinous Materials

Cheesy and Raw are qualities of my compositional materials. They are building blocks in a form that is not yet counterbalanced and channeled into the intensity of the Numinous.

- **Cheesy:** Qualities of materials associated with the “awe” of the Numinous which, when isolated or unrefined, appear clichéd or overly sentimental.
- **Raw:** Qualities of materials associated with the “dread” of the Numinous which appear untamed, visceral, and unfinished.

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Baptizing a loudspeaker. Worshipping a mini-fridge. A forest crucifixion gone wrong. Standing in awe before a sound amplifier. A room filled with suspended, dismembered guitars.

These experiences lie at the center of this artistic research thesis. Combining anthropology, religious studies, and my practice as a composer of music theater, I explore how electronic music devices (the electric guitar, amplifier, and loudspeaker) embody a paradox. Mass-produced consumer products that function as musical instruments, they carry rich symbolic associations with myth, ritual, and the sacred while remaining inseparable from the profane world of tools.

Through two new concepts—Symbolic Sound-Producing Gestures and Grotesque Numinosity—I examine how performers' interactions with technology create sacred meaning in performances that embrace both awe and absurdity, finding intensity where sacred and profane fuse in the raw energy of electronic sound.



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