City University of New York (CUNY)

CUNY Academic Works

Dissertations, Theses, and Capstone Projects

CUNY Graduate Center

6-2014

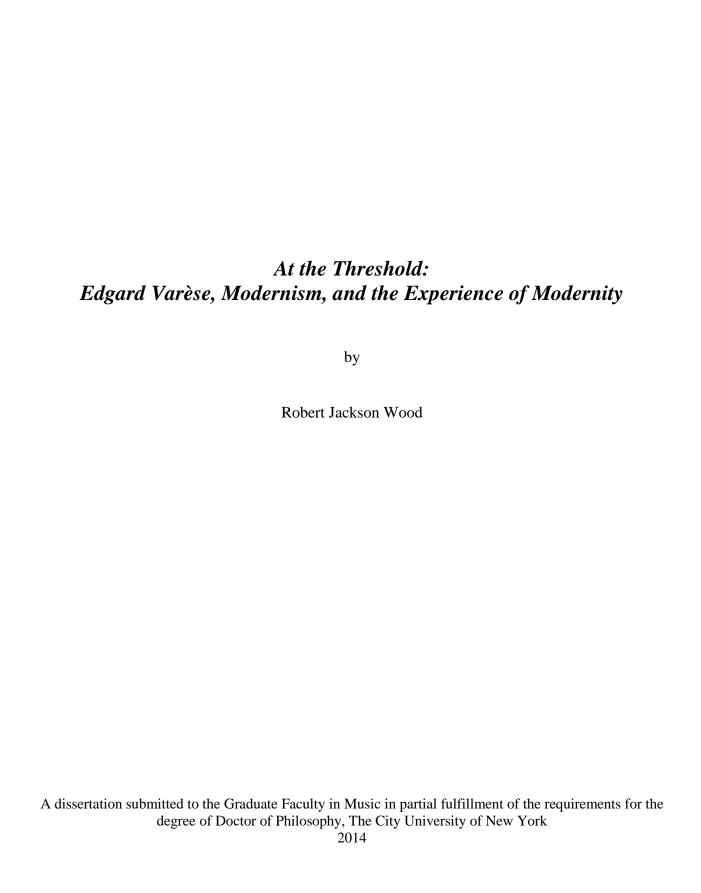
At the Threshold: Edgard Varese, Modernism, and the Experience of Modernity

Robert Jackson Wood Graduate Center, City University of New York

How does access to this work benefit you? Let us know!

More information about this work at: https://academicworks.cuny.edu/gc_etds/130 Discover additional works at: https://academicworks.cuny.edu

This work is made publicly available by the City University of New York (CUNY). Contact: AcademicWorks@cuny.edu



2014

Robert Jackson Wood

All Rights Reserved

This manuscript has been read and accepted for the Graduate Faculty in Music in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

Date	Joseph Straus Chair of Examining Committee
	Chair of Zhamming Committee
Date	Norman Carey Executive Officer
Supervisory Committee:	
Richard Kramer	
Chadwick Jenkins	
Brian Kane	

THE CITY UNIVERSITY OF NEW YORK

Abstract

At the Threshold:

Edgard Varèse, Modernism, and the Experience of Modernity

by

Robert Jackson Wood

Adviser: Richard Kramer

The writings of composer Edgard Varèse have long been celebrated for their often

ecstatic, optimistic proclamations about the future of music. With manifesto-like brio, they put

forth a vision of radically new instruments and sounds, delineate the parameters for spatially

oriented composition, and initiate the discourse of what would become electronic music. Yet just

as important for understanding Varèse is the other side of the coin: a thematics of failure

concerning the music of the present—a failure of old instruments to transcend their limitations, a

failure of technique to achieve certain compositional ideals, and a failure of music to connect

listeners adequately to the vital current of the times.

This dissertation explores the connection of Varèse's visions of transcendence, together

with his continual refrain of art's metaphysical failure, to one of modernism's utopian and

impossible demands: that the artwork somehow seize upon or make contact with modernity

itself—that it be, in the words of Rimbaud, "absolutely modern." In Varèse's case, this will mean

a desire—stemming partially from the sense of always being left behind by the coursing

temporality of post-war modernity—for works (and through them, listeners) to enter into an

iv

intimate communion with the modern world, providing a kind of unmediated contact with the creative-destructive drive of the new.

Chapter 1 will explore this desire by way of Varèse's interest in the siren, whose continuous parabolic curves will come to symbolize an unmediated realm of the musical real beckoning just beyond the clumsy reach of the tempered scale. In chapter 2, Varèse's desired immediacy will take the form of the absolute present, which the artwork will attempt to apprehend both through its collaboration with science and through what Varèse will call its necessary "permanent revolution." In chapter 3, immediacy will be explored by way of Varèse's highly physical, at times violent, notion of sound, which will become a means of making actual contact with the listener's body while dissolving the barriers separating them from modernity's coursing vital stream.

Acknowledgements

I would like to extend my gratitude to a number of people for the support, encouragement, and advice they offered me during the course of this project. I first heard Varèse on WXXI radio while in my college dorm room at the Eastman School of Music, so I must first thank the fearless programmers there who saw fit to subject the inhabitants of Rochester to such sublime orchestral cacophony. I am no less indebted to my advisor, Richard Kramer, who provided unwavering support throughout all stages of this project. His insistence that I continually strive to clarify and expound upon, but never abandon, the often unwieldy abstractions that I would bring to the table was immensely important to this dissertation. My family and friends, too, have been a chorus of believers. Surely they thought at times as though this mysterious dissertation that they never saw or read but that I spoke of so incessantly was destined for incompletion. But no matter: outwardly they were infinitely loving, encouraging, and supportive. My friends and colleagues Steve Smith and Seth Brodsky were particularly invaluable, having served as indispensable sounding boards over the years as well as co-travelers down intellectual rabbit holes too numerous to mention. I would also like to thank the remainder of my committee, Rosa Lim, my colleagues at the Brooklyn Academy of Music, and the archivists at the Paul Sacher Stiftung and Harry Ransom Center for the different, but equally important, forms of support that each provided.

Preface

Edgard Varèse, modernism, and the experience of modernity: it is likely that nothing about this grouping will seem new or unexpected in a dissertation on the composer. Modernism is that aesthetic bracket we tend to place around the angular, unforgiving sound world typical of works like *Arcana*, *Amériques*, and *Intégrales*, while modernity is that sociocultural phenomenon, never more a subject of discourse than during Varèse's time, to which modernism was supposedly a response. So what about this threshold? What defines it? Why talk about it? What does it have to do with any of these terms?

A threshold implies a point or a place past which one thing becomes another, something to be crossed in order for a qualitative change to occur. It can have spatiotemporal associations, as a kind of transitional point encountered on a journey; physiological or psychological associations as a moment of loss associated with pain or paroxysm; or mystical, metaphysical associations, as a moment or place at which matter becomes transmogrified into something beyond its mere self. In reading Varèse's writing throughout the course of this project, I could not help but constantly think of these and other thresholds. Everywhere, we seem to be just around the corner from something aesthetically or metaphysically game-changing, something monumental. We are brought to a precipice delineated by music's current technical capabilities and limitations and allowed a glimpse at what resplendent things that—with only this technological advancement and that new instrument—it would surely become. The wind from the coming electronic music revolution is already in our hair. The future is always almost here.

But we cannot say, of course, that this sense of a threshold is entirely unique to Varèse's writings. This is, after all, the age of the manifesto in which countless pronouncements about

art's future—what it should be, what it could be, what it almost is—make the reader feel, on the one hand, as though surely utopia is immanent, but on the other, that for some reason, those pronouncements themselves bear more interest than their representative works, or that the works themselves fail, or that they can do no more than stand out as mere tokens of a theorized type. Thus, Marinetti's Futurist Manifesto becomes a document of determined desire—"we want to sing the love of danger," "we want to glorify war," "we want to demolish museums and libraries"—but also of desire deferred: "we have therefore at least ten years to accomplish our task." Never has music history seen such an ecstasy of writing matched with such a sidelining or underplaying of individual works.

Varèse, ever teetering on the brink of merging theory and practice, ever exclaiming about what was *almost* able to be done, was no exception. What I have tried to do in this dissertation is to rethink Varèse from the perspective of different thresholds of transcendence, or at least isolate certain tendencies in his works that seem to evoke them. On the far side of those thresholds is always a musical metaphysics that Varèse will call various things and approach in various ways, but always implicating music in a certain failure to do what he wants it to do. There will be the threshold of beauty (Varèse's own coinage), for example, capable of being crossed (if crossed at all) only by way of the most dedicated collaboration between art and science. There will be the threshold of the musical real, which will beckon from beyond the reach of the clunky fingers of the tempered scale. There will be the threshold of the absolute present, a utopian place beyond all mediation that will be able to be conjured only obliquely by what Varèse will call the artwork's "permanent revolution." There will be other thresholds as well, all of them providing us with new perspectives on Varèse's urgent rhetoric and exuberant sonic visions. And as we explore them, we will have occasion to approach a number of other facets of Varèse's music and rhetoric

in ways that have not been done before. Science, for example, will become less the stuff of rigid objectivity and cold calculus and more something akin to art itself: a vehicle of revelation in the service of providing renewed images of the world, of imagining the world otherwise. Apollinaire will enter here as a criminally overlooked influence on Varèse, providing the composer with a persuasive framework from which to understand art's ideal relationship with various modalities of innovation and discovery. Sound will become something highly physical, even violent, capable of breaking open the recalcitrant shell of the listener's subjectivity to enable an unimpeded congress with modernity's coursing temporality. And sirens will become not merely new instruments used to enliven a worn-out palette of sounds, but the embodiment of an entirely new discourse of the real born from an overlooked domestic primal scene. All of these things will provide new perspectives on Varèse's musical visions, and all will be implicated in some way in defining the boundaries of thresholds.

But a note on my approach: because it is so often writing that is responsible for articulating the threshold's coordinates and setting its stakes, it is largely Varèse's writing that I will be focusing on here. This is not, of course, to consign his actual music to secondary status. It is, rather, to explore the ambitious discursive shadow under which that music was conceived. It is also to pay heed to a crucial historical juncture at which writing takes on a heightened importance as something that helps provide art with new visions of how, during the disorienting period of high modernism, it might reconstitute itself. We will understand this period largely by way of what Walter Adamson has called the "modernist window," a "transitional period in which the relation between market forces, lingering aristocratic standards of taste, individual ingenuity and craftsmanship, and a newly enlarged mass audience was being renegotiated." There will be time enough to explore this below. Here, we merely note that the class and public to which art

had formerly addressed itself and whose values and ideologies it had long perpetuated had, by the time of Varèse's modernism, become a shell of its former self. This left art to either reconstitute itself for what it imagined to be a new form of that public or turn away from the public altogether to entertain radically new forms of self-understanding. We will see how so many aspects of Varèse's music—the great cataclysms of sound, the acerbic dissonances piled atop one another—could have resulted from this turning away from a reliable social base. But we will also see how writing asserts itself at this same moment as something that art needs more than ever—needs as something that might provide it with new forms of bindingness as it is forced to reassess its social place ane function. This is the service Varèse's writings will provide throughout this dissertation, exuberantly conjuring the boundaries of a threshold past which a new art beckons for new times.

¹ The proliferation of various "isms" during this period, together with their various manifestos, is nothing if not a symptom of just this loss of art's self-evidence and its related need to organize itself in new ways.

Table of Contents

Introduction:		1
Chapter 1:	Varèse, the Siren, and the Sonic Real	27
Chapter 2:	Varèse at the Threshold: Time and Transience	72
Chapter 3:	Varèse, Contact, Sound	130
Bibliography:		179

List of Illustrations and Examples

1.1	Diverse interval spans and pitch/space saturation in Arcana, m.26-/	55
1.2	Block-like complementarity of sections in Arcana	56
1.3	Detail of one of Varèse's sketches for Déserts specifying pitch by frequency	58
2.1	Varèse's sketch of a logarithmic spiral	92
2.2	A "projected" spiral on a sketch for Déserts	93
2.3	Projection of IC 13 in the opening measures of Arcana	95
3.1	Colliding twelve-tone sound masses in mm.34-39 of <i>Arcana</i>	154

Introduction

In May of 1933, Luigi Russolo wrote to Varèse:

A work of art of genius is characterized by a technique which has been highly perfected, as in, and even more than in, already existing works of art, but even beyond this, which might be called the external structure or wall, there are the windows that permit one to see, beyond the wall, the infinite. And this "infinite" is like a panorama of the artist's interior world, that is, the substance of what he has to say. The wall is there only to provide these windows and reveal through them the artist's interior world. Technique, no matter how complex, beautiful, or perfect, can never be an end in itself but serves as a foundation to support those windows and towards the end of opening up that interior world.²

There is little here that immediately strikes one as having come from the pen of a modernist. Russolo's "genius," privileged because of his or her ability to conjure the cherished infinity of the elusive interior, is an image seemingly more suited to aspects of Romanticism or Idealism than it is to, say, the brutal dissonances and quasi-scientific rhetoric of Varèse's modernism. For a proponent of the former, Russolo's metaphor might be read something like this: wall and window relate not as two separate entities in mutual support of one another—as positive and negative space, respectively—but as different degrees of the ideality of spirit obtained by the artwork. The wall would exist to dissolve into, not merely support, the transparency it enabled. In its brute materiality, it would represent the labor whose end was its own disappearance into the ineffable and immaterial "something more" of the soul. Romantic sign would transmogrify into symbol, leaving behind no trace of the profane material world.

But Russolo's metaphor also invites a radically different interpretation, and one that, I would argue, is as well-suited to a modernist as anyone—or at least that strain of modernist interminably frustrated with the limitations of their medium. If the work is a wall constructed

² Luigi Russolo to Varèse, May 21, 1933, Edgard Varèse Collection, Paul Sacher Stiftung.

solely for the sake of its window, then by definition, the work is in some sense damned to remain the mere inversion, the mere negative space, of what it would most like to be. It would always be something other than its ideal content, oblique to what it could imply but never actually account for objectively within the stuff of its making. Our questions, then, would be these: even if the wall did offer some glimpse into infinity, even if structure did allow some intimation of its beyond, in what sense could the work ever be said to be identified with it? Would the work not remain the mere material ruin of an unrealizable dream?

I offer this metaphor as a way of introducing a theme that will appear time and again in the pages to come, one that is critically important for our understanding of both modernism and Varèse: the sense of a disconnect between what the artwork wants to be and what it is, the notion that, weighed down by the profane stuff of its coming-to-be, it is unable to transcend the contingencies of its making to manifest or make contact with something real.³ What even a cursory glance at Varèse's writings reveals is just such a frustration: the composer as failed alchemist for whom musical gold is always a technological innovation, a beam of sound, a fourth-dimensional projection, a strategically placed portamento, or sonic cataclysm away. "No matter how consummate a work of art may seem," writes Varèse, "it is only an approximation of the original conception." "Music, like all the arts, is but a means of expression; only the conception counts. As perfect as it may be, never will technique be able to rise to its level",4

This is quite the bittersweet claim. What do we make of an artist's self-defeating assertion that, from the very beginning, his work is doomed to failure, never to achieve its cherished ideal? One might first appeal to personal psychology—Varèse as the quintessential

³ By "real" I mean something that escapes the mediation of signs, something that isn't an imitation but an actual embodiment or seizure of a "real thing." What that "real thing" is will take on various meanings for Varèse and is in large part the subject of this dissertation.

⁴ Edgard Varèse, quoted in Olivia Mattis, "Varèse's Multimedia Conception of Déserts," *Musical Quarterly* 76/4 (1992): 573.

tortured composer frustrated with his work and his abilities, unable to "get it right," to achieve "the thing," to come up with a form of expression adequate to the elusive content of his innermost soul. But such readings inevitably treat only the symptom, and what I will be much more interested in exploring here are the historical conditions and social circumstances that allow these frustrations to exist as a possibility in the first place. Specifically, I will be interested in the disorienting experience of early twentieth-century modernity as the milieu that lends those frustrations their particularly urgent tenor, the sense that somehow, with these particular frustrations at this particular time, something much greater is at stake. What does it mean, for example, when in the wake of a composer's constant frustration with his technique, he repeatedly cites as his preferred model the world-disclosive power of the new physics? What does this say about the types of things now expected of art? What does it say about the precarious status it might have?

Before proposing an answer, and in order to set the stage for a particularly historical way of thinking about Varèse's modernism and modernism in general, I want to suggest that we see these frustrations with art's metaphysical failure, with the wall's inability to become a pure window, as being intimately related to the larger desire for artistic transcendence that has had a place within the discourse on art since long before modernism. It is a desire so familiar to us as to be taken for granted, and yet for our purposes, it will be important to see it as a historically produced phenomenon characterized at its simplest by art's discontent with itself and its powers, with its wish that it could transcend its ontological status as the mere artifice, mere play, or mere

=

⁵ One could argue, for example, that a work as old as Dürer's *Melancholia* exemplifies such a frustration. As Gabriel Josipovici has argued, informed by the iconographic readings of Panofsky, the engraving depicts Melancholy as paralyzed by thought, "reduced to inactivity and despair by the awareness of the insurmountable barrier separating her from the realm of Truth." Writes Dürer himself: "The lie is in our understanding, and darkness is so firmly entrenched that even our groping will fail." Art here does not partake of truth or of the divine in an a priori fashion, in other words, and it might never be able to do so. As Josipovici outlines, such a position is emblematic of the Weberian "disenchantment of the world" that will be further discussed below. See Gabriel Josipovici, *What Ever Happened to Modernism?* (New Haven: Yale University Press, 2011): 26.

imitation that, in a disenchanted age, it is destined to have. That this is not a new desire is evidenced, of course, by the litany of names that have been associated with it over the years—nature, truth, god, spirit, expression, and infinity, to name only a few. Together with Varèse's own language of transcendence, which will be one of our subjects in the pages to come, all of these words betray an art that feels as though it has a right to bigger things, along with the possibility that, by way of a particularly rarefied kind of making, it might be able to achieve them. Or at least come close.

To be sure, each of those aforementioned manifestations of artistic transcendence arose from a unique historical situation to resonate in very specific ways with the life-world of a specific group of artists. It could be argued, then, that we risk being radically ahistorical by lumping Varèse's rhetoric in with that of other composers whose language actually reveals very distinct ways of understanding art's relationship with the world. To seek God in art—the Hegelian god, for example, as the highest form of a distinctly human-centered spirit—is potentially quite different from seeking something as impersonal and oblique to conscious experience as the psychoanalytic real, for example, to name the particular incarnation of transcendence that we will be exploring in chapter one. Yet as important as it is to maintain these distinctions, it is also important that we take a step back and see this same language on a larger historical level—the level upon which the real historical contingency is the fact that transcendence in art is needed or desired—or can be needed or desired—at all. This level would be roughly that of modernity, and it will be against the backdrop of that modernity that we will come to understand the urgent rhetoric of Varèse's modernism in the pages to come.

Modernity and Disenchantment

Modernity can be defined from any number of angles. But for our purposes here, let us take it to mean an epoch, beginning no later than the seventeenth century and extending to our own, that is characterized primarily by three things: the erosion of tradition as a guarantor of meaning in the present, the celebration of that present as an ever new site of value creation, and the sense of contingency and linear time consciousness that accompanies both. Let us further specify it to mean a period in which art and human beings alike, each confined to their own rationalized spheres (for art, the aesthetic; for human beings, subjectivity), increasingly exist with no a priori connection to the world, no sense of being prefigured in its making. It is an age marked by what has been called disenchantment, a process whereby superstitious, magical, and mystical understandings of the universe are gradually displaced by their rational equivalents, and also whereby a way of life that drew its self-understanding from inherited rituals and other traditions is displaced by one in which day-to-day meanings are subject to the constant revisions demanded by modern science and the market. In such a milieu, that aforementioned sense of connectivity to the world can no longer be simply inherited from the past as a given but must instead be continually sought out in the present (in art, for instance), always in the name of progress and yet one never far removed from the lingering sense of a certain compromised experience. It is an age, as Nietzsche wrote, in which "the consuming desire for knowledge" has led to "the loss of a mythical home."⁷

⁶ Max Weber writes: "The increasing intellectualization and rationalization [...] means that principally there are no mysterious incalculable forces that come into play, but rather that one can, in principle, master all things by calculation. This means that the world is disenchanted. One need no longer have recourse to magical means in order to master or implore the spirits, as did the savage, for whom such mysterious powers existed. Technical means and calculations perform the service." See Max Weber, "Science as a Vocation," *From Max Weber: Essays in Sociology* (New York: Oxford University Press, 1958), 139, 155.

⁷ Nietzsche, quoted in Jürgen Habermas, *The Philosophical Discourse of Modernity* (Cambridge: MIT Press, 1987): 87.

That "mythical home," as the story goes, was one of ubiquitous connectivity of music, soul, and world, a world that, in Lukács' words (again, referencing the domestic), is "wide and yet it is like a home, for the fire that burns in the soul is of the same essential nature as the stars." It is an idea exemplified on the cosmological level in the notion of the *harmonium mundi*, for example, in which music is but a metonymically related instance of the more general music that binds together all things. For Boethius, this connectivity was put in terms of an essential congruity between the music of the spheres (*musica mundana*), the music that unifies body and soul in human beings (*musica humana*), and instrumental music as such (*musica instrumentalis*), a unity which we also find in Plato's (and later, Ficino's) doctrine of the universe as a single indivisible soul. This is in many ways to say that the isolated work concept with which we are so familiar today, shut off from world and soul alike, could have no place in such a milieu in which the relationship between music proper and the larger music of the universe was so diffuse.

But it is with the emergence of subjectivity and modern science that this connective thread is cut, so to speak, and its binding metaphysic, formerly passed down as tradition, is subjected to a scrutiny that ultimately sequesters music, soul, and world into their own isolated rationalized spheres. ¹⁰ Music is here no longer metonymically connected to this inherently meaningful world, no longer an elaboration of its pre-given truths, but instead comes to serve as its secularized afterimage, to use Adorno's word, a residue of the magical world kept apart from

⁸ Georg Lukács, *The Theory of the Novel* (Cambridge: MIT Press, 1974): 29.

⁹ For more on the work concept in general, see Lydia Goehr's *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music* (Oxford University Press: 2007). Also see Daniel Chua, *Absolute Music and the Construction of Meaning* (Cambridge: Cambridge University Press, 1999) and Gary Tomlinson, *Metaphysical Song: An Essay on Opera* (Princeton: Princeton University Press, 1999).

¹⁰ Consider Hegel's vivid description: "The statues are now only stones from which the living soul has flown, just as the hymns are words from which belief has gone. The tables of the gods provide no spiritual food and drink, and in his games and festivals man no longer recovers the joyful consciousness of his unity with the divine. The works of the Muse now lack the power of the Spirit, for the Spirit bas gained its certainty of itself from the crushing of gods and men." See G.W.F Hegel, *Phenomenology of Spirit*, trans. A.V. Miller (Oxford: Oxford University Press, 1977): 455.

more properly rational activity as mere vestige of that irrational past. ¹¹ What this essentially means is that, by merely existing, art preserves the memory of an alternate type of meaning that, with respect to modernity, cannot but be implicitly critical. "Art always says 'And yet!' to life. The creation of forms [via the autonomous aesthetic]," Lukács offers, "is the most profound confirmation of the existence of a dissonance." ¹² In the modern era, art is no longer about *elaborating* a meaning that already exists but about *creating* a meaning, a connectivity, that doesn't. It has become an activity through which the world is not repeated and reaffirmed but instead imagined otherwise, a type of labor on the world in which a vestige of that old magical connectivity can, in however compromised a form, be perpetuated. ¹³

I want to propose, once again following Adorno, that we see much of art's rhetoric of transcendence as having everything to do with this disenchanted state, namely, as an index of the desire to recover something of that meaningful way of participating in or cozying up to the world that was lost to the progressive rationalization endemic to modernity. As we said, the autonomous aesthetic can be seen as a kind of remnant of enchanted times, and one that, while cut off from the world in its own rationalized sphere, preserves the memory of that alternate form of meaning. Thus, what god, spirit, infinity, the real, and those other manifestations of transcendence seem to indicate is a desire of artworks from throughout modernity to escape themselves in order to enter into an intimate communion with an other, a desire to make contact with and participate in the larger world. They index an art that is frustrated with its autonomy,

. .

¹¹ See Adorno, *Aesthetic Theory*, trans. Robert Hullot-Kentor (Minneapolis: University of Minnesota Press, 1998): 18. By "truths" here, I simply mean the agreed-upon ways that the world and cosmos are understood for a particular group of people. In this section, those truths are largely of the neo-Platonic variety.

¹² Lukács, *Theory of the Novel*, 72.

¹³ I have found Hans Robert Jauss's discussion of this matter in terms of poiesis to be particularly helpful. See his "Poiesis," *Critical Inquiry* 8/3 (Spring 1982): 596.

¹⁴ "Art is a stage in the process of what Max Weber called the disenchantment of the world, and it is entwined with rationalization; this is the source of all of art's means and methods of production; technique that disparages its ideology inheres in this ideology as much as it threatens it because art's magical heritage stubbornly persisted throughout art's transformations." Adorno, *Aesthetic Theory*, 54.

we might say, and with the reality of being shut off from the world within the hermetically sealed bounds of its form, able to participate in the world only by mimetically imitating it from afar or, like Russolo's wall, evoking it as the representation of a kind of lack. The rhetoric of transcendence, I am suggesting, has long been at least in part about the work escaping this prison of form so that it might actually participate in the world.

This will be our starting point, at least, for understanding Varèse's own rhetoric of transcendence and metaphysical failure, which will have everything to do, I will argue, with this desire to establish some sort of intimate communion with the world. I have been implying that such a desire cannot help but bring to mind art's magical heritage, and if this strikes one as being too great a leap across the centuries, then it will help to recall that Varèse himself implied as much by his frequent resort to the pre-rational notions of magic, alchemy, and the quadrivium when articulating his dream for music. The title of Varèse's Arcana refers to the sacred secrets of alchemy and its epigraph was by none other than the Renaissance alchemist Paracelsus, whose work Varèse owned and studied. 15 One of alchemy's chief dictums was that the spiritual and physical realms were intermixed, an idea strongly resonant with our depiction of the pre-modern enchanted world above in which music itself was thought to permeate and bind together all things, from the airiest vapors to the most profane earthly materials. ¹⁶ In his lecture "The Liberation of Sound," Varèse refers to "an entirely new magic of sound" immediately after outlining his thoroughly modern vision for a science-informed art, as though to imply that ultimately science alone would be insufficient without an element of its irrational other to help it achieve the desired effect.¹⁷ As for the quadrivium, Varèse often spoke of wanting music, which,

¹⁵ Varèse outlined in pencil several passages from Paracelsus in his personal copy of the alchemist's works.

¹⁶ See John D. Anderson, "Varèse and the Lyricism of the New Physics," *Musical Quarterly* 75/1 (1991): 38.

¹⁷ Edgard Varèse, "The Liberation of Sound," in *Contemporary Composers on Contemporary Music*, ed. Elliott Schwartz and Barney Childs (New York: Holt, Rinehart, and Winston, 1967): 198.

as we said above, had become divorced from the sciences in the modern age, to be considered alongside them once again. Such an idea is particularly resonant when we recall that it was Boethius who coined the term quadrivium, the same Boethius who, in his own alchemical way, wrote of that congruence between *musica mundana*, *humana*, and *instrumentalis*.

What is implied by all of Varèse's references to the pre-rational, I would argue, particularly when used by a composer who also spoke so enthusiastically about modern science, is an underlying frustration with the world that such a science defines: a rationalized, differentiated, atomized world carved out and delineated by a kind of knowledge that can know and describe but only at the expense of imposing the distance between things characteristic of alienated subjects and objects (we remember Hegel from above: "the Spirit has gained its certainty of itself from the crushing of gods and men"). The kind of participation in the world that science offers the subject is, as Benjamin wrote in his "On the Program of the Coming Philosophy," impoverished and insufficient. ¹⁹ In the case of the new physics and other matters to be discussed below, it could also be unendingly exciting. The new physics in particular was in many ways its own form of alchemy, so remote were its assertions from the sober rationalism of the outdated Newtonian worldview. And yet at the end of the day, to dream of alchemy in this context is to dream of overcoming that impoverished form of knowing and being with the world, and also to imagine a music that might be able to overcome its sequestered autonomy and

¹⁸ "The philosophers of the Middle Ages separated the liberal arts into two branches: the trivium, or the Arts of Reason as applied to language-grammar, rhetoric and dialectic-and the quadrivium, or the Arts of Pure Reason, which today we would call the Sciences, and among which music has its place in the company of mathematics, geometry and astronomy. Today, music is more apt to be rated with the arts of the trivium. At least, it seems to me that too much emphasis is placed on what might be called the grammar of music. At different times and in different places music has been considered either as an Art or as a Science. In reality music partakes of both." See Varèse, "Music as an Art-Science" in *Contemporary Composers on Contemporary Music*, ed. Elliott Schwartz and Barney Childs (New York: Holt, Rinehart, and Winston, 1967): 198. Heidy Zimmermann notes that Varèse misunderstood the degree to which music was still studied as part of the trivium. See her "Recycling, Collage, Work in Progress: Varèse's Thought in Speech and Writing," *Edgard Varèse: Composer, Sound Sculptor, Visionary*, ed. Felix Meyer and Heidy Zimmermann (Suffolk: The Boydell Press, 2006): 270.

¹⁹ Walter Benjamin, "On the Program of the Coming Philosophy," *Walter Benjamin: Selected Writings 1913-1926* (Cambridge: Harvard University Press, 1996).

mimetic status (sequestered precisely because of that impoverished form of knowing) to actually participate in that world.²⁰

Modernism and Early-Twentieth-Century Modernity

Thus far, I have been discussing the experience of modernity on a relatively general, abstract level—modernity as a centuries-spanning historical experience increasingly marked by these themes of separation and disenchantment. But this has largely been to set the stage for and better contextualize the concrete social and existential experiences of the more specific modernity of the early-twentieth-century in which Varèse's modernism will actually find form. It is this acutely disorienting milieu, I will argue, characterized by great upheavals in nearly every domain of experience and marked by a radical intensification of the experience of time, that will contribute to Varèse's sense of diremption from the social fabric and provide a key as to the particular urgency with which he deployed the artwork as an attempt at some sort of intimate communion with the larger world.

If the goal of art was to achieve, as we have been proposing, a kind of vicarious participation in the world, then no milieu could have complicated that task more than the breathless whirlwind of post-war New York, so alive with the creative destructive vigor of modernity at its most blindly determined. With the arrival of the twentieth century, in which the upheavals of world war, the paradigm shifts of the new physics, and the urbanization of an emergent bourgeoisie all contributed to such an intensified experience of time, it is the very notion of a world that suddenly seems inadequate to art insofar as even the world now seems so

²⁰ This is Adorno's argument. "The trace of memory in mimesis, which every artwork seeks, is simultaneously always the anticipation of a condition beyond the diremption of the individual and the collective." See *Aesthetic Theory*, 131.

susceptible to being swept away. This would be that milieu in which "all that is solid melts into air," to borrow Marx's phrase, including stable forms of meaning, which come and go with the wind of technological innovation and social revolution alike. Any attempt at a vicarious participation in the world through art has now been further hindered by the fact that the world will not sit still long enough for this to happen. There is still the time of the individual, time as a function of the concrete, ritualistic workaday activities of daily life. But this time increasingly rubs against another more "official time," an emphatically linear time marked by the rapid progression of world-historical events and happenings that the individual can witness but in no way hope to see themselves as participating in. It is a situation in which "we feel dizzy," as Octavio Paz has written, and where "what has just happened already belongs to the world of the infinitely remote." Time has become fractured and alienated from the subject. Modernity has become a train constantly leaving the station before anyone is aboard.

Temporality, then, will be another of this dissertation's most important themes. Earlier, we spoke of Varèse's rhetoric of transcendence as indicating a desire for the artwork to overcome its sequestered autonomy to achieve an intimacy with the larger social fabric. But in a situation in which the world itself is so elusive and constantly new, we will find the desired contact to be less with the world proper and more with the time that seems to constantly remake it. This is to say that if Varèse's desire to transform his wall into a window was a desire to make something that escaped the contingency of the merely made, imitative thing to actually participate in the world in a more meaningful way, to be something true and real, then we must see how, in a situation in which paradigm-shifting developments like quantum physics were displacing even the most tried and true foundational concepts of experience, the realest thing of

²¹ Octavio Paz, *Children of the Mire: Modern Poetry from Romanticism to the Avant-Garde* (Cambridge: Harvard University Press, 1974): 6.

all might have seemed to be the fundamental nature of change, movement, and time themselves. Particularly in the last chapter, I will be proposing that what Varèse attempted to seize hold of and participate in via his works—or from another angle, what he wanted his works to actually *become*—was just that elusive creative-destructive force: the libidinal drive of modernity, blindly groping its way towards the new.

We know that this exhilarating, disorienting environment contributed not only to Varèse's music but to the obsession with the new characteristic of modernism in general. And undoubtedly, we must see the forms that resulted—so often opaque and alienating—as being somehow qualitatively distinct from those that came immediately before. Yet from a different perspective, I want to suggest that we see these same radically new forms as representing not so much a radical break from those of a recent artistic past as much as a culmination, admittedly pushed to its extreme, of the much larger social phenomenon of modernity in general.

Modernism's obsession with the new, that is—modernism as that commonly-referred-to circumscribed historical period from the late nineteenth and early twentieth century —has its model in the inaugural past-rejecting, contingency-embracing gesture of modernity itself, a gesture that indexes a realization that a meaningful connectivity to the present can no longer be passively inherited from the past but must instead be actively cultivated and renewed along an (increasingly) ever-moving stream of time. 22

Such a permeable understanding of modernism—modernism as both the radical art of the early 20th century as well as a certain tendency of so much art that came before it—can be

_

²² It should be becoming clear by this point that my aim is not to differentiate Varese's modernism from other modernisms, but to better understand Varese precisely by way of an understanding of modernism that we can, for the most part, understand as univocal. It goes without saying that many different so-called modernisms can be accounted for, and indeed, modernism is notorious for being able to accommodate both Fascism (Marinetti) and Socialism (Malevich), to name but one exemplary pair. But we can also speak of those disparate strains as searching for answers to the same problem, I think, arising from social circumstances that are discussed shortly below and throughout this dissertation.

confounding, in part because modernism is by many accounts about nothing if not a radical break from those very older eras. Conceived of in a purely stylistic vein, it is about a "crisis in language" or a "turn towards abstraction," we are told, phrases that imply either an exceptional and traumatic historical moment or a shunning of history altogether.²³ But by understanding modernism as a mere style rather than seeing it as a more general attitude towards the present tied intimately to a much larger historical project, both of these interpretations hinder our ability to understand its larger historico-philosophical significance as an artistic phenomenon whose greatest subject is actually modernity itself and the sometimes exhilarating, sometimes terrifying consequences of its rejection of the past.²⁴ We are not far here from Adorno's understanding of early-twentieth century modernism as not an isolated stylistic period so much as a kind of culmination whose cryptic products betray the dark consequences of the process of rationalization in which art has, to various degrees, always participated.

And yet, we cannot move too quickly here. Because something special *did* happen along that continuum around the turn of the century, something that *did* in fact result in a crisis of language and turn towards abstraction. The key, however, is to see that crisis as being every bit a product of that larger aforementioned historico-philosophical processes, even if its consequences were in many ways different in kind. We will have much more to say about this below, but for now we need only note that the crisis was not so much in art as it was in art's public. If up until the end of the 19th century, an ever-evolving art could still be said to have had a relatively stable social base to address, one consolidated by normative aristocratic values trickled down into the

. .

²³ Robert Morgan, for example, perpetuates this much more circumscribed view. See his "Secret Languages: The Roots of Musical Modernism," *Critical Inquiry*, 10/3 (March 1984): 444.

²⁴ I take this notion of modernism as an attitude towards the present from Baudelaire, namely the latter's "The Painter of Modern Life." See *The Painter of Modern Life and Other Essays*, trans. Jonathan Mayne (New York: Phaidon Press, 2008). For a gripping elaboration of this position, see Foucault's "What is Enlightenment" in *The Essential Foucault: Selections from the Essential Works of Foucault 1954—1984*, ed. Paul Rabinow and Nikolas Rose (New York: The New Press, 2003).

larger public sphere (those seemingly timeless concepts such as Spirit, Nature, Beauty, and such), the revolutionary upheavals of the early twentieth century ended all of that. The aristocratic social base that had long lent consistency to art was waning, if not entirely gone. Thus, modernity had, as part of its past-rejecting adventure, also rejected the foundations from which that adventure had long been viewed and understood. What was left was an art still beholden to those grand dreams of transcendence associated with the recently ousted ancient regime and yet without a regime—a cohesive world-image or collective point of departure, we might say—into whose image to make itself over. If it is here that art turns towards abstraction, it is because it is here that art turns away from a now-missing public and towards itself where, by whatever fantastic means of reaching, testing, and searching, it might somehow remake that negativity, that lack of a concrete social base, over into form. ²⁵ Varèse once spoke of "groping towards the music [he] sensed could exist." ²⁶ We will take modernism to be the sound of that groping, the sense of blind reaching for new forms of bindingness in the wake of the dissolution of an older organizing ideology.

But why such terminological hairsplitting in a dissertation on Varèse? Why the need to marry modernism with modernity in such an explicit way? Simply because without doing so, we fail to grasp the degree to which larger historico-philosophical issues are implicated in the way Varèse chooses to speak of artistic transcendence. We risk depriving a reference to something so seemingly inconsequential as alchemy, for example, of its potential critical power, dismissing it as yet another metaphor—however anachronistic—for art's ineffable quality, rather than seeing it as a negative presence within the work, as a goal that art in the modern age could never hope to

²⁵ In T.J. Clark's words, "Modernism is the form formalism took in conditions of modernity—the form it took as it tried to devise an answer to modernity," by which he means precisely that shift in the nature of the public. T.J. Clark, "Modernism, Postmodernism, and Steam," *October* (Spring 2002): 186.

²⁶ Edgard Varèse, interview transcription in *Composers' Voices from Ives to Ellington*, ed. Vivian Perlis and Libby Van Cleve (Yale University Press, 2005): 103.

achieve. "Modernism," T.J. Clark has written, "turns on the impossibility of transcendence." At the dawn of the modern era, art enters the scene as a vestige of the magical connectivity of the pre-modern, and yet it is a magic that, in the context of the disenchanted world, can now exist as little more than illusion. The entire history of art in the modern period could perhaps be read as the gradual process through which art becomes increasingly self-aware of this ersatz status, culminating in the crisis period known as modernism in which art's claims to facilitating a renewed intimacy with the world must confront, as never before, the similar yet qualitatively different claims of science.²⁸ Art's growing suspicion of its own metaphysical failure, coupled with its intense desire to circumvent this failure by new means, is born out of just this situation. Its "violent quest for verisimilitude," its "frenzy to uncover the thing beneath the semblance of the thing," to quote Dan Albright, "stems from its desperate effort to enhance its dignity and selfreliance." ²⁹ Varèse's music exhibits nothing if not this violent frenzy. And as we will see, that dignity and self-reliance for Varèse will come in the form of an art that in many ways casts off the exoskeleton of art, so susceptible to being rendered obsolete by modernity's whims, to seize upon the real of modernity itself.

Survey of Literature

As I have been suggesting, this dissertation is, if only implicitly, as much about modernism in general as it is about the specific modernism of Varèse, and it originated out of a simple desire to understand both in the broadest possible sense: as phenomena that draw deeply

_

²⁷ T.J. Clark, *Farewell to an Idea* (New Haven: Yale University Press, 2001): 22.

²⁸ See Gabriel Josepivici's Whatever Happened to Modernism? (New Haven: Yale University Press, 2010).

²⁹ Daniel Albright, *Representation and the Imagination: Beckett, Kafka, Nabakov, and Schoenberg* (University of Chicago Press, 1981): 5.

on the concrete social experiences of a particular time but that also bring to light certain consequences and truths of historical contingencies—namely, those of modernity in general—that are long in the making. This latter point might seem obvious; all art has a history and all artworks are clearly the precipitates of values, ideologies, and social forces that originated long before they found form. But nowhere is it easier to forget this than in an art so beholden to the idea that the present might be just that place where those contingencies might be transcended. As Varèse so vividly exemplifies, modernism wants so badly to escape the ravages of time and history and transform its walls into windows, and in most cases, it wants us to believe that it has done so. And yet the more it waxes ecstatic about and urgently needs the new, the more it dialectically betrays a secret horror in the face of (and continued dependence upon) its alternative. Varèse's often euphoric enthusiasm for the new, that is, draws our attention away from the other side of the coin: what is surely a terror before the abyss of the recent past that nips at the heels of the new, and in which aged chestnuts like tonality and the tempered scale, robbed of their meaning by time, go to die.

What I am saying is that, from a certain existential point of view, modernism's obsession with the new needs to be seen in part as an obsession out of necessity. From the perspective of art, whose business of meaning-creation is in many ways so opposed to the notion of the constantly new, we can see modernism's complicity with the new less as a partnership bred from a genuine excitement and more as its capitulation to a kind of unspoken social command. That breathless temporality of modernity, in which time is encountered as an other that one *must* keep up with, presents itself as an overpowering inevitability that, through a kind of subjection, becomes internalized into the creative super ego of composers themselves. Lest one succumb to that abyss of the recent past, the time consciousness of modernity becomes a force to which one

has no choice but to submit. Crucially, such a reading allows us to see how Varèse's obsession with the new might have arisen not simply out of an enthusiasm for science and such for their own sakes, but rather out of a very real sense, however unconscious, that meaning—that sense of participation in and intimacy with one's own time—simply could not be created by other means.

It should go without saying, then, that any study of modernism that focuses exclusively on the ecstatic side of the coin—on that unmitigated enthusiasm for machines, technology, and the like—does so at its peril. And yet this is precisely what most scholarly studies of Varèse have done. They have taken Varèse's rhetoric at face value, in other words, or have sought refuge in uncritical games of "hunt the slipper," doing little more than attempting one-to-one correspondences between Varèse's scientific/technological ideas and their supposed analogs in his music. This would be more unfortunate were it not the case that so little scholarly work has been done on Varèse in general. But the fact remains that in confining itself to the mere recounting of biographical facts and other very local matters, Varèse scholarship has ignored the larger issues that are at stake in his music. For my purposes, the most important of those is what music has to say about the existential experience of modernity in general.

There are a few studies that have gestured in a more positive direction. Carol Oja's *Making Music Modern* is notable for the way it connects the music of Varèse and others to the exhilarating atmosphere of post-war American modernism, and also for beginning the work of bringing important figures like Henri Bergson into the discussion of the music that was produced therein. I also credit Oja's work for turning me on to the criticism of Paul Rosenfeld, whose nuanced, if at times hyperbolic, readings of Varèse's music through the lens of the experience of

³⁰ Regarding the latter point, I am thinking particularly of John D. Anderson's "Edgard Varèse and the Lyricism of the New Physics" as well as John Strawn's "The Intégrales of Edgard Varèse: Space, Mass, Element, Form," both of which are oriented around this tautological approach. See John D. Anderson, "Edgard Varèse and the Lyricism of the New Physics," *Musical Quarterly* 75/1 (Spring 1991), and Strawn, "The Intégrales of Edgard Varèse: Space, Mass, Element, Form," *Perspectives of New Music* 17/1 (Autumn-Winter 1978).

modernity remain unendingly persuasive. Olivia Mattis' writing, particularly her article "Varèse's Multimedia Conception of 'Deserts'," has begun the work of combating the image of Varèse as a mere two-dimensional technophile by creating a picture of the composer as someone torn between a myriad of often conflicting influences and ideas. For my purposes, the most important of these is the Dionysian rhetoric of Nietzsche and Artaud, which is important for understanding not only the creative/destructive tendency of modernity itself but also a certain ambivalent, contradictory thread in Varèse's modernism, both of which we will discuss in the concluding chapter. Similarly, Larry Stempel's work has made an attempt to dig beneath the composer's strong-headed rhetoric to reveal moments of complex humanity ranging from deep-seeded oedipal resistance³¹ to touching awkwardness.³² And no less important for these same reasons is the biographical work of Varèse's wife Louise, which offers an invaluably candid account of her husband that does much to temper the often times grandiloquent nature of his public face.

From an analytical perspective, my readings of Varèse's scores are indebted to the spatially oriented graph analyses of Jonathan Bernard, which, in an attempt to better account for the way Varèse talked about his own music, treat notation less as a way of representing isolated points of sound and more as a way of delineating the outer boundaries of strictly measured blocks of musical space. This spatial perspective will prove enormously useful in illustrating tendencies of pitch space saturation, parataxis, and other phenomena in Varèse's scores that will in turn resonate in important ways with extra-musical notions such as disenchantment and the real.³³

³¹ Larry Stempel, "Not Even Varèse Can Be An Orphan," *The Musical Quarterly* 60/1 (January 1, 1974).

³² Larry Stempel, "Varèse's 'Awkwardness' and the Symmetry in the 'Frame of 12 Tones': An Analytic Approach," *The Musical Quarterly* 65/2 (April 1979).

³³ Jonathan Bernard, *The Music of Edgard Varèse* (New Haven: Yale University Press, 1987).

I will quickly mention a few other studies that have done much to influence my thinking: Julian Johnson's Webern and the Transformation of Nature, for reconnecting the thorny modernist project with its roots in romanticism by showing the ideological underpinnings of its concept of nature, a notion that we will discuss in our first chapter³⁴; Daniel Chua's Absolute Music and the Construction of Meaning, for clarifying the philosophico-historical substratum (including the Weberian disenchantment mentioned above) of a conception of music we tend to take for granted and which is so crucial to any understanding of the hermetic nature of the modernist work³⁵; Gary Tomlinson's *Metaphysical Song*, for its vivid elucidation of that aforementioned musical connectivity within the neo-Platonic world of Renaissance cosmology³⁶; Lydia Goehr's "Radical Modernism and the Failure of Style: Philosophical Reflections on Maeterlinck-Debussy's 'Pelléas et Mélisande'" for its nuanced discussion of the way modernist artworks undermine their own attempts at transcendence³⁷; and Daniel Albright's Representation and the Imagination: Beckett, Kafka, Nabokov, and Schoenberg, for its compelling discussion of the modernist desire for works to slough off their mimetic character to actually be the thing itself.38

In the end, however, this is as much a dissertation about the experience of modernity in general as it is about music, which means that many of its frames of reference will come from outside of musicology proper. Of these, the most important (if not always explicitly referenced) will be the notion of experience itself as theorized by writers such as Benjamin, Adorno, Lukács, and others. In Benjamin's notion, modernity and its particular forces of production bring with

³⁴ Julian Johnson, Webern and the Transformation of Nature (Cambridge: Cambridge University Press, 2000).

³⁵ Chua, *Absolute Music*.

³⁶ Gary Tomlinson, *Metaphysical Song: An Essay on Opera* (Princeton: Princeton University Press, 1999).

³⁷ Lydia Goehr, "Radical Modernism and the Failure of Style: Philosophical Reflections on Maeterlinck-Debussy's *Pelléas et Mélisande*," *Representations* 74 (Spring 2001).

³⁸ Albright, *Representation and the Imagination*.

them a decline in the qualitative dimension of experience, which is to say that experiences in general are less likely to bear a kind of meaning that resonates with or can be integrated into the larger social or imagined totality. Experiences take on the form of shock, to use an example we will encounter in Chapter 1, a phenomenon intimately tied to urban life in particular and its surplus of sensory encounters that can never be adequately processed or assimilated. For Benjamin and Adorno, the poetry of Baudelaire is notable for the way it explicitly embraces these experiences as its content, an important move with respect to modernism in that the artwork thus proclaims its contingency upon the extra-artistic—in a sense making experience itself a key theme of the work—even as it attempt to transcend that contingency by way of the aforementioned "secularized magic" of form. ³⁹ In many ways, my dissertation builds on this foundation, examining Varèse's music as something that absorbs and encodes a particularly inassimilable experience while seeking at the same time to redeem it. It also builds upon many of Adorno's elaborations and emendations of that discourse, including his nuanced discussions of the relationship between meaning, the new, and capitalist temporality; and his explications of the mimesis concept and its rootedness in art's magical heritage. 40

³⁹ Benjamin discusses experience in numerous places, but most notably in his works "The Storyteller" and "On Some Motifs in Baudelaire." Many of Adorno's references to Baudelaire occur in the "Situation" section of his Aesthetic Theory. For a good secondary source on the subject of Benjamin and experience, see the work of Richard Wolin, particularly his "Benjamin's Materialist Theory of Experience," Theory and Society 11/1 (Jan 1982). For a good source on Adorno and experience, see Roger Foster, Adorno: The Recovery of Experience (SUNY Press, 2007). Giorgio Agamben's Infancy and History is another excursus on the Benjaminian destruction of experience. ⁴⁰ At this time, I am only familiar with one substantial reference to Varèse in Adorno's work, and that is in his article "The Aging of New Music," in which Adorno writes: "The work of Edgard Varèse bears witness to the possibility of musically mastering the experience of a technologized world without resort to arts and crafts or to a blind faith in the scientization of art. Varèse, an engineer who in fact really knows something about technology, has imported technological elements into his compositions, not in order to make them some kind of childish science, but to make room for the expression of just those kinds of tension that the aged New Music forfeits." Amusingly, Adorno sent Varèse a copy of his *Philosophy of New Music* bearing the inscription: "To Edgar Varèse—hoping that he will not find this too far behind the avant-garde—in sincere admiration, T.W. Adorno, Frankfurt, August 31, 1950." See "The Aging of New Music," Essays on Music (Berkeley: University of California Press, 2002), 194. See also T.W. Adorno, Philosophie der neuen Musik, Edgard Varèse Library, Harry Ransom Center, University of Texas, Austin.

Lastly, I should mention the work of art historian T.J. Clark, whose *Farewell to an Idea*: Episodes from a History of Modernism has also provided something of a jumping off point for this project. Clark's forays into the complex relationship between modernism's intense desire for meaning creation and transcendence within a milieu of disenchantment, modern time consciousness, and contingency are exemplary and they have informed this work, I am sure, in more ways than I know.

Chapter Summaries

Albright, speaking of modernism, writes:

When representation is forced to its limits, when the artist taxes his ingenuity not merely to simulate his object but to capture it, embody it, a violent strain is placed on the whole apparatus of his technique; what he will present to his audience is precisely that strain, that tension of reaching, since what he seeks forever eludes his grasp. 41

We are reminded here of Varèse's comment from above: "Music, like all the arts, is but a means of expression; only the conception counts. As perfect as it may be, never will technique be able to rise to its level." We will not need to look deeply within Varèse's writings to find more references to this failure of technique to grasp what forever seems just out of reach. Varèse's writings reveal nothing if not precisely this "strain," this sense of a constantly deferred gratification in which a dreamt-of music is ever neared but never quite achieved. It is a strain that can be heard in the music as well, particularly in the early orchestral music and its tendency to lurch repeatedly upwards in those manic expressions of will tinged equally in ecstasy and desperation. At times, we get a sense that, by way of the sheer force of volume and saturation of pitch space. Varèse felt as though he could somehow force his way through the mediation that kept his music from achieving those desired alchemical transformations, each surging

⁴¹ Albright, *Representation and the Imagination*, 12.

culmination of pitches resembling a profanely material tower of babel willing its way towards a communion with a rarefied immaterial world. In the pages to come, I will be exploring Varèse's language of transcendence as it relates to the breathtaking experience of modernity, and I will do so by way of three ideas or things around which this "strain" seems to precipitate. I am interested in exploring how the artwork, as a made and thus profoundly material thing confronted with the task of apprehending and making contact with something so ephemeral as modernity, so often ends up asserting itself as that mere "tension of reaching," to use Albright's expression, as a kind of allegorical limit or threshold past which the essence of modernity always lies just out of reach.

In chapter one, that point of condensation will be the figure of the siren. A quintessential symbol of modernity at its most chaotic and used by Varèse in a number of compositions (including *Hyperprism*, in which he seems to have unconsciously transcribed the pitches of an actual siren heard from his bedroom window), the siren represented at once the bustling cacophony of urban life and the more violent conflagrations of world war. It was a sign that the bounds of subjectivity had been (ambulance) or were about to be (air raid) breached, and a general symbol of experiences too overwhelming to be assimilated into conscious life. Neither the subject nor subjective meanings were entirely safe before the creative-destructive whims of modernity, the siren seemed to say, consigning that subject to a place of vulnerability while enshrining modernity as an impersonal force whose blows could never fully be parried.

But even as the siren represented this impoverished form of experience, so resistant to meaningful assimilation into subjective life, it also represented a new, albeit disenchanted, realm of transcendence: the realm of the impersonal, intransigent real. As a quasi-mystical space that existed beyond the mediation of mere symbols, symbols which an intensified time consciousness

had revealed to be so contingent upon past ages and circumstance, the real represented the truer fundament obscured by but always coursing beneath those symbols—a fundament that, in its elusive, inassimilable character, was in some ways hardly distinguishable from that of modernity itself. What's more, the siren was an embodiment of the real in its very form: a smoothly parabolic continuum yet to be parsed into discreet notes that could do little but block access to a more essential reality.

What will be at issue in terms of our theme of metaphysical failure, then, will be the musical work's inability to convincingly seize upon and embody that real strictly by way of the mediating and outworn musical technologies of the symbolic. The chief of those technologies will be the tempered scale, which Varèse deemed modernity to have long ago rendered obsolete. We will examine this problematic in the light of what Friedrick Kittler has termed the "discourse of 1900," a general fascination with the real made possible by the emergence of data storage technologies such as the seismograph (which Varèse mentioned often) or gramophone that could, for the first time and unlike writing, record the meaningless noise that the symbolic had to suppress to remain intelligible. After comparing Varèse's disdain for the obfuscating tendencies of that symbolic (the now-disenchanted tempered scale) to that of his mentor Busoni, we will see how the musical real, unmediated by tonal or other interpolations, could be seen to directly register the seismographic traces of modernity at its most impersonal and inassimilable.

Additionally, we will examine the more concrete social situation that could allow such an impersonal realm to take on the meaning it did.

In chapter 2, we will explore this notion of contact with modernity more in terms of the work's relationship to time, namely, the absolute present as an ideal and essential content of modernity that is always slipping from the work's grasp. Of importance here will be the acute

awareness of a particularly linear, irreversible time characteristic of the experience of modernity and responsible for what we might call its allegorical historical sensibility. This would be the awareness, generated largely out of modernity's persistent search for the new, of meaning's inevitable decay into the meaningless to reveal the contingency of all meaning on particular circumstance. ⁴² But it would also be a sensibility that brings with it the messianic hope that each new present might nonetheless be able to deliver the stable form of meaningfulness that the new promises but can never quite deliver. It is within this milieu that we will situate Varèse's discourse on the present and his attempts to establish some sort of meaningful relationship with it through art, particularly by way of one of the present's most potent symbols: science.

As a point of departure, we will begin with Baudelaire, considered by many to be a father of modernism and whose theory of beauty from "The Painter of Modern Life" will provide a helpful conceptual framework for understanding Varèse's own relationship to the fleeting new. For Baudelaire, art was an attempt to overcome the profane time of modernity by way of that very time—an attempt, in Matei Calinescu's words, to go "beyond the flow of history through the consciousness of historicity in its most concrete immediacy, in its presentness." Beauty was an evocation of the "eternal in the transient," by which he meant that the eternal—a kind of redeemed meaning seemingly free from contingency, immanent in the structures of its making—could only be conjured by way of an element of the fleetingly present, perhaps the most contingent thing of all. We will trace aspects of this paradox through the writings of Busoni and into those of Varèse himself, where we will find it to be heightened by the fact that that for the latter, that essential element of the present is now symbolized by science. "On the threshold

. .

⁴² What will make the real from chapter one so attractive from this perspective is in part its immunity from precisely this disenchantment; the real will symbolize the essence of modernity's elan vital itself, not the weighty symbolic structures within its stream whose meaning would inevitably decay.

⁴³ Matei Calinescu, Five Faces of Modernity (Durham: Duke University Press, 1987): 50.

of beauty, science and art collaborate," Varèse wrote. Our questions will be these: what becomes of art's dream of eternity and world-creation when it is so beholden to progressive discoveries that exist, as they do in science, merely to be surpassed? Moreover, what happens to that notion of overcoming time by way of time when "art like science must live," as Varèse said, "in a state of perpetual unrest and revolution"? To answer, we will explore Varèse's rhetoric of revolution and its ambivalent resonance with both capitalism, in which the new is sought simply for the sake of itself, and actual social revolution, which we will find to be at the forefront of Varèse's creative imagination and which implied not a further perpetuation of the new but a final release from its profane temporality.

In chapter 3, our theme will once again be Varèse's attempts, made through art, to achieve a more intimate relationship with modernity's profane temporality, except that here our subject will be the notion of contact proper, both as a pervasive theme throughout Varèse's writings and as something desired in a surprisingly literal way from artworks themselves. Much as in chapter two, the time of modernity will assert itself as a kind of inassimilable other radically indifferent to the more circular temporality of private experience, except that here, that modernity will also become aligned in Varèse's creative imagination with a kind of vitalism—a life-giving stream—that the subject, art, and institutions alike could ignore only at their own peril. "Art is subject to the same laws as life," Varèse wrote. "Life is effort, movement, progress. For the mind as for the body, to cease struggling is to begin to die." To obey the laws of life—which as we will see, were conflated with a general ontology of modernity itself—was to maintain a kind of unmediated contact with the absolute present, whether through social forms that promoted that contact or art works that, in one way or another, provided it.

⁴⁴ Edgard Varèse, "Jérom' s'en vat'en guerre," *Eolian Review* (Feb 1924).

We will begin by examining Varèse's charged rhetoric of contact in relation to his frustration with old musical forms, stagnant political structures such as the nation state, and any type of atomized, outmoded mode of experience that seemed to shut people off from the lifegving monism of modernity's elan vital. From there, we will move to a discussion of music proper and to the particularly curious relationship between Varèse's rhetoric of contact and his highly physical, at times even violently invasive, notion of sound. After tracing that notion through the writings of Hermann von Helmholtz, in which music is singled out among the arts for the intimate (and quite literal) contact it maintains with the listener's body, we will consider what Varèse might have meant by his desire for music to do such things as "hit the hearer on the back of the head" and serve as a "bomb that would explode the musical world." Ultimately, I will argue that these somewhat disturbing notions, together with the Dionysian rhetoric surrounding works such as the unfinished *The One All Alone*, indicated a desire to overcome the recalcitrant shell of the listener's subjectivity and open them up to the possibility of a more redeemed type of contact with modernity. With echoes of a disenchanted version of the music of the spheres, the Varèseian sonic will be a kind of prosthesis of touching, an ersatz pneuma torn between metaphysics and mechanism that at once fulfills and parodies the modernist desire for immediacy.

Chapter 1

Varèse, Sirens, and the Sonic Real

There is a story often told about the origin and premiere of Varèse's chamber work *Hyperprism*. The event took place on March 4, 1923 with the composer conducting, and was, even for the age of the *succès de scandal*, hardly an uneventful affair. According to W.J. Henderson, the audience broke out into a cacophony of laughter, hisses, and catcalls, ⁴⁵ fistfights, according to another ⁴⁶, all instigated at least in part by the work's strident, incessantly repeated C-sharps. As it turns out, those c-sharps had an unlikely origin. Critic Paul Rosenfeld recounted in his *Musical Chronicle*:

During the first performance of the work, [the c-sharps] produced convulsive laughter in the audience. But when the composer returned to his home that evening, and sat working into the night, he heard from somewhere over the city, a very familiar sound, a siren; and realized that he had been hearing it for many nights, over six months; and that the tone was exactly a very shrill high c-sharp.⁴⁷

From the peak of a distant parabola, yawning somewhere in the night, Varèse had unknowingly derived part of the content of one of his more contentious compositions. For listeners on March 3, that content was disturbing, and it would be reasonable to assume that its source of inspiration might have been no less so for a composer attempting to compose in the solitude of his own home. But Varèse was not any other composer, Varèse for whom the sounds

⁴⁵ W.J. Henderson, quoted in Fernand Ouellette, *Varèse*, trans. Derek Coltman (New York: The Orion Press, 1968): 77. It should be noted that subsequent performances of the work, most notably the next one under Stokowski, received rave reviews. See Carol Oja, *Making Music Modern* (New York: Oxford University Press, 2003): 35. ⁴⁶ Ouellete, *Varèse*, 77.

⁴⁷ Paul Rosenfeld, *An Hour with American Music* (Westport: Hyperion Press, Inc., 1979): 163.

of the city were not noises from which music was to be vigilantly differentiated, but rather the index of a vital energy of modernity that music could ignore only at its peril. It is more than a coincidence, then, that on other occasions, Varèse actively embraced sirens, experimenting with them in the manner of Helmholtz's magisterial work *On the Sensation of Tone* before using them as actual instruments in works such as *Amériques*, *Arcana*, and even *Hyperprism* itself. And yet, despite the fact that Varèse ultimately embraced the siren as a crucial part of his musical world, on that night in March, it wasn't Varèse who had chosen the siren but the siren that had chosen him.

It is possible, of course, that the siren anecdote is largely apocryphal. But its veracity should not concern us. Whether true or contrived, Rosenfeld chose to talk about it, and in choosing to talk about it, implied that there was something special, something utterly meaningful, about the particularly invasive way modernist works were conceived as well as about their relationship to their immediate environment. He provides us, in other words, with a kind of uniquely modernist primal scene, and one that any historian interested in modernism's discursive modes would be foolish to ignore. Curiously, though, the story has rarely received more than a cursory mention in secondary literature on Varèse, most often as evidence in support a larger mythology of the modernist-composer-as-magician, capable of transfiguring even the most invasive city noises into redeemed constellations of sound. Rosenfeld's account discussed above is no exception, occurring during a section of his *An Hour with American Music* in which he attempts to differentiate Varèse's sonic incantations from the Futurist's supposedly inferior, crudely imitative style. If the Futurists were excessively literal in their employment of sounds

⁴⁸ For more on this construction of Varèse, see Hermann Danuser, "The Varèse Myth," in *Edgard Varèse: Composer, Sound Sculptor, Visionary,* ed. Felix Meyer and Heidi Zimmermann (Woodbridge: The Boydell Press, 2006), 423.

⁴⁹ Rosenfeld, An Hour with American Music, 162.

such as the siren, the argument goes, then Varèse "used his new sonorous medium in interests other than those of descriptivity," revealing through music the city as motley symphony, a transcendent whole in which "rasping, blasting, threatening machinery [became] strangely fraternal [...] full of character and meaning [...] revealed as integral parts of some homogenous organism breathing, roaring, and flowing about."⁵⁰

What rests at the core of this interpretation and others like it is in part an attempt to rescue Varèse's music from the barbarism of the literal, to paraphrase Adorno, an effort to preserve, even within a music wrought from the forsaken landscape of the modern city, some glimmer of the metaphysical.⁵¹ Unlike the Futurists, Varèse is here a true musical alchemist who, like his model Paracelsus in *Arcana*, transmutes crude sounds coming in through his window into musical gold, domesticating them all the while into something "strangely humanized and fraternal." As a result of this siren transmogrified, listener and composer alike are thus able to "feel the conditions under which objects exist," all while becoming "part of forces larger than [them]selves."⁵²

As we will see in the last chapter, this last remark is in many ways as fit a description of how Varèse might have viewed his own music as any. But we are nonetheless nearing here the

⁵⁰ Ibid. Here is the entire passage: "Following a hearing of these pieces, the streets are full of jangly echoes. The taxi squeaking to a halt at the crossroad recalls a theme. Timbres and motives are sounded by police whistles, bark and moan of motor horns and fire sirens, mooing of great sea cows steering through harbor and river, chatter of drills in the garishly lit fifty-foot excavations. You walk, ride, fly through a world of steel and glass and concrete, by rasping, blasting, threatening machinery become strangely humanized and fraternal; yourself freshly receptive and good-humored. A thousand insignificant sensations have suddenly become interesting, full of character and meaning; gathered in out of isolation and disharmony and remoteness; revealed integral parts of some homogenous organism breathing, roaring, and flowing about."

⁵¹ See T.W. Adorno, *Aesthetic Theory*, trans. Robert Hullot-Kentor (Minneapolis: University of Minnesota Press, 1997): 61.

⁵² Paul Rosenfeld, *Musical Impressions*: *Selections from Paul Rosenfeld's Criticism*, ed. Herbert A. Liebowitz (New York: Hill and Wang, 1967): 225. He writes: "music is expressive, carrying [...] us out of ourselves and beyond ourselves, into impersonal regions, into the stream of things; permitting us to feel the conditions under which objects exist, the forces playing upon human life. To live, to merge with the stream and become part of forces larger than ourselves, is to feel, to know something about the entire world; music lets us share in a great man's absorption: at least to the degree to which we are capable of being lost to ourselves."

well-tred and undoubtedly Romantic cliché of the composer-as-vessel who unconsciously channels the elusive spirit of the profane modern world into the redemptive form of artworks. We find this trope in E.T.A. Hoffmann, for example, for whom the composerly unconscious is a kind of privileged resonator, perfectly tuned to a "secret music of nature," which vibrates in a fortuitous "sympathy with the composer's spirit." For Rosenfeld and Hoffmann alike, what seems to enter into the composer's unconscious is not raw otherness or inassimilable experience as such, but rather, an intuition of something transcendent of that experience, a sense of its content "raised to a higher power." The siren registers not as a siren, that is, but as a sirenalready-become-spirit; not as something invasive and external—something undeniably other—but as an always-already distilled, a priori condition of the artwork.

To be sure, there is a sense in which Rosenfeld's reading is exactly right. In speaking of how Varèse's music carries "us out of ourselves and beyond ourselves, into impersonal regions, into the stream of things," he is describing a musical intimacy not with some sort of Romantic Elysium but with the alienated temporality of modernity—perhaps the ultimate Other—of the sort described so vividly by writers like Nietzsche and Bergson. And yet what remains problematic about Rosenfeld's account and others like it is that it seems to ascribe the condition of modernity to the siren while denying that same condition to the way the siren enters into the unconscious. Perhaps because the composer's unconscious is deemed already predisposed towards the "secret music of nature," no account is needed of its initial encounter with that nature, of the moment when siren essentially breaches mind. Far from being the discourse of the Other, the Romantic composer's unconscious is here a region seemingly already one with the

_

⁵³ E.T.A. Hoffmann, *E.T.A. Hoffmann's Musical Writings:* Kreisleriana, The Poet and the Composer, *Music Criticism*, ed. David Charlton, trans. Martyn Clarke (Cambridge: University of Cambridge Press, 1989), 164. ⁵⁴ Hoffmann, "Beethoven," *E.T.A. Hoffmann's Musical Writings*.

⁵⁵ This will be the subject of chapter three.

world from which it takes its sounds, needing only to store those sounds at the composer's unknowing disposal until they emerge transformed in the musical work.

What is at issue, then, is the particular discourse needed to make sense of artistic materials such as the siren, materials so tied to a specifically 20th-century experience and modernity, that don't so much as suggest themselves to the composer's creative unconscious as force their way in. To be sure, the notion of art as a product of some sort of outside agent, temporarily inhabiting or taking control of the artistic imaginary, is not at all new. It can be found in the age-old trope of artistic inspiration, for example, which, at least since Socrates, has viewed artists as figures temporarily robbed of their agency—possessed even—by forces both inexplicable and outside their conscious control. And yet most often, the outside world in those models doesn't as much *erupt* into the unconscious as it does simply *resonate* with it as though from a distance, ultimately revealing that aforementioned "secret harmony with [a] nature" otherwise thought to be hostile. Of the romantic unconscious, Henri Ellenberg writes:

[The Romantic unconscious] was the very fundament of the human being as rooted in the invisible life of the universe and therefore the true bond linking man with nature. Closely related to the notion of the unconscious was that of the 'inner' or 'universal sense' (*All-Sinn*) by which man, before the fall, was able to cognize nature. [It] enabled [the Romantics] to gain some direct understanding of the universe, be it in mystical ecstasy, poetic and artistic inspiration, magnetic somnambulism, or dreams. ⁵⁷

What we lose in understanding Varèse's encounter with the siren through such an anachronistic historical lens is our ability to understand those encounters by way of a discourse

down from the Muse. And every poet has some Muse from whom he is suspended, and by whom he is said to be

⁵⁶ See M.H. Abrams, *The Mirror and the Lamp: Romantic Theory and the Critical Tradition* (London: Oxford University Press, 1971), 189. See also Plato's *Ion*: "Do you know that the spectator is the last of the rings which, as I am saying, receive the power of the original magnet from one another? The rhapsode like yourself and the actor are intermediate links, and the poet himself is the first of them. Through all these the God sways the souls of men in any direction which he pleases, and makes one man hang down from another. Thus there is a vast chain of dancers and masters and undermasters of choruses, who are suspended, as if from the stone, at the side of the rings which hang

possessed, which is nearly the same thing; for he is taken hold of."

57 See Henri F. Ellenberg, *The Discovery of the Unconscious: The History and Evolution of Dynamic Psychiatry* (Basic Books, 1970): 204.

more fitting to early 20th-century experience and thus more sympathetic to the conditions in which its works are conceived, disseminated, and rendered meaningful. Indeed, we resort to a crude ahistoricism which, even as it finds useful parallels across the boundaries of historical experience, fails to consider the changing historico-philosophcial conditions that determine what can be defined as an experience at all. In the case of Varèse and the siren, I am thinking of a more materialist reading of the unconscious, to give but one example, whose insistence on the primacy of matter lends the idea of invasive inspiration a particularly ominous quality for which more metaphysically-oriented romantic theories cannot account, and which also seems to speak to a kind of experience defined less by meaningful resonances and more by sensory experiences that cannot be assimilated into any kind of meaningful whole.⁵⁸ In the context of an age that lived through World War I—and Varèse himself served near the front lines—we quickly see how difficult it becomes to interpret the siren episode as signifying anything but a decisive moment when the outside world breaches the bounds of the subject to enact a slightly darker type of inscription.

Modernity and Shock

As a whole, the New York of the 1920s was a place of sonic transgression. If anyone knew this, it was Paul Rosenfeld himself, whose mere description of the city—even the city as rendered "strangely humanized and fraternal" by the music of Varèse—almost overwhelms the reader with sensation:

5

⁵⁸ Friedrich Kittler, whose work we will encounter below, makes a similar point about the dangers of ahistorical takes on literary modernism obscuring the materialist discourses specific to the 20th century. "Only the ahistoricism that afflicts literary histories of Modernism could allow A.W. Schlegel's definition of poetry to be set beside the 'word-in-itself-poetry' of Ivan Goll or Hugo von Hofmannsthal's phrase 'The material of poetry is words.'" See his *Discourse Networks: 1800 / 1900*, trans. Michael Metteer (Stanford: Stanford University Press, 1990), 43.

the streets are full of jangly echoes. The taxi squeaking to a halt at the crossroad recalls a theme. Timbres and motives are sounded by police whistles, bark and moan of motor horns and fire sirens, mooing of great sea cows steering through harbor and river, chatter of drills in the garishly lit fifty-foot excavations. You walk, ride, fly through a world of steel and glass and concrete, by rasping, blasting, threatening machinery [...] revealed [to be] integral parts of some homogenous organism breathing, roaring, and flowing about.⁵⁹

If the role of music was to temper these "rasping, blasting" sounds, then the everyday experience of them was anything but domesticated. Yet to be transfigured by the composer's pen, the city was instead a place of sonic eruptions which, far from resonating in "sympathy with the composer's spirit," could have just as likely been seen to threaten it. In other words, this was not a place conducive to the romantic unconscious, consonantly tuned to Hoffmann's "secret music of nature." Like Kant's dynamic sublime stripped of its final moment of cognitive mastery, nature here all but overwhelms, breaking through sanctified borders with blows that cannot be parried.

It is scenarios such as the one Rosenfeld describes that led Walter Benjamin to characterize the experience of modernity in general as one of shock, a sensation fitting, he felt, for an epoch marked by the increasing inability to assimilate the overwhelming data of sensory experience into something meaningful and whole. Typified by raw collision over comprehension, the experience of modernity was for Benjamin an impoverished type of experience, best exemplified by the difference in the historical mediums used to convey it: storytelling and the newspaper. ⁶⁰ If the act of storytelling represented not only the communicability of experience—experience as immanently meaningful and therefore conveyable in all of its lived poignancy—but also the ability of the listener to find itself reflected back in those experiences, then the newspaper

5

⁵⁹ Rosenfeld, An Hour with American Music, 16.

⁶⁰ Benjamin discusses the newspaper in multiple places, but most notably in his essay "The Storyteller." See Benjamin's *Illuminations*, trans. Harry Zohn (New York: Schocken Books, 2007).

represented a world in which such immanently meaningful experiences had been degraded to mere information. That is, in its presentation of random, isolated news stories, the totality of which a reader could never experience as directly lived, the newspaper symbolized an alienated world in whose image the reader could no longer imagine itself as a constitutive part. The experience of shock was precisely such a non-experienced experience, we might say, an inassimilable encounter with information prior to all meaning.

Undoubtedly, this experience of shock was intensified for Varèse's generation, who, raised with at least one foot rooted in more provincial times, could experience the eruption of New York's modernity against the backdrop of a distinctly slower temporality. "A generation that had gone to school on a horse-drawn street car now stood under the open sky in a countryside in which nothing remained unchanged but the clouds," wrote Benjamin of this age. Varèse himself had been born in Paris but soon after moved to the little village of Le Villars in Burgundy, deep in the French countryside, where he grew up with his beloved grandfather. Always identifying as a *Bourguignon*, and with grandpère in particular, Varèse wrote of how he hated having to return to Paris to attend school at the Conservatoire, and would vacation in Le Villars whenever possible. 62

This is to say that the Varèse of the siren—Varèse the "ultramodern"—was in many ways not always so. Hardly born an uncompromising technophile, Varèse's background was instead one of Romanesque churches and vineyards, not quantum physics and fourth dimensions.

Moreover, it is only against this more provincial background, I would argue, that Varèse's experience of the shock of technological modernity can be properly understood. That is, rather than seeing the siren as the endpoint in a simple chronological progression through which a

⁶¹ Ibid., 84.

⁶² See Varèse's own account in Louise Varèse, *Varèse: A Looking-Glass Diary, Vol.1* (New York: W.W. Norton, 1972), 18.

French provincial is gradually seduced by and assimilated into the new, we must understand that more pastoral background as being precisely what lent Varèse's later encounters with modernity their particular intensity. In Fredric Jameson's words, "the familiarity of [...] the pre-modern, or underdevelopment, confers on the violence of the new its capacity for arousing fear or excitement." Thus, for Benjamin as for Jameson, the unchanging clouds in the countryside sky become what enables an experience of comparative violence and even bodily vulnerability, to say nothing of shock itself: "Beneath these clouds, in a field of force of destructive torrents and explosions," continues Benjamin, "was the tiny, fragile human body." ⁶⁴

Benjamin's "field of force of destructive torrents" was in every way Varèse's modernity. As much a "world of rasping, blasting, threatening machinery" as it was the battlegrounds of World War I, it was typified by an experience of rupture, of new powers and productive forces exploding onto the scene. The siren, then, as what both breached and signified a breaching, as what both erupted into private domestic space and signaled that the borders of bodies had been (ambulence, police siren) or soon would be (air raid siren) violated, was perhaps the symbol of that invasive modernity par excellence. As such, Varèse, at that primal scene of *Hyperprism's* inception, comes to be seen less as a romantic subject, actively assimilating the disenchanted modern world into art, and more Benjamin's tiny, fragile human body upon whom the siren inscribes its non-experiencable message.

What is at issue here is, in a sense, a kind of subjection. Rosenfeld seems to have sensed something of this vulnerability when he mused that "if the auditory sensations of modern life have developed the musical medium under [Varèse's] hands, it is merely because they have

- -

⁶³ See Fredric Jameson, *A Singular Modernity: Essay on the Ontology of the Present* (London: Verso Press, 2002), 142—145.

⁶⁴ Benjamin, "The Storyteller," 84.

sought him out."⁶⁵ But all the while, Rosenfeld's comment once again seems to have more to do with a lingering pseudo-romanticism than with a discourse capable of accounting for the often shock-like character of these encounters. In this instance, it is the psychoanalysis of Jung that Rosenfeld seems to channel—Jung who once said of artistic ideas that "we do not create them; they create us."⁶⁶ But hardly referring to a process of violent interpolation or invasiveness, Jung was instead referring to the means by which archetypes shared by the collective unconscious involuntarily enter into the work of the artist, materialized there to allow the collective populace a way of participating in something larger than themselves—a distinctly Rosenfeldian idea.⁶⁷ In proper Hegelian fashion, Jung's artist "uplifts the idea he is trying to express above the occasional and the transitory into the sphere of the ever-existing, [exalting] personal destiny into the destiny of mankind to find rescue from every hazard and to outlive the longest night."

Rosenfeld most certainly knew Jung's work, and this "suprapersonal" view of art, resounding with idealism, could not be closer to Rosenfeld's understanding of art as a kind of vessel through which the public taps into the collectivized "stream of things." But like the trope of romantic inspiration, its unacknowledged kindred spirit, it could not be further from the unassimilable blows experienced by the tiny, fragile human body. Sirens, after all, do not outlive

⁶⁵ Rosenfeld, An Hour with American Music, 162.

Garl Jung, *Modern Man in Search for a Soul*, trans. W.S. Dell and Cary F. Baynes (San Diego: Harcout Brace Jovanovich, 1933): 115. Jung writes: "Widely accepted ideas are never the personal property of their so-called author; on the contrary, he is the bond-servant of his ideas. [...] Ideas spring from a source that is not contained within one man's personal life. We do not create them; they create us." Jung's version of psychoanalysis was often privileged over Freud's by American intellectuals such as Rosenfeld because of the less pathological (more romantic) way he dealt with creativity. As formulated by Jung, the unconscious seemed to justify the romantic idea of a "something more" to life than its mere material objects, perpetuating a kind of metaphysical beyond into the twentieth century in newfound scientific garb. In a response to an article on Jung in *The New Republic* by *Seven Arts* editor James Oppenheim, Walter Lippmann went so far as to associate the intelligentsia's endorsement of Jung's embrace creativity with a kind of religious fanaticism, claiming that the psychoanalyst's followers had found a bit of truth "so marvelous" that it had been "expanded thoughtlessly to a universal." See Nathan Hale, *Rise and Crisis of Psychoanalysis in the United States, Vol.II* (Oxford University Press, 1995) and James Oppenheim, "What Jung Has Done" *The New Republic* 26 April 193?.

⁶⁷ In Jung's words, the source of art was "not to be found in the personal unconscious of the author, but in that sphere of unconscious mythology whose primordial images are the common heritage of mankind."

the longest night; they often times perpetuate it. And so divested of its invasive otherness and materiality, filled with the "strangely humanized and fraternal" archetypes of the collective mind, the romantic unconscious, to repeat yet again, proves insufficient for understanding the experiences that concern us here.

The Freudian unconscious was a different matter. Parallel to the revolutions that marked the first decade of the twentieth century and anticipating the traumas of the first World War, Freudian psychoanalysis redefined the subject as a site of inscription, impotent in many ways to defend against the sensory onslaught of modernity. Freud's Beyond the Pleasure Principle was first published in 1920, two years after the end of the war and three years before the premiere of Varèse's *Hyperprism*. Rife with accounts of barriers "breached," of "quantity[s] of excitation [that cannot] be bound,"⁶⁹ and "traumatic forces [...] powerful enough to break through the protective shield [of consciousness],"⁷⁰ Freud's work describes a subject vulnerable through and through, constantly bombarded with sensations against which it could not always properly defend itself. The site that recorded these unassimilable shocks was the unconscious, conceived by Freud not as a seat of collectivizing archetypes but as a vast archive of encounters registered but not properly experienced, permanently etched into the underbelly of being.⁷¹

Though the romantics could speak of a similar notion of the unconscious as a kind of registry of experiences anterior to the waking mind, it is in Freud that this region comes to be

⁶⁸ Sigmund Freud, Beyond the Pleasure Principle, trans. James Strachey (New York: W.W. Norton, 1989), 34. ⁶⁹ Ibid, 4.

⁷⁰ Ibid, 33.

^{71 &}quot;The Freudian unconscious has nothing to do with the so-called forms of the unconscious that proceeded it. [...] Freud's unconscious is not at all the romantic unconscious of imaginative creation. It is not the locus of the divinities of night. This locus is no doubt not entirely unrelated to the locus towards which Freud turns his gaze—but the fact that Jung, who provides a link with the terms of the romantic uncionscious, should have been repudiated by Freud, is sufficient indication that psycho-analysis is introducing something other." See Jacques Lacan, The Four Fundamental Concepts of Psychoanalysis, trans. Alan Sheridan (New York: W.W.Norton, 1998), 24.

seen as largely constitutive of consciousness itself. That is, with Freud, the subject comes to be identified not by its autonomy and powers of synthesis but as a ledger of violent inscriptions and unassimilable experiences from which consciousness rises as a mere effect.⁷² Even memory, the very essence of the psyche, comes to be seen by Freud not as a repository of ineffable, disembodied images, but as something entirely physical, the product of violent breaches (Bahnung) made by the stimulation of "non-permeable neurons" which had "a capacity for being permanently altered."⁷³ In his "A Note Upon the 'Mystic Writing-Pad'," published thirty years after the infamous *Project for a Scientific Psychology*, these non-permeable neurons are reconcieved as a type of writing surface with "unlimited receptive capacity," indiscriminately recording "permanent memory traces" etched by the "pointed stylus" of the outside world. 74

In a word, the subject and its unconscious had become disenchanted, transformed from an autonomous soul into an inscribable body—a site of indiscriminately received sense impressions understood primarily through materialist notions of force and energy and only secondarily through those of subjectivity and meaning. 75 What we have in the Freudian unconscious and its "quantities of excitation [that cannot] be bound," then, is a model much more conducive to the vulnerable body of post-war experience, and to the sirens under discussion here.

⁷² "According to an advanced mechanistic theory, consciousness is a mere appendage to physiologico-psychical processes and its omission would make no alteration in the psychical passage [of events]. According to another theory, consciousness is the subjective side of all psychical events and is thus inseparable from the physiological mental process. The theory developed here lies between these two. Here consciousness is the subjective side of one part of the physical processes in the nervous system, namely of the ω processes; and the omission of consciousness does not leave psychical events unaltered but involves the omission of the contribution from ω." Sigmund Freud, "Project for a Scientific Psychology," The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume I (1950): 311.

⁷³ Freud, quoted in Jacques Derrida, "Freud and the Scene of Writing," Writing and Difference, trans. Alan Bass (University of Chicago Press, 1978): 200.

⁷⁴ Freud, Sigmund. "A Note Upon a 'Mystic Writing-Pad" in The Standard Edition of the Complete Psychological works of Sigmund Freud, Volume XIX (1923—1925): The Ego and the Id and Other Works: 226-231.

⁷⁵ Freud often used the phrase "psychic apparatus." See Friedrich Kittler, *Grammaphone, Film, Typewriter*, trans. Geoffrey Winthrop-Young and Michael Wutz (Stanford University Press, 1999): 89.

I want to be clear that I am not interested in making some sort of empirical, historicophysiological claim on the Varèseian unconscious as such. What interests me, rather, is the
particular discourse that unites the siren and the unconscious, a discourse not only shared in
many ways by Varèse's music but one that, as we will later see, allows that music to be possible
at all. What we must see is that the siren wasn't just any stylus etching itself into the subject from
the outside world. Rather, in its continuous, parabolic makeup, the siren represented in form the
very place that its inassimilable, piercing quality destined it to be inscribed. That is, as a
continuum of indistinct pitches, yet to be parsed into the differentiated symbolic, the siren was an
ideal representation of the indiscriminately recorded archive of information that arose as an
effect of the linguistically structured Freudian unconscious itself. In the following section, we
will see how this discourse of the continuum and of the real, of boundaries breached and
messages inscribed, registers in the music of Varèse.

A Discourse of the Real

If Freud's notion of "quantities of excitation [that cannot] be bound" gave form to a certain inassimilable experience of modernity, then it was also indicative of a larger and emergent discourse of the real which, around the turn of the century, erupted into the collective creative and scientific imaginations alike. We can understand this in part by way of what Friedrich Kittler has called the discourse of 1900, an historico-cultural disenchantment of language (and here, I believe we can include musical languages as well) brought on largely by innovations in media technology and the electronic storage of information. For Kittler, the arrival

7,

⁷⁶ The real, that is, is an effect of language, and the unconscious is structured like a language. Additionally, the reader might pause here, remembering that our initial discussion of the siren was not as a continuum of indistinct pitches but as a carrier of a very distinct C-sharp. Perhaps the C-sharp was at the peak of the siren's parabola? In any event, what will become

of devices such as the gramophone define a moment at which, for the first time in history, writing loses its status as the sole means through which sense data could be serially recorded. The Prior to the decades surrounding 1900, writing and soul had yet to, as he puts it, fall apart. The former could still be said to conjure the imaginary fullness of bodily presence, like a transparent, window opening directly onto the mellifluous regions of the authorial soul. After the emergence of the gramophone, however, which could record not only the transparent symbolic language of the expressive subject but its material underbelly as well—the scratches, hisses, and pops that that language, in the interest of its legibility, attempted to repress—the unity of writing and speech was effectively dissolved. Writing was "no longer the handwritten, continuous transition from nature to culture" but something wholly material, a "countable, spatialized supply" which could now be studied as something anterior and indifferent to the waking mind. The prior of the serially recorded.

Evacuated of the imaginary, drained of its primary status as a vehicle for conveying an ersatz subjectivity, writing was now just as implicated in what that subjectivity concealed from view: a material real whose peculiar allure now existed in curious competition with writing's more traditional symbolic function. ⁸⁰ The Freudian unconscious, the gramophone, the siren—all of these things were nothing if not implicated in this allure of the symbolic's beyond. Just as the unconscious seemed a kindred spirit of the gramophone as an indiscriminate archive of slips and stutters that belied the intentions of transparent speech, so too was the siren its own record of a sonic real that resisted circumscription into the articulate symbolic, seeming to embrace the whole of sound even as it did so at the expense of music proper. ⁸¹

,,

⁷⁷ Ibid., 229-30.

⁷⁸ Kittler, Grammaphone, Film, Typewriter, 14.

⁷⁹ Kittler, Friedrich, *Discourse Networks*, 194.

⁸⁰ Ibid., 230

⁸¹ As Kittler recounts, Freud referred to his study of the unconscious as telephony. See *Gramophone*, *Film*, *Typewriter*, 89.

As it turns out, musical technologies were no less implicated in this irruption of the real into the collective imagination. Before the emergence of the discourse of 1900, we might say that, in a manner similar to the relationship between writing and the authorial soul, music provided a transparent embodiment of the temporal life of the spirit. Around the turn of the century, however, it is as though the vehicle of that spirit—the tempered scale as absorbed into tonality—becomes strangely opaque, transformed from serving as the soul's ineffable adjunct into an arbitrary, axiomatic construct seen to conceal as much as it revealed. We find evidence of this transformation in Ferruccio Busoni's highly influential treatise Entwurf fur einer neuen *Musik*, published in 1911, in which the composer writes:

What we call our tonal system is nothing more than a set of "signs"; an ingenious device to grasp somewhat of that eternal harmony; a meager pocket-edition of that encyclopedic work; artificial light instead of the sun.⁸²

No longer the given, sacred center of all musical expression, the tonal system is here, as it was in the writings of Schoenberg and so many others, reduced to little more than a collection of brute signifiers shorn of their signifieds, unmasked as mere things among other things (Kittler's "countable, spatialized supply") and, as such, deprived of their former metaphysical power. In contrast to this embodied musical finitude stood the truer object of music—the infinite—against which the paltry twelve notes of the scale could only pale in comparison. Busoni continues:

We have divided the octave into twelve equidistant degrees, because we had to manage somehow, and have constructed our instruments in such a way that we can never get in above or below or between them. Keyboard instruments, in particular, have so thoroughly schooled our ears that we are no longer capable of hearing anything else—incapable of hearing except through this impure medium. Yet Nature created an infinite gradation infinite! Who still knows it nowadays?83

⁸³ Ibid., 89.

⁸² Ferruccio Busoni, Sketch of a New Esthetic of Music, reprinted in Three Classics in the Aesthetic of Music (New York: Dover Publications, 1962), 89.

As the makeshift stand-ins ("we had to manage somehow") for a much truer essence of music, the atomized notes of the scale had been reduced to crude objects that did little more than obliquely hint at the infinity of nature. The signifier had been revealed for what it truly was: a mere object among objects, standing in for a lack. That Busoni could discuss the notes of the scale in such a manner—as mere quantities or things significant solely in their number-ness and not as the components of an indivisible metaphysical given—speaks to a process of musical disenchantment not unlike the aforementioned one of writing. As itself a type of serial data storage, the scale had become irreparably impaired in its ability to conjure the infinite, rendered no less strangely material than a body-become-skeleton, devoid of blood between its bones. What captured the musical imagination instead was now the interstitial and in-between, a sonic beyond that flourished in "infinite gradations" beneath the reach of signifiers making up the tempered scale.

If anyone was a torchbearer of these ideas, it was Varèse, for whom Busoni was nothing less than a musical prophet. Varèse had already read and absorbed the composer's *Enwurf*—a self-declared milestone in his musical development—by the time the two first met in 1907, and it was from then on that the two men nurtured an intimate friendship that would last until Busoni's death. ⁸⁵ In the *Sketch*, Varèse had found a prophetic confirmation of his own beliefs, a true kindred spirit whose frustrations with the arbitrary limitations of musical materials matched his own. This is evident, among other places, in the extensive annotations Varèse made in his personal copy of Busoni's book, which included brackets made around the very passage cited

⁸⁴ In many ways, his ability to do this foreshadows the twelve tone procedure in which notes are in one sense treated as pure quantities.

⁸⁵ Varèse, quoted in Ouellette, *Edgard Varèse*, 23-4. "I had read his remarkable little book, *A New Aesthetic of Music* (another milestone in my musical development), and when I came across his dictum: 'Music was born free and to win freedom is its destiny,' I was amazed and very much excited to find that there was somebody else besides myself—and a musician at that—who believed this."

above in which Busoni speaks disparagingly of the limits imposed on hearing by keyboard instruments.86

Like his mentor, then, Varèse's writings betray a certain perturbed sensitivity to the noteas-thing and to the scale as an impoverished construct woefully inadequate to capturing the vital experience of modern life. In his first public statement made upon arriving in New York, Varèse complained that "our musical alphabet is poor and illogical. Music, which should pulsate with life, needs new means of expression, and science alone can infuse it with youthful vigor."87 Hardly any longer the transparent window into a metaphysical beyond that it was for the romantics, the scale now seemed to be little more than an "alphabet," a mere "set of signs," to recall Busoni, notable as much for asserting what those signs weren't than for conjuring what they so badly wanted to be.

Varèse seemed to have found another kindred spirit in the poet Stephane Mallarmé, whose writings betray a comparable frustration with the materiality and opacity of the artistic sign. In his essay "The Book: A Spiritual Instrument," those signs are, in a manner comparable to the notes of the tempered scale, the discrete letters of the alphabet: "words [lead] back to their origin, which is the twenty-six letters of the alphabet [...] The Book, which is a total expansion of the letter, must find its mobility in the letter."88 It was a sentiment expressed once again in the poet's poem "The Blue," in which a poet dreams of blocking out the sky so that its ideal infinity might no longer mock the comparative material crudity of the poet's verse. 89 Along with

⁸⁶ See Varèse's copy of the *Entwurf* in the Edgard Varèse Library, Harry Ransom Center, University of Texas, 24.

⁸⁷ Edgard Varèse, "Que la musique sonne," trans. Louise Varèse, 391, Number 5 (June 1917): 1.

⁸⁸ Stéphan Mallarmé, "The Book: A Spiritual Instrument" in *Selected Poetry and Prose*, ed. Mary Ann Caws (New York: New Directions Publishing, 1982), 82.

⁸⁹ "The timeless blue's clear irony oppresses, as indolently beautiful as flowers, the impotent poet cursing his powers across a sterile Desert of distresses [...] The Sky has died.—Matter, I need your aid! Help this martyr who shares the litter in which the contented human herd is laid to lose all thought of cruel Ideal or Sin, for there I long [...] to yawn, mourning, towards obscure downfall." See Stephane Mallarmé, "The Blue" Collected Poems and Other Verse, trans. E.H. and A.M. Blackmore (Oxford: Oxford University Press, 2006), 21.

Goethe's poem "Kennst du das Land?," whose subject is itself the yearning for a distant ideal, Varèse referenced the poem in a letter to his friend Carlos Salzedo in which he spoke of the tragedy of man's "inability to escape himself." We cannot help but envision Varèse as a similarly mocked poet who, confronted with the limitations of his all-too-material medium, dreamt of transcending their limitations to reach some sort of musical beyond.

Among Busoni, Mallarmé, and Varèse, then, we find a common acknowledgement that the materials of art had lost something crucial. No longer capable of conjuring that hallucinatory fullness so redolent of art in other eras, the scale and sentence alike had been drained of the imaginary, leaving behind little more than the Symbolic as Symbolic, that is, opaque signs that signified nothing but themselves.

We can easily see how the siren, with its graceful parabolic curves so seemingly disdainful of "alphabetization," could have appeared as an answer to this disenchanted atomization. A ready-made sonic epitome of the "infinite gradation," the siren was one of Varèse's many solutions to Busoni's challenge. In a lecture at Yale University in 1962, Varèse explained his interest in the siren:

I have always felt the need of a kind of continuous flowing curve that instruments could not give me. That is why I used sirens in several of my works. Today such effects are easily obtainable by electronic means. In this connection, it is curious to note that it is this lack of flow that seems to disturb Eastern musicians in our Western music. To their ears, it does not glide, sounds jerky, *composed of edges of intervals and holes* and, as an Indian pupil of mine expressed it, "jumping like a bird from branch to branch [emphasis mine]." ⁹¹

Like a plot of cracked, sun-baked earth, starved for water, the scale was here little more than a petrified thing deprived of any life-sustaining connectivity between its parts. The spans

⁹¹ Edgard Varèse, "The Electronic Medium," (lecture, Yale University, 1962), reprinted in *Contemporary Composers on Contemporary Music*, ed. Elliot Schwartz and Barney Childs (New York: Da Capo Press, 1998), 208.

44

⁹⁰ Varèse, letter from Carlos Salzedo, 20 June 1933; Edgard Varèse Collection, Paul Sacher Stfitung, quoted in Theo Hirsbrunner, "Varèse and La Jeune France," *Edgard Varèse: Composer, Sound Sculptor, Visionary*, ed. Felix Meyer and Heidy Zimmermann (Woodbridge, Suffolk: The Boydell Press, 2006), 205.

separating its notes were no longer the move from one soul state to the next but a leap over an abyss into which all dreams of infinity would undoubtedly fall. The siren, by contrast, bound together the skeletal notes of the scale with an infinity born of the real, a real that circumscribed the entire world, omitting nothing.⁹²

"From now on, the symbolic encompasses linguistic signs in their materiality and technicity," Kittler writes of the discourse of 1900, "letters and ciphers" that "form a finite set without taking into account philosophical dreams of infinity."93 The "letters and ciphers" of the tempered scale had been downgraded to mere things among other things, disenchanted objects that could no longer conjure a sense of a greater meaning, transcending the sum of their parts in which the listener could recognize something of their greater spiritual selves. In a way, we could say that the siren, with its smooth parabolas embodying precisely what it was that the symbolic now lacked, embodied an attempt to revive these "philosophical dreams of infinity" by transposing them to its alternative realm of the real. But when dreams of the infinite are transposed to a place that is wholly anterior to the soul—an anterior whose infinity is less one of spiritual recognition and more of what is precisely beyond that recognition, of data yet to be parsed into the filtered meaningfulness of the symbolic—can this infinity still be considered in the same light? Are we not dealing with a difference in kind?

⁹² Douglas Kahn makes related points in his book *Noise, Water, Meat: A History of Sound in the Arts*, although in the end, his notions of "worldliness" and "freedom" cannot account for the crucial dialectic between symbolic and real that I am advocating here. "What was lost in the restricted pitch mobility of percussion [and other instruments] was gained in the diapasonic movement of microtonality along the line of the glissando. The glissando alluded to worldliness by being set in contrast to the segmentation of both temperament and instrumental design. The silenced sounds between notes, between microtones, were seen as markers of a lack of freedom, of restricted movement within a comprehensive and infinitely fine universe, and the gradient of all possible pitches was considered to be typical of the wealth of lived experience outside music. See his Noise, Water, Meat: A History of Sound in the Arts (Cambridge: MIT Press, 2001): 84.

³ Kittler, Gramophone, Film, Typewriter, 15.

We have seen how Busoni and Mallarmé were both so sensitively attuned to the disenchantment of their respective mediums. The scale for Busoni substituted for nature's infinity a mere "pocket edition" of the real thing, while the infinity of the sky for Mallarmé mocked the profane nature of his earthly creations. But despite both men's acknowledgement of the compromised ability of their mediums to realize their respective dreams of infinity, I would argue that they pined for those utopias nonetheless, utopias whose infinity was less a Varèsian infinity, enamored with the real, and more an older, subject-centered infinity based in symbolic recognition. In other words, Busoni and Mallarmé's rhetoric of infinity remained within the discourse of 19th-century idealism in which art, as a kind of pseudo-philosophy, came to embody the subject at its near apogee: as pure, immaterial interiority. Here, the soul reigned fully over body, the infinity of human thought over the finitude of matter, and art, like writing before the gramophone, came to serve as a direct window onto what was most quintessentially human. For Symbolists such as Mallarmé, it was exactly this cherished interiority that the encroachment of the new discourse—exemplified in his case by materialism and positivism—threatened to eradicate. We need only recall Mallarmé's impotent poet, disdainful of and yet on the way to becoming reconciled with crude matter, to grasp the extent of this discursive ambivalence.

Compellingly, much of Busoni's writings, too, find recourse in this older, more explicitly subject-centered aesthetic, as evidenced by his rather romantic description of art as "nature mirrored and reflected in the human breast." Art, in other words, embodied nature not as it existed in itself, but as it existed precisely *for* the subject, as Hegel might say, a subject who at its essence was a pure interiority no longer contingent upon the finitude of matter. ⁹⁴ Thus, Busoni

⁹⁴ "Sound, so to speak, liberates the ideal content from its immersion in matter." See G.W.F. Hegel, *Introductory Lectures on Aesthetics*, trans. Bernard Bosanquet (London: Penguin Books, 1993): 95.

could write of music that it was the "most complete of all reflexes of Nature by reason of its untrammeled immateriality," something that, like the inner life of the soul,

floats on air! It touches not the earth with its feet. It knows no law of gravitation. It is wellnigh incorporeal. Its material is transparent. It is sonorous air. It is almost Nature herself. It is—free. 96

Resistant to the discourse of materialism, which seemed to rob music of all that made it uniquely incorporeal and thus concordant with the human soul, Busoni maintained that music's essence was in its immateriality, one in whose reflection the listener could ultimately be reminded of their own ideal content.

In his essay "The Essence of Music," Busoni had written that "the musical gods are dead," a phrase we could take to indicate the composer's awareness of a kind of Nietzschean shift in discourse away from an older metaphysics of the subject and onto something more like that aforementioned discourse of 1900.⁹⁷ But even if the musical gods had died, even if the normative musical subject congealed within the tempered scale had lost its metaphysical power, the philosophical subject with which that scale had traditionally been associated—the subject for whom nature existed and in which that subject could recognize itself—seemed to persist for Busoni regardless. Caught between two discourses, then, Busoni could fearlessly advocate radical musical innovations in musical material while still desiring musical affects intimately connected to the very techniques those innovations would displace.⁹⁸

But the same cannot be said about Varèse. For a composer of Einstein's generation, one for whom there was "more musical fertility in the contemplation of the stars [...] and the high

96 Ibid.

⁹⁵ Busoni, 77.

⁹⁷ Ferruccio Busoni, *The Essence of Music and Other Papers*, trans. Rosamond Levy (New York: Dover Publications, 1957): 29.

⁹⁸ The apparent conservatism of Busoni's music, whose incongruity with his writings Varèse himself noted, is perhaps itself explained by this discursive ambivalence.

poetry of certain mathematical expositions than in the most sublime gossip of human passions," infinity could be sought elsewhere than in any cherished immaterial interiority or in nature as reflected in the human breast. 99 That is, now that metaphysics' former unity with musical technologies such as the tempered scale had dissolved, dreams of infinity were free to reconstitute themselves elsewhere, in spaces anterior to metaphysics, in the interstices of meaning hostile to more traditional forms of humanism. 100

The discourse of 1900, best represented by the unfiltered streams of data etched indiscriminately by the needle of the gramophone, was this place. It was rooted, after all, in a fascination not with the ineffable reaches of human subjectivity but with what that subjectivity kept at bay in order to exist as such. It was an embrace of the non-sense beyond sense, and similarly, of the materiality of the languages—artistic and otherwise—subjectivity displaced in order to conjure itself into existence. In a fundamental way, then, the discourse of 1900 leaned heavily on the ideas of scientific materialism, whose goal had long been to replace metaphysical explanations of life and human subjectivity with those rooted in the universal laws of the physical world. 101

We find both a source for and symbol of this alternate infinity and materialism in the work of Helmholtz, whose previously mentioned On the Sensations of Tone as a Physiological Basis for the Theory of Music was both a chief inspiration for Varèse and the source of the composer's infatuation with—what else?—the siren. On the first page of that work, Helmholtz

⁹⁹ Varèse, program note to *Intégrales*.

¹⁰⁰ It is interesting to see this in light of comments made by the Futurists, namely Marinetti: "[We must] destroy the I in literature, that is, all psychology. The man sidetracked by the library and the museum, subjected to a logic and wisdom of fear, is of no interest...To substitute for human psychology, now exhausted, the lyric obsession with matter...The warmth of a piece of iron or wood is in our opinion more impassioned than the smile or tears of a woman." See Daniel Albright, Modernism and Music: An Anthology of Sources (Chicago: University of Chicago Press, 2004): 173.

¹⁰¹ See Anson Rabinbach, *The Human Motor Energy, Fatigue, and the Origins of Modernity* (Berkeley: University of California Press, 1992): 43, 49, 66.

announced his project as an attempt to "connect the boundaries of [...] physical and physiological acoustics on the one side, and of musical science and esthetics on the other," a task inspired by the fact that "the horizons of physics, philosophy, and art" had "of late been too widely separated." It is interesting to note that the early Freud, whose materialist notion of consciousness was itself in many ways the result of an infatuation with Helmholtz, described his own project in similar terms, stating his desire to "furnish a psychology that [would] be a natural science," representing "psychical processes as quantitively determinate states of specifiable material particles." In short, what sound was for Helmholtz, the soul was for Freud. The metaphysical and vitalist residues associated with both were to be downplayed in favor of an understanding that viewed sound and soul as entities subservient to the laws governing the physical world. Whereas sound had previously been seen as merely a means for the conveyance of that ineffable soul, it could now be studied and appreciated as an entity itself, and one whose coextensive relationship with the material soul-become-body was now of only of secondary importance.

To be sure, we must be careful to not take this narrative of disenchantment too far, and we would be grossly mistaken to read Helmholtz's *On the Sensation of Tone* as a work that was without its own metaphysical substrate. It was only later in his life that Helmholtz became what we might call a positivist, and even then—and unlike fellow scientists Fechner and Mach—he never saw the natural world as a mere sum of appearances, purged of all metaphysical mystery. In the years surrounding *On the Sensation of Tone*, Helmholtz's views were as neo-Kantian as they were anything. He viewed the concept of force, for example, much as Kant viewed his *a*

. .

¹⁰² Hermann L.F. Helmholtz, *On the Sensations of Tone as a Physiological Basis for the Theory of Music*, trans. Alexander J. Ellis (New York: Dover Publications, 1954): 1.

¹⁰³ Freud, Sigmund, "Project for a Scientific Psycholgy," in *A Freud Reader*, 87. For more on Freud's relationship to Helmholtz, particularly his use of Helmholtzian sonic metaphors in analysis, see John Picker, *Victorian Soundscapes*, 108.

priori concepts: as an ungraspable metaphysical reality that was at once the very fundament of scientific experience as a whole. 104 What is important here is not so much the purging of metaphysics altogether from his and other texts of the time as the subordination of metaphysics to a more rigorously scientific and inevitably materialist way of studying sound's existence in the world. It is in the face of this change in focus, then, that we can see how little room there could be for something so elusive as Busoni's "wellnigh incorporeal [...] sonorous air," which touched "not the Earth with its feet." For Helmholtz and Varèse, music most certainly touched the earth with its feet, and it did so not as something mellifluous and ineffable but as the "rapid periodic motion of the sonorous body" conducted through "particles of air." As sonorous air-becomebody, sound had been rendered opaque by Helmholtz, transformed from an immaterial analog of the human soul into a physical thing to be studied in its own right. In the words of John Picker, the work of Helmholtz and others had initiated a "demythologization of hearing," transforming what had previously been conceived as a "sublime experience [of sound] into a quantifiable [...] object or thing." ¹⁰⁶

As we will see in more detail in chapter three, Varèse shared Helmholtz's highly materialistic notion of sound, frequently referring to, among other things, sound's crucial physical relationship to the ears of the listener. 107 But what is more important here is once again the particular discourse in which that physicality could become meaningful. As the example of

¹⁰⁴ For more on this, see Michael Heidelberg, "The Evolution of Helmholtz's Philosophy of Science," Hermann von Helmholtz and the Foundations of Nineteenth-Century Science, ed. David Cahan (University of California Press, 1994): 468-477.

¹⁰⁵ Helmholtz, On the Sensations of Tone, 7-8.

John Picker, Victorian Soundscapes (Oxford: Oxford University Press, 2003): 10-11.

¹⁰⁷ As Helmholtz noted, music stood "in a much closer connection with pure sensation than the other arts," referring to the much more literal contact made between sound waves and the listener than that of, say, the image of an artwork with the eyes of a viewer. In his early days, Varèse espoused immaterial view of music. As if channeling his mentor directly. Varèse expressed this precise sentiment in 1939 lecture in New Mexico, asking the audience: "when you listen to music do you ever stop to realize that you are being subjected to physical phenomenon?" Later, in the publication The Commonweal, Varèse elaborated, speaking of how music's "power of suggestion is more compelling than that of any of the other arts, since its actual physical attack is more difficult to escape and more allpervading." See Varèse, "Organized Music for the Sound Film," The Commonweal, 13 December 1940.

someone such as Hanslick shows, a materialist conception of *sound* did not necessarily rule out an idealist or romantic conception of *music*—that is, a notion of music still implicated in an ideal content whose meaning came from its resonance with the immaterial human soul. ¹⁰⁸ But within the discourse of 1900, for which the musical symbolic, drained of the Imaginary, was much less compelling than the material real it was now seen to conceal, sound could now take on a life of its own. No longer merely the transparent means through which the resonant infinity of the human breast could hit its mark, sound—corporeal sound—now had an infinity of its own, and one as indifferent to the subject as had been those indifferent grooves of the gramophone.

What this meant for a composer whose motto was the "liberation of sound" and who was more interested in the "high poetry of certain mathematical expositions than in the most sublime gossip of the human passions" was this: the discourse of 1900—a discourse of the real—allowed for nothing if not the liberation of music from the subject. As Kittler has written,

Cultural technologies could be attributed to Man only as long as they were marked off along the abscissa of biological time, whereas the time of the apparatus liquidates Man. Given the apparatus, Man in his unity decomposes, on the one hand, into illusions dangled in front of him by conscious abilities and faculties and, on the other hand, into unconscious automatisms. ¹⁰⁹

With its new means of storing and recording serial streams of data, what the discourse of 1900 allowed, and what the gramophone so well exemplifies, is the ability to record sounds and data in a manner indifferent to biological time. It is without question the notion of frequency, a way of specifying pitch based on measurements that only a machine could accurately determine, with which Varèse stepped decisively over this divide. We can understand how by first

_

¹⁰⁸ See John Buford, "Hanslick's Idealist Materialism," 19th-Century Music, 30/2 (Fall 2006).

¹⁰⁹ Kittler, Discourse Networks, 224.

¹¹⁰ Through it doesn't refer to frequency as such, the following passage from Hegel provides an example of how uncomfortably that concept fit into an older more romantic discourse: "when we hear [...] notes, our apprehension of them feels quite different from an apprehension of dry numerical relationships: we need not know anything of numbers and arithmetical proportions. [...] The connection between the sound and these numerical relations may not merely strike us as incredible; on the contrary, we may get the impression that our hearing and inner understanding

looking to Busoni's contrasting concept of the interval as discussed in his *Sketch for a New Aesthetic of Music*. Towards the end of that work, Busoni himself referred to frequencies ("mathematically exact number of vibrations") in connection to Thaddeus Cahill's Dynaphone, an instrument which had only recently been invented and which he conjectured would one day be able to deliver that sought-after "infinite gradation" of the octave discussed above. But rather than immediately embrace the Dynaphone and its peculiar infinity, Busoni cautioned that the "infinite gradation" of the octave could come only after listeners' ears had been properly acclimated to the new sounds. What Busoni proposed instead was a series of scales, each with progressively greater divisions of the semi-tone, as a means of gradually creeping closer to the "infinite gradation" that was inevitably to come. ¹¹¹

And so even as Busoni's new scales were intended to displace the traditional intervals that he had elsewhere dismissed as tired and arbitrary, he nonetheless expressed concern that to abandon these intervals too quickly would be a mistake. "Were we to adopt [third-tones] without further preparation [of the ear]," Busoni writes, "we should have to give up the semi-tones and lose our 'minor third' and 'perfect fifth;' and this loss would be felt more keenly than the relative gain of a system of eighteen one-third tones." When we read this passage in the light of Busoni's desire for music to serve as "nature as reflected in the human breast," we cannot help but interpret this loss as a loss of the soul's ability to comprehend and thus recognize itself in the structures of the scale, the scale as *ratio*. Though they professed to "draw a little closer to

.

of the harmonies is actually degraded by referring their origin to something purely quantitative." See Hegel, *Hegel's Aesthetics: Lectures on Fine Art, Volume II*, trans. T.M. Knox (Oxford: Oxford University Press, 1998): 924. There is something of this in the following passage from Hanslick as well: "Must not the babbling of the brook, the slap of waves on the shore, the thunder of avalanches, the raging of the gale have been the incentive to and prototype of *human* music? Have all the murmuring, squaling, crashing noises had nothing to do with the character of our music? We must in fact reply in the negative. All these natural manifestations are nothing but noise, i.e., air vibrations of incommensurable *frequencies* [all emphasis mine]" See Hanslick, *On the Musically Beautiful*, trans. Geoffrey Payzant (Indianapolis: Hackett Publishing, 1986): 71.

See Busoni, Sketch for a New Aesthetic of Music, 92—95.

infinitude," as Busoni wrote, his scales were ultimately still built upon fractions, upon notes related not by their positions on a continuum of the musical real (i.e. as frequencies) but as embodiments of human logic— "musical speech" as Busoni aptly called it. Busoni's scales, in other words, occupied a position on the near side of Kittler's "abscissa of biological time." New notes of the scale—third tones or otherwise—would be derived progressively, and yet all the while, the cherished minor third and perfect fifth could indirectly remain to exert their familiar, if now-obfuscated, pull.

It is interesting that in much of his early instrumental music, Varèse, too, betrayed something of this desire to "draw a little closer to infinitude" by gradually filling in the gaps of the scale. Because his dreamt-of instruments had yet to be invented, instruments whose content seemed to point to the far side of biological time, Varèse had only his all-too-human musical alphabet with which to work, destined, as was Busoni's, to approach the musical real only asymptotically. We find throughout Varèse's music moments that betray an almost obsessive desire to saturate the pitch and interval fields and to delineate overlapping continuums of musical space, and I wonder if we can't understand both of these tendencies as having something to do with this desire to close in on the musical real by way of an ill-equipped musical technology. It is tempting, of course, to try to read this through the guise of a pseudo-twelve tone technique, as some have already done. But such an interpretation becomes much more tenuous when we realize, among other things, the spatial dimension upon which Varèse's pitch and interval

. .

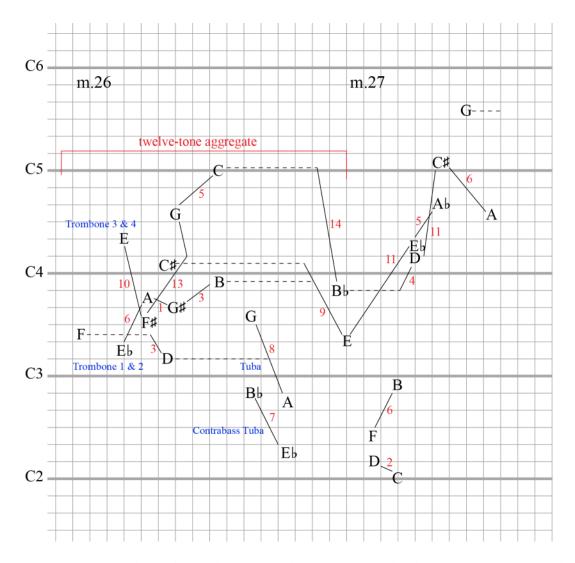
¹¹² Ibid., 94.

¹¹³ See, for example Andras Wilheim, "The Genesis of a Specific Twelve-Tone System in the Works of Varèse," *Studia Musicologica*, 19/1 (1977). Larry Stempel has also discussed this in his "Varèse's 'Awkwardness' and the Symmetry in the 'Frame of 12 Tones': An Analytic Approach," *The Musical Quarterly*, 65/2 (1979). ¹¹³ Varèse himself discusses the twelve tone technique in Gunther Schuller, "Conversations With Varèse," *Perspectives of New Music*, 3/2 (Spring-Summer 1965): 33.

saturation plays out.¹¹⁴ Looking at mm.26—7 of *Arcana*, we see that not only are the pitches used entirely distinct from one another, ultimately accounting for all twelve notes of the chromatic scale, but that the intervals delineated by their rises and descents are all different as well. Each of the twelve tones has been selected based on its ability to articulate an interval not yet used within the section.¹¹⁵ With their E-flat-A-G-sharp-B motive, trombone 1 and 2 delineate a semi-tone content of 6-1-3, while trombone 3 and 4 outline a semi-tone content of 10-13-5-14 with their E-F-sharp-G-C-B-flat motive. Not long after, the B-flat-E-flat of the contrabass tuba spans 7 semi-tones, the regular tuba an 8, horns 1, 3, 5, and 7 a span of 9, and on an on—all together articulating the semi-tone spans 1, 3, 5, 6, 7, 8, 9, 10, 13, and 14 in the space of only a measure:

¹¹⁴ Here, I am indebted to the graph method employed by Jonathan Bernard in his work on Varèse. See for example his "Pitch/Register in the Music of Edgard Varèse," *Music Theory Spectrum* (Spring 1981), and his *The Music of Edgard Varèse* (New Haven: Yale University Press, 1987).

¹¹⁵ To be clear, I mean the intervals articulated by the lines of individual instruments, not random intervals existing between different instruments.

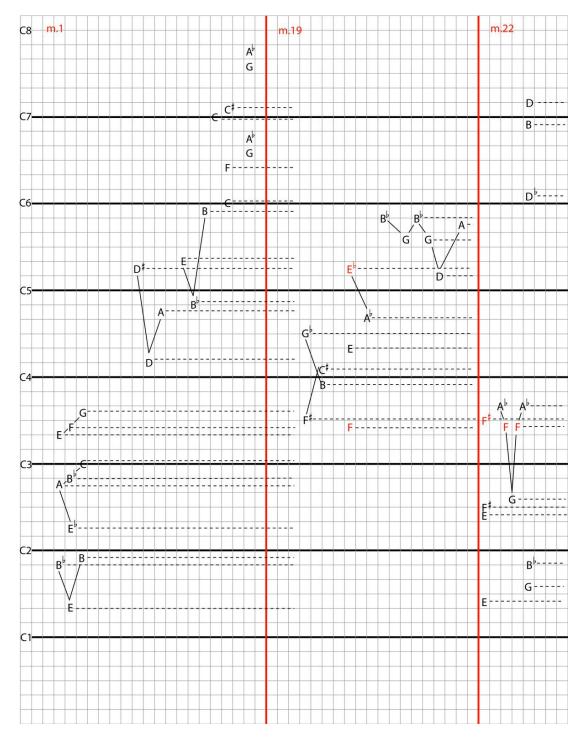


Example 1.1: Diverse interval spans and pitch/space saturation in *Arcana*, m.26-7. Numbers indicate the number of semitones between pitches.

What the whole of this procedure seems to indicate is an almost obsessive desire to progressively fill in gaps and plug holes, and to do so while amassing a diverse range of intervals that themselves work to overlap relentlessly, as though no two edges could be the same for fear of letting the slightest bit of light through.

We can also see a similar procedure of saturation enacted on a larger formal scale in *Arcana*. In Example 1.2, three of the work's opening sections fit together like complementary

blocks which effectively fill in the gaps left by preceding sections while maximizing pitch diversity:

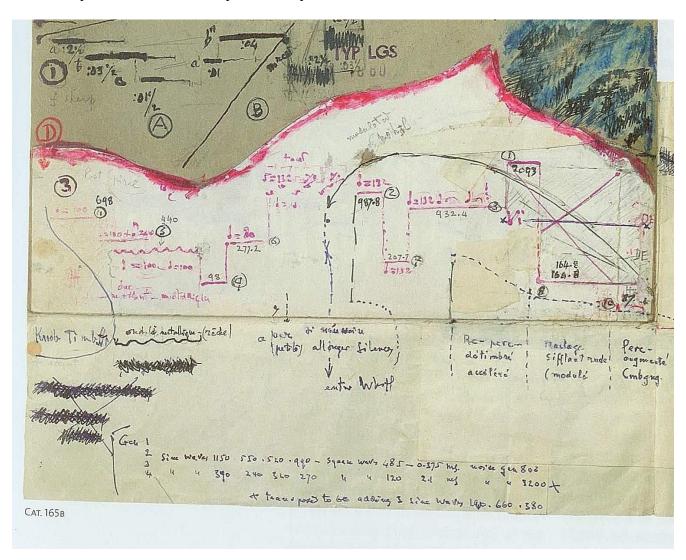


Example 1.2: Block-like complementarity of sections in *Arcana*. Pitches in red indicate repeated pitches across sections, while dashed lines are used simply to clarify the sections' complementary structure.

But there is a better reason why the twelve tone technique is a poor way to explain these obsessive moments of pitch saturation. In its pretense towards fulfillment and completion, the twelve tone technique ignores what I see as a crucial allegorical dimension of Varèse's early works that lives in a dialectical relationship between the limit of what was musically possible and what was thought to lie just on the other side of it, between the infinity of the human breast and the infinity of matter. In other words, faithful to the relationship between the symbolic and the real, the impoverished, disenchanted structures of the scale cannot be understood apart from a desire to move beyond them, particularly at such an historical point of discursive transition, when the musical technologies available lagged behind the discourse in which they attempted to participate. What we find in early works such as *Arcana*, which feature the siren alongside more traditional 19th century orchestral instrumentation, is perhaps something of a compromise, then, as though the siren's sinuous curves were deployed to supplement or smooth over what Dane Rudhyar described as the "edges of intervals and holes" caused by the musical symbolic's differential structure.

What we have in the notion of frequency, then, was way of talking about pitch that better matched the discourse from which those pitches could emerge as being meaningful. But not meaningful in the sense that traditional music derived from the tempered scale was meaningful. As determinations of pitch based not on proportions and ratios between pitches but on cycles per second determining singular pitches themselves, frequencies in many ways symbolized an indifference to the subject, invisible vibrations that, unlike the visible nature of proportions, had little to do with either the realities of human hearing or the rhetorical structures of music itself. Frequencies, then, such as Varèse specified in his sketches for *Déserts* and other works (see Example 1.3), were the ultimate embodiment of sound as it existed not for the subject but for

itself, having little to do with any sort of nature as reflected in the human breast. With frequencies, "the measure of length [as the determinant of ratio] is replaced by time as an independent variable," Kittler writes. "It is a physical time removed from the meters and rhythms of music. It quantifies movements that are too fast for the human eye, ranging from 20 to 16,000 vibrations per second. The real replaces the symbolic."



Example 1.3: Detail of one of Varèse's sketches for *Déserts* specifying pitch by frequency. Image courtesy of Paul Sacher Stiftung.

58

¹¹⁶ Kittler, Gramophone, Film, Typewriter, 24.

If frequencies quantified movements too fast for the human eye, then they also stood for a way of thinking about pitch that was largely indifferent to human hearing. Varèse, the self-professed "worker in rhythms, frequencies, and intensities," could boast of having obtained through the Theremin "sounds as high as eleven thousand five hundred cycles per second," which translated into a pitch roughly an octave and a half above the highest note on the piano, fast approaching the limit of what could be picked up by the human ear. A 1933 letter from Varèse to the Guggenheim Foundation echoed this interest in extreme frequencies, describing yet-to-be-performed experiments on the Dynaphone which would attempt to "increase the range of the instrument so as to obtain high frequencies which no other instrument can give."

In sum, if Busoni's scales remained contingent upon an infinity that still had romantic baggage to shed, then Varèse's frequencies, sanctioned by Kittler's "time of the apparatus," embodied the very different infinity of matter itself. That the two were radically incommensurable is nowhere more evident than on the path, itself infinite, along which one might have attempted to travel from one to the other. To try and "draw a little closer to infinitude" by way of Busoni's progressively exponential division of the scale was to travel along an asymptote upon which no intersection with frequency would ever occur. And this is because the difference between the two, between ratio and frequency, was not one of degree but of kind. Regardless of how near to infinity Busoni's pitches might have come, there would inevitably remain another infinity sprawled out between the notes of those finite sets. Busoni was a composer committed to the "three-mirror Tube of Taste, Emotion, and Intention," 119

1

¹¹⁷ Varèse, quoted in Ouellette, *Varèse*, 122.

¹¹⁸ Ibid., 130. In that same letter, Varèse also spoke of "loading [...] fundamentals with certain series of harmonics, to obtain timbres which will produce new sounds." And as if to not be outdone by limitations imposed on duration either, Varèse once confessed to Milton Babbit how remarkable it might be one day if one could create sounds lasting only a thousandth of a second. See Milton Babbitt, "Milton Babbitt on Milton Babbit," *American Music* Vol.3, No.4 (Winter 1985): 470.

¹¹⁹ Busoni, *Sketch*, 93.

Varèse was a "worker in rhythms, frequencies, and intensities," and ne'er would the twain meet. 120

And nor would they meet in their visual representation on paper. It stands to reason that if the intransigent real of Varèse's frequencies represented a difference in kind from the ratios embodied by Busoni's scales, then that difference would have to be reflected in their respective notations. As a necessary component of such a music, Varèse remarked that

the time will come when the composer, after he has graphically realized his score, will see this score automatically put on a machine that will faithfully transmit the musical content to the listener. As frequencies and new rhythms will have to be indicated on the score, our actual notation will be inadequate. The new notation will probably be *seismographic*. And here it is curious to note that at the beginning of two eras, the Mediaeval primitive and our own primitive era (for we are at a new primitive stage in music today), we are faced with an identical problem: the problem of finding graphic symbols for the transposition of the composer's thought into sound. At a distance of more than a thousand years we have this analogy: our still primitive electrical instruments find it necessary to abandon staff notation and to use a kind of *seismographic* writing much like the early ideographic writing originally used for the voice before the development of staff notation. Formerly the curves of the musical line indicated the melodic fluctuations of the voice; today the machine-instrument requires precise design indications. [emphasis mine]¹²¹

No longer indexing the time of the human body, Varèse's "machine-instrument" turned its back on that body to index the time of an apparatus whose "precise design indications" only a machine could determine and control. Though this was ultimately in the service of giving absolute fidelity to the composer's intentions, we must see those intentions as themselves involving a fidelity to a Real in which only oblique traces of that original intention could remain. We cannot forget that the music to be notated here was the music of the siren, the same siren that, we will recall, left behind seismographic traces of its own in the beyond of Varèse's subconscious. In this way, Varèse's metaphor could not have been more perfect: as an apparatus

¹²⁰ We are reminded here of Schoenberg's understanding of the artist as a craftsman as opposed to a genius. Varèse's reference to himself as a worker in intensities perhaps reflects a similar self-understanding.

¹²¹ Edgard Varèse, "New Instruments and New Music" in *Contemporary Composers on Contemporary Music*, 198.

whose content was the real, the seismograph inscribed a continuum of tectonic minutiae far too subtle for human detection. Just like the Varèsian unconscious, poised before the open window of the noisy city, it registered shocks that evaded circumscription into the symbolic universe even as they left behind their undeniable traces in some anterior realm. 122 If Varèse's seismographic notation wasn't exactly a projection of those very unconscious curves etched by the siren, then it was at least informed by the type of experience sedimented within them.

But how to translate those curves back out into music? Only by a "machine that [would] faithfully transmit the musical content to the listener," as Varèse said. What is unique about any instrument whose job it is to inscribe the real is, of course, that its inscriptions aren't so much representations of an object but marks "authenticated by the object itself." A needle both inscribed vibrations directly onto the plate of the gramophone and, by way of those same sinuous paths, translated those vibrations back out into sound. Similarly, if Varèse's music was to remain faithful to its own notated real, then it would have to be derived from that real directly. Varèse's seismographic notation would have to be read by a machine capable of achieving the kind of fidelity to precise frequencies that no human performer could ever hope to achieve. 124

That this kind of absolute fidelity was important to Varèse is nowhere better evidenced than in his frustration with performers, who represented an irritating level of mediation between the listener's reception of the musical real. Ideally, for Varèse, music would

reach the listener unadulterated by "interpretation." [The new system of composing] will work something like this: after a composer has set down his score on paper by means of a new graphic notation, he will then, with the collaboration of a sound engineer, transfer the score directly to this electric machine. After that, anyone will be able to press a button to release the music exactly as the composer wrote it—exactly like opening a book. 125

¹²² It is useful to remember that Freud himself referred to the unconscious as a machine.

¹²³ Kittler, Gramophone, Film, Typewriter, 12.

¹²⁴ Many of Varèse's paintings exhibit seismograph-type figures. See *Edgard Varèse*: Composer, Sound Sculptor, Visionary, 161.

¹²⁵ Varèse, "Music as an Art-Science," Contemporary Composers on Contemporary Music, 200.

What Varèse meant by "opening a book" is made clear elsewhere, in a conversation with the painter Alcopley. It was a matter of being

in immediate communication with [the] audience. A painter hangs his canvas on a wall—a finished work. Anyone with eyes can see it. A score is only a blueprint, and cannot be said to be finished until it is played. It is at the mercy of performers and risks the distortion of their 'interpretations'. They are, after all, actors (I include conductors) before an audience and therefore tempted to show off. ¹²⁶

The real loses its status as the real the minute it is interpreted, filtered, and removed by performers from the site of its authentication. If Varèse's music symbolized the type of inassimilable experiences of modernity represented by his experience before the siren, then human subjectivity could have no more say over its translation back into sound than it did in mediating the siren as it forced its way into the composer's unconscious.

The Real and Modernism

Having spent a bit of time now looking at the subtle differences in the rhetoric used by Busoni and Varèse, we can now see how, despite being kindred spirits in many ways, the discourses that supported those seemingly similar visions actually stemmed from structurally incommensurable ways of seeing the world. Cognizant on one level that the musical gods had died but still unable to remove the linchpin that kept their metaphysics faintly whirring, Busoni was perched on the precipice over which Varèse would take a dive. Only by such a leap could one move from a "logic to a physics of sound," and, consequently, to a discourse in which sound

¹²⁶ Varèse, "Edgard Varèse on Music and Art: A Conversation Between Varèse and Alcopley," *Leonardo* 1/2 (April 1968): 187.

could take on a meaning apart from the soul.¹²⁷ Busoni himself had written in the *Sketch* that one might have to leave the Earth in order to arrive at a music that embodied the full extent of his prophesies. We can read Varèse's music, I think, with its infinity on the far side of biological time and poetry based in the stars, as making precisely that decisive journey.

But as should now be clear, we must see "leaving the Earth" here as symbolizing far more than a mere change in the subject matter embodied in Varèse's music. If that subject matter had something to do with the blind and indifferent real, then what remains is to go a step further and to consider the social configurations that allowed for the possibility of that real becoming meaningful at all. I want to briefly consider how "leaving the Earth" towards a discourse of the real was intimately connected with the larger cultural shift towards modernism itself and all of the disorienting developments associated therein.

In regards to modernism, Busoni's metaphor is a perfect one: on the one hand, it betrays a latent technological optimism and sense of futurity that would go on to define so many of modernism's early manifestations; on the other, it implies that an inevitable consequence of such developments would be artworks that, adrift from the earth as they were, would be radically alienated from their own creators, remote from the very spirits that brought them into being. I would argue that there is something of this contradiction subtly implied by the two most prevalent catchphrases used to describe Varèse himself: Varèse as the "liberator of percussion" and Varèse as the master of "organized sound." The contradiction begs the question: exactly what type of freedom is achieved by this type of control? A liberation from what or whom?

For Adorno, the root of this dialectic was in the logic of capitalism. In its relentless, technological pursuit of the new, the modernist work betrayed its complicity with capitalism's injunction to innovate at all costs, costs which, in the form of the work's alienating character,

¹²⁷ Kittler, Grammophone, Film, Typewriter, 24.

revealed themselves to be the complete sacrifice of usefulness or "use value"—the work's ability to affirm and consolidate a peoples' image of itself¹²⁸—to the blind perpetuation of exchange. The liberation of music from the earth was precisely music's dark parody of this autonomy, an experience of the commodity's solipsistic indifference to the needs of the subject.

But we can also speak of this solipsistic nature of the modernist work—this moment in which art goes from addressing a public to addressing only itself—as a symptom of a more general crisis in that public itself. Busoni had wanted an art that explicitly affirmed the public, representing nature reflected in the human breast. Varèse cared less "about reaching the public" than he did about reaching "certain musical-acoustical phenomena." In the span between the two, we can locate a moment of transition, so invaluable to understanding the conflicted nature of modernism, during which the homogenous public that art could once take for granted as its audience began to gradually disappear. ¹³⁰ If that older public was constituted largely by the cultural remnants of the aristocracy and its narrow, seemingly eternal values and aesthetic codes, then its successor was an industrial capitalist bourgeoisie whose "everlasting uncertainty and agitation" ¹³¹ meant nothing but instability for the ontological security inherent in the former's

¹²⁸ The artwork is useful in this sense in that it "enacted, clarified, and criticized [a] class's experiences, its appearance and values; [one that] responded to its demands and assumptions." See T.J. Clark, "Clement Greenberg's Theory of Art," *Critical Inquiry* 9/1 (September 1982): 146.

¹²⁹ This is, of course, a Marxian interpretation based around the contradictions inherent in the commodity, whose usefulness to people is only secondary to the fact that it is produced to be exchanged. The growing autonomy of art, in contradistinction to its former function in ritual and such, reflects this increased commodification and indifference. Of course, as Adorno writes, on the market, commodities always retain a degree of use value or else they would never be bought or sold. The point is that many facets of modernism can be interpreted as something of a dark parody of this situation, providing the image of capitalism driven to its extremes in which use has completely lost out to exchange. For what is perhaps Adorno's clearest explanation of this see his essay "Why is the New Art So Hard to Understand?," *Essays on Music: Theodore Adorno* (Berkeley: University of California Press, 2002): 131.

¹³⁰ For more on this, see Perry Anderson, "Modernity and Revolution" *New Left Review* (March-April 1984), T.J. Clark's *Farewell to an Idea*, and Fredric Jameson's *A Singular Modernity*.

¹³¹ Karl Marx, "Manifesto of the Communist Party," *The Marx-Engels Reader*, ed. Robert C. Tucker (New York: W.W. Norton, 1978): 476.

supposedly timeless codes of meaning.¹³² We need only remember the chronology of Varèse himself, born and raised in what we might call the circular time of the French countryside and only later acclimated to the linear time of the industrial city, to see how real this experience could be even on the level of the individual.

The consequences had for musical forms were in no way slight. Previously, that stable, pseudo-aristocratic public had its analog in the agreed-upon forms of common practice music, forms whose lifeblood was their ability to gratify the public's image of itself and reaffirm its ideology. Busoni's "three-mirror tube of taste, emotion, and intention" bears at least traces of such a vehicle, the means for affirming an unproblematically centered subjectivity with roots as much in the 18th and 19th centuries as they were in a Europe on the verge of World War. With the gradual displacement of that older order by the industrial bourgeoisie, the social base that had sustained those ideologies for centuries was no longer available, absorbed into a dizzying, selfconscious modernity whose constant destabilization made normative values such as "taste" and "intention" seem hopelessly anachronistic. 133 As Clement Greenberg put it, western society became "less and less able [...] to justify the inevitability of its particular forms" and thus to sustain the "accepted notions [the ideology] upon which artists and writers [depended] in large part for communication with their audiences." ¹³⁴ We have already considered one example of such a seemingly inevitable form in tonality and the tempered scale. If earlier, we spoke of its waning moments as resulting from a process of disenchantment caused by the arrival of new storage technologies centered around the real, then now we can see how this newfound interest in the real was itself partially enabled by the fact that the unspoken obligations art had had to an aging public had all but disappeared.

3

¹³² "Ontological security" is Anthony Giddens' term. See Giddens, Consequences of Modernity, 92.

¹³³ Clark, "Clement Greenberg's Theory of Art," 155.

¹³⁴Clement Greenberg, quoted in ibid., 143-4.

But we can also speak of this transition as the weakening of a certain ideological relationship to and construction of nature. The difference between that relationship, linked to the pretenses of harmony and universality espoused by the ancient regime, and a later, fractured conception implicitly evoked by the problems of modernism, is nowhere better captured than by Louise Varèse, who referred to her husband as a "'a poet of nature—not of landscape.'" The landscape was, as we might expect, Busoni's nature, one already mediated by and packaged for the spirit, pacified and prettified as a mere projection of human morals and aspirations onto the non-human. It was an optimistic yet ideological conception enabled in part by the hubristic faith in rationality characteristic of the positivist science of the nineteenth century, a science so confident in its ability to know nature that, near the close of the nineteenth century, it had deemed its project nearly complete. Adorno referred to a similar conception of nature in art using Hegel's phrase "ideological art religion," the satisfaction in a reconciliation symbolically achieved in the artwork, and we can now see how that reconciliation was presumed to exist between the public and nature as well. ¹³⁶

By contrast, Varèse, "poet of nature," shunned the landscape, stepping out instead into a nature not already prepackaged for the subject. Louise noted how it was the "terribly impersonal aspects" of that nature that "moved him passionately," aspects that, like the unfiltered data of the gramophone, did not already represent a level of mediation by the subject. ¹³⁷ If the science of the landscape was of the confident, positivist variety, then the science of this impersonal Varèsean nature was non-Euclidean geometry, relativity, and quantum mechanics whose Copernican turn

¹³⁵ Louise Varèse, A Looking-Glass Diary, 228.

¹³⁶ T.W. Adorno, *Aesthetic Theory*, 62. Interestingly, he goes on to remark: "Natural beauty [a beauty unmediated by the subject, unlike art beauty] vanished from aesthetics as a result of the bourgeoning domination of the concept of freedom and human dignity, which was inaugurated by Kant and then rigorously transplanted into aesthetics by Schiller and Hegel; in accord with this concept, nothing in the world is worthy of attention except that for which the autonomous subject has himself to thank. The truth of such freedom for the subject, however, is unfreedom: unfreedom from the other."

¹³⁷ Ibid, 228.

represented the limits of rationality and of a nature that, to artists at least, seemed immune to circumscription. What is crucial to see is the way the disorienting, destabilizing experience of these world-altering paradigm shifts elided so well with the continual innovation, constant revisioning, and tradition-destroying drive of capitalist modernity and its respective, newly-emergent bourgeois public. Writing of the eve of modernism in his book *Webern and the Transformation of Nature*, Julian Johnson suggests that "perhaps [art's role of mediating the reception of nature] was never more critical than at the time when it became problematic, as the contradictions between the modern city and art's myth of man and nature in harmony became insupportable."

To "leave the Earth," then, was to not only turn away from an ancient regime and its stable codes of meaning but from the very conception of nature that undoubtedly helped to sustain it. We can see how these changes, then, could allow for the radical cultural decentering to which musical forms were not at all immune. The discourse of 1900 and its new storage technologies symbolized this perfectly in the way it externalized experience onto machines, a development which would find echoes in the Freudian unconscious, the disorienting paradigm shifts of science we have already discussed, and the limits of rationality in general which would become so apparent with the arrival of World War I. Additionally, the real was itself symbolic of what the older regime, in the interest of preserving its power and perpetuating classical ideals of beauty and order, kept repressed from view. It was the perfect content for a time in which "art," as Adorno writes, "no longer has the task of representing a reality that is preexisting for everyone

13

¹³⁸ For more on this, see Anthony Giddens, *The Consequences of Modernity*. Also see the introduction to Clark, *Farewell to an Idea*.

¹³⁹ Julian Johnson, Webern and the Transformation of Nature (Cambridge: Cambridge University Press, 1999): 9.

in common, but rather of revealing, in its isolation, the very cracks that reality would like to cover over in order to exist in safety." ¹⁴⁰

In concluding, I want to briefly consider an admittedly slippery aspect of this discussion that I have yet to address directly, and that is the relationship of this new discourse to meaning. As I hope the latter part of this chapter has made clear, the modernist work is anything but free from contradictions. And yet it is admittedly still tempting to read Varèse's impersonal rhetoric, filled as it is with sirens, frequencies, and such, as symptoms of a purely linear process of disenchantment by which the metaphysics of music gradually gives way to a profane physics of sound. As the narrative goes, the soul is displaced by the body, the human breast is displaced by the poetry of higher math, and the "worker in rhythms, frequencies, and intensities" is left in his laboratory to create sounds indifferent to human hearing. "I don't care about reaching the public," Varèse wrote, "as much as I care about reaching certain musical-acoustical phenomena. In other words, to disturb the atmosphere—because, after all, sound is only an atmospheric disturbance!" 141 Yet if sound truly were only an atmospheric disturbance and metaphysics truly had been fully displaced by the blindness of physics—in other words, if no meaning came from what was done with this content—Varèse would have not been Varèse. He would have been a scientist—not a composer. He would not have been looking for something in that mere atmospheric disturbance and yet so clearly beyond that atmospheric disturbance in the form of the artwork, something that made nature, to use Adorno's phrase, "open its eyes." 142 "On the

¹⁴⁰ Ibid., 131.

¹⁴¹ Varèse, quoted in Gunther Schuller and Edgard Varèse, "Conversations with Varèse," *Perspectives of New* Music, 3/2 (Spring-Summer 1965); 37. Compare to Apollinaire, who will be discussed later: "As art today has only a very limited social function, it is quite right that it should take on the disinterested task of studying scientifically, and even without any aesthetic purpose, the huge expanse of its own domain." See his The Cubist Painters, trans. Peter Read (Berkeley: University of California Press, 2004): 62.

¹⁴² See the sections on "Art Beauty" and "Natural Beauty" in Adorno's Aesthetic Theory.

threshold of beauty, science and art collaborate," Varèse wrote in a passage that will be important in our next chapter, as if sensing that science alone was only part of the picture and that it would indeed remain blind unless supplemented by something more. What Adorno meant by his phrase, and what I think Varèse also meant by "beauty," is precisely meaning. Not meaning in the guise of the landscape—a meaning forced on nature by human beings—but a meaning of things in themselves, of a nature that, even while freed from subjective imposition, still speaks to that subject. In its most abstract sense, this is, of course, where art's dream of autonomy converges with that of the commodity. The latter claims to have an inherent value, freed from subjective determination, while secretly being a product of nothing but. But that art wants to keep the promise of what is in many ways its opposite is precisely the point: Varèse was a modernist because he knew that it could only be through modernity, through the particular representational practices that defined the present, that those practices could be transcended, that meaning could be possible. "For the attitude of modernity," Foucault writes, "the high value of the present is indissociable from a desperate eagerness to [...] to imagine it otherwise than it is, and to transform it not by destroying it but by grasping it in what it is." ¹⁴³

But this simple polarization between science as the material of the present, and art as the act that imagines it otherwise is still too simple. This is because at the turn of the century, science itself could in many ways be said to have embodied precisely this sense that reality was in the process of being imagined otherwise. We can understand this best by comparing it with the science of Mallarmé's time. We have already seen how science, still largely defined by positivism and by a hubris yet to be shaken by the paradigm shifts of the twentieth century, could see its goal of understanding the universe as nearly complete. For Symbolists such as Mallarmé,

¹⁴³ Michel Foucault, "What is Enlightenment?," *The Essential Foucault: Selections from the Essential Works of Foucault 1954—1984*, ed. Paul Rabinow and Nikolas Rose (New York: The New Press, 2003): 50.

this did not bode well for the privileged life of the soul, whose value rested in the quality of ineffable mystery and cherished interiority traditionally thought to be beyond the reach of science's circumscription.

For Varèse, on the other hand, science was the solution, not the problem. As an antidote to the impoverished musical "alphabet," we remember, it was precisely science that could, as he put it, "infuse it with youthful vigor." Such an about-face was made possible in part because materialism, one of the driving engines of positivism, had by Varèse's day largely been absorbed into the artistic imagination. 144 We find evidence of this, as well as a definite source of inspiration for Varèse, in the writings of Guillaume Apollinaire, whose ideas still stand as a hugely under-acknowledged influence on the composer. From the symbolist legacy of Mallarmé, Apollinaire had inherited a disdain for any discipline that deprived life of its quality of intangible mystery. But if for Mallarmé, that discipline was positivist science, for Apollinaire, it was what of positivism had crept into art itself, namely, literary realism and naturalism. In a fascinating reversal, what Apollinaire praised in distinction to positivist literature was science itself. As he had written in his book on Cubism, "it is the social function of great poets and artists to continually renew the appearance nature has for the eyes of men." And yet, as the examples of realism and naturalism had shown, poets and artists had, up until the great efflorescence of modernism, thoroughly failed in this task. 145 It was scientists, not writers, who had truly "renewed the appearance of nature," imagining reality otherwise through their explorations into every corner of existence. Scientists "ceaselessly scrutinize the new universes that bare themselves at every crossroads of matter," he wrote in "The New Spirit and the Poets," filling the skies with "strangely human birds, machines, motherless daughters of men," and other things

14

¹⁴⁴ See Peter Michelson, Speaking the Unspeakable: The Poetics of Obscenity (SUNY Press, 1993): 13.

Guillaume Apollinaire, *The Cubist Painters*. For more on Apollinaire's views on art, see Christopher Grey, *Cubist Aesthetic Theories* (Baltimore: Johns Hopkins Press, 1953).

that challenged the idea that there was nothing new under the sun. ¹⁴⁶ Varèse's turn to frequencies, seismographs, and other scientific miscellany was a turn towards the inhuman and impersonal, as we have been saying. But as we will see in the next chapter, his embrace of science was also a turn towards a newly revelatory power for which the categories of the inhuman and impersonal cannot fully account.

¹⁴⁶ Guillaume Apollinaire, "The New Spirit and the Poets" in *Symbolist Art Theories: A Critical Anthology*, 311.

Chapter 2

Varèse at the Threshold

Your minutes, foolish mortal, are the ore From which you must extract the gold you're searching for!¹⁴⁷

—Baudelaire, "The Clock"

In the last chapter, our subject was Varèse's turn to the discourse of the real in the context of the increasingly inassimilable, overwhelming experience of modernity. From the perspective of psychology, the real was that deeply dug unconscious inscription whose inaccessibility testified to what in experience was incapable of being experienced, a site of shock-like encounters that indexed the overwhelming maelstrom of modern urban life. And yet we also saw how, with the arrival of media storage technologies like the gramophone capable of actually recording that unparsed beyond of language and experience, the real was just as much an object of fascination, representing a new, albeit decidedly alienated, site of aesthetic investigation.

But whether seen as an object of fascination or an index of trauma, the real—as a domain of experience apprehensible only in a mediated fashion, through machines like the gramophone or through that more obscure machine known as the Freudian unconscious—represented a certain disenchantment of consciousness whereby experience could now be apprehended only obliquely rather than through the immediate lens of a more traditionally conceived subjectivity. Seen as a kind of precipitate of that inassimilable experience, the artwork was thus no longer a

¹⁴⁷ Baudelaire, "The Clock," Flowers of Evil and Paris Spleen, trans. William H. Crosby (Ann Arbor: BOA Editions, 1991): 153. Translation slightly modified.

transparent window onto the subject's romantic "dreams of infinity," as Busoni had called them, but rather a kind of machine in its own right, registering the traces of shock-like experience that would always remain provocatively anterior to consciousness, and ultimately, to the fumbling fingers of the work itself. The essence of modern experience, it seemed, whether manifested in art or consciousness, was always elsewhere.

It is this "elsewhere" that will concern us in the present chapter, but less in the guise of the real and more in the context of a concept with which the real is intimately related: time, or more accurately, the notion of an absolute present within time. If the real could represent a kind of utopian space beyond the mediation of the symbolic, then it also represented a space outside of the time through which the symbolic, through its own process of disenchantment, could assert itself as such, as something that had been drained of the imaginary by way of historical decay. The real that Varèse sought beyond the mediation of the tonal system, that is, was in some sense also a real beyond the temporality through which that once-meaningful tonality had decayed into something recalcitrant and dead. What I am suggesting is that we see the real in Varèse's creative imagination as eliding with a certain allegorical historical sensibility, and one that cannot be considered apart from the heightened consciousness of a particularly linear, irreversible form of time characteristic of life in the early 20th century. In this milieu, which is characterized by the relentless decay of the imminently meaningful into the meaningless, the "always elsewhere" of the real takes on the temporal designation of a remainder that forever beckons from out of a promissory future. We find something of this dynamic in the dialectic of desire revealed in modernity's infatuation with the new, in which novelty is constantly displaced by the even newer in a search for stable forms of meaningfulness that the new promises but can never actually deliver. What the real converges with in such a context is the dream of escaping

this profane temporality into an absolute present, a utopian moment prior to the onset of disenchantment, prior to the separation of material symbols from whatever modicum of the beyond they might be able to evoke. But it also converges with another dream: the dream of apprehending temporality itself, of seizing on time not as the ravager of history but as the very means through which modernity expresses its utmost creative spirit.

We will have a chance to elaborate on both notions below, and all the while, our guiding questions will be these: what is the nature of the relationship of that peculiar symbol known as the artwork to the overwhelming time consciousness we associate with modernity? And what is its relationship to these fantasies of presence? While we saw in the last chapter how Varèse's work could serve as a kind of seismograph, for example, registering the traces of the real and transmitting it directly to the audience, we said little about what the artwork might have offered in a more existential sense, offered as a peculiar act of symbolic labor within, or perhaps on, a modernity in which time was synonymous with decay and stable forms of meaning were resultantly in short supply. In the context of the two utopias mentioned above (the dream of the absolute present, the dream of the perpetual present), then, we will need to ask the following: if, for Varèse, the newer is guaranteed to replace the new and meaning is so contingent upon time, then must the role of the work not be to carve out a space within that time so as to prolong contact with the fleeting meaning associated with the elusive present? Or must the work not instead assert time so as to become, and thus create some sense of ameliorative identification with, modernity itself?

The way we answer will ultimately depend on how we interpret one of Varèse's truly distinguishing traits: his obsession with science. But before we get to science proper, we will want to establish a basic framework for thinking about these problems in general, and we will do

so by turning to Baudelaire, whose writings on the relationship between modernity, art, and temporality will provide an ideal point of entry into the subject. After a brief introduction to the latter, we will briefly consider a Baudelairean Varèse, for whom the artwork serves to concretize some sense of what Baudelaire called the "eternal in the transient." Here, the scientific side of Varèse's works will play the role of what Baudelaire, in his famous definition of modernity, termed the "ephemeral": it will be a crucial symbol of the passing present without which the eternity of beauty, in its distinctly modern conception, would not be possible. But this Baudelairean Varèse will only be a waypoint to a more nuanced reading of the composer that takes into consideration, among other things, the new physics and science in general in its uniquely 20th century form. Ultimately, we will see how the work's peculiar identification with science allows it to assume what Varèse called its natural state of "permanent revolution," a state that both affirms the constant, disorienting newness of modernity while suggesting a certain proximity to what is promised, if only implicitly, beyond that interminably restless project.

Baudelaire, Art, and Time

By most accounts, it is Baudelaire's "The Painter of Modern Life" that inaugurates in literature the vivid consciousness of time that we associate with modernity. "By 'modernity," he writes, "I mean the ephemeral, the fugitive, the contingent, the half of art whose other half is the eternal and the immutable." Bracketing the "eternal and immutable" for the moment, we see that for Baudelaire, the present is hardly more stable than what comes and goes in a flash. If the "ephemeral" implies that the present can be apprehended for a fleeting second, the "fugitive" implies, on the contrary, that it is forever on the loose, a dreamt-of place of being that is always

..

¹⁴⁸ Charles Baudelaire, "The Painter of Modern Life," *The Painter of Modern Life and Other Essays*, trans. Jonathan Mayne (New York: Phaidon Press, 2008): 12.

out of reach. Modernity for Baudelaire is thus primarily an experience of instability and elusiveness, of the ground constantly being yanked from beneath one's feet.

If the "ephemeral" and the "fugitive" testify to modernity's inapprehensible character rooted in a heightened consciousness of time, then it is perhaps Baudelaire's third term, the "contingent," that implicates the first two terms in crucial questions of meaning. It was not, in other words, the mere experience of change, of things here in one moment and gone the next, that was most disorienting about modernity. More accurately, it was the experience of those things becoming explicitly historical, of ideas or fashions moving from seeming so sublimely pregnant with the life and meaning of their time to petrifying into fossilized remnants of those things. What in art, fashion, and the like briefly presented itself as so full of inherent meaning, so full of an almost theological symbolic capacity of evocation, would inevitably undergo a slow mortification at the hands of time, revealing the embarrassing dependency of that sense of meaning upon the extra-aesthetic criteria of social circumstance.

This is what was most disorienting about modernity: the constant loosening of meaning from materials that would occur as cultural products aged and were replaced by the new and newer. It was the experience of meaning as something in no way permanently guaranteed throughout the lifespan of cultural artifacts, despite the seeming permanence of those works themselves. Once seen to emanate from the very structures of those creations, meaning was now a mere temporary haunting of their interstices, an apparitional arrangement of the profane into a fragile but resounding resonance with a particular age.

As we will especially see in the last chapter, what we are describing here is in many ways an experience of separation: the subject's inability to maintain its sense of participation in and connection to its own modernity, a sense otherwise confirmed by its ability to find its image—its

meaningful agency and subjectivity—reflected back in the structures of the world. It is an experience similar to the one before Benjamin's aura, which he once described in his own work on Baudelaire as the sensation of having one's gaze returned by the content of artworks. ¹⁴⁹ If that moment of simulated interpersonal recognition was the moment of participation in one's time, then it was one that always had the potential to decay as those gazing eyes aged and closed, returning the artwork to the mere matter that, for all intents and purposes, it had always been.

For Baudelaire, this condition of separation was in many ways primary. His historical sensibility implied a world that, no longer possessive of an inherent spiritual quality, had been thoroughly disenchanted by the arrival of what we might refer to generally as the scientific worldview. Defined by the fruits of a purely technical type of knowledge, the world had been impoverished to a state of "artificial abstractions," to use Max Weber's phrase, "which with its bony hands [sought] to grasp the blood-and-the-sap of true life without ever catching up with it" And yet, despite this indictment, Baudelaire's aesthetics made it clear that that empirical disposition—detached, contemplative, and purged of the metaphysics that otherwise connected people to things—had for artists and scientists alike won out as the primary means of determining one's initial relationship to the world. It is for this reason that everywhere throughout Baudelaire's prose, the material world is presented as a vast, forsaken landscape, unformed and ill-arranged, waiting for the poet-flâneur to come along with their "blood and sap" and transform it into a tenuous meaning. "External nature [...] is nothing but an incoherent heap

1

¹⁴⁹ Walter Benjamin, "On Some Motifs in Baudelaire," *Illuminations*, trans. Harry Zohn (New York: Schocken Books, 1969): 188.

¹⁵⁰ Max Weber, "Science as a Vocation," *From Max Weber: Essays in Sociology,* trans. H.H. Gerth and C. Wright Mills (New York: Oxford University Press, 1946): 141. See also Jürgen Habermas, *The Philosophical Discourse of Modernity*, trans. Frederick G. Lawrence (Cambridge: MIT Press, 1990): 111.

of raw materials which the artist is invited to group together and put in order," wrote Baudelaire in 1861. Or here, in his "Salon of 1859":

The whole visible universe is but a storehouse of images and signs to which the imagination will give a relative place and value; it is a sort of pasture which the imagination must digest and transform.¹⁵²

That Baudelaire could describe the world in such alienated terms was intimately related to what he referred to as a corresponding "duality of man," which was a consequence of an Enlightenment project that, in order to make man the master of his world through a particular kind of knowledge, had succeeded in separating him from it.¹⁵³ But in less abstract terms, the "duality of man" was Baudelaire's symbolic expression of a particularly alienated experience of nature, and one that registered most acutely in the witnessing of nature-become-history, of the

Baudelaire, quoting himself in "The Life and Work of Eugene Delacroix," *The Painter of Modern Life*, 51.
 Charles Baudelaire, "Salon of 1859," *Art in Paris 1845—1862: Salons and other Exhibitions Reviewed by Charles Baudelaire*, trans. Jonathan Mayne (Oxford: Phaidon Press, 1965): 161—2. For more on this, see William W. King, "Baudelaire and Mallarme: Metaphysics or Aesthetics?" *The Journal of Aesthetics and Art Criticism*, 26/1 (Autumn 1967).
 That Baudelaire understood this evacuated metaphysics on deeper epistemological as well as experiential levels

is evident in his frequent references to soul-body binarism as a way of articulating alienated experience. "The duality of art [which we will discuss below] is a fatal consequence of the duality of man," Baudelaire wrote, revealing the close kinship of his critical materialism to the dualisms that undergirded both science and philosophy alike. The latter was perhaps best represented by Kant, who in his attempts to formulate an epistemology based around certainty and eternal truths, had grounded his conception of the subject in principles borrowed directly from those sciences. In so doing, Kant had directly identified knowledge in general—which is to say, experience in general—with a specifically scientific kind of knowledge and experience, leaving little room for the more ephemeral, alternative modes embodied by the reveries of art, the intoxication of hashish, or other alternative modes of being. The resulting conception of the subject was, to use Benjamin's phrase, "of the lowest order." Modeled exclusively on an empirical, scientific consciousness, its mode of apprehending the world was confined to the sterilized models of the laboratory, a subject whose engagement with its surroundings could by definition be little more than the detached contemplation of objects. For Baudelaire on the "duality of art," see Charles Baudelaire, "Salon of 1859," 161—2. For Walter Benjamin's account of the Kantian problem, see his early treatise "On the Program of the Coming Philosophy," Walter Benjamin: Selected Writings 1913-1926 (Cambridge: Harvard University Press, 1996). Another nuanced take on the issue is Giorgio Agamben, Infancy and History: On the Destruction of Experience, trans. Liz Heron (New York: Verso Press, 2007): 35-70. For more on Baudelaire and epistemic alternatives to this Kantian-Newtonian rationalism, see Allen Thiher, Fiction Rivals Science: The French Novel from Balzac to Proust (University of Missouri Press, 2001).

potentially brute indifference to the subject that matter, once pregnant with significance, could have. 154

For our purposes, the temporal aspect of this experience cannot be emphasized enough. The world for Baudelaire was not a priori disenchanted; it was disenchanted because it had become that way, or because it always had the possibility of becoming that way. In theory, modernity—defined at one point by Baudelaire as "the poetry within history," and "the eternal within the transitory"— was the very opposite of the disenchanted, embodying that absolutely present moment during which the fleeting had not yet fled, and the world seemed pregnant with a type of meaning that, while secretly dependent upon time, seemed to wholly transcend it. Paradoxically, then, the dream of modernity was in many ways the very opposite of its contingent reality, enamored with the very self-assured moment that the contingent was always seeking to embarrass and undo. And yet this contradiction was precisely the point: modernity was the "poetry within history," which is to say a poetry dependent upon history, contingent upon history. It was both a moment and that moment's decay—a moment, to put it more dialectically, that drew its vividness precisely from the *possibility* of its decay. Thus, Baudelaire's mute landscape was forsaken only in contrast to what modernity, as that dreamedabout "incandescent point" at the front lines of time, stood for as a possibility within that time.

But we must clarify that this was not just any time. To talk about this fleeting time that leaves behind, a time that abandons the works and fashions that are made with it in mind and that are most meaningful only with it at hand, is to talk about the linear, irreversible Newtonian time

¹⁵⁴ The relationship of something so abstract as philosophy's subject and object to something so prosaic as a feeling of alienation can admittedly be difficult to grasp. We might say that, though this duality wasn't itself actual, it nonetheless "gave expression," to use Adorno's words, "to the real separation, the rivenness of the human condition" that could potentially be experienced in day-to-day life. See T.W. Adorno, "On Subject and Object," *Critical Models: Interventions and Catchwords*, trans. Henry W. Pickford (New York: Columbia University Press, 2005): 246.

of science, development, rationality, and progress. This was the time by which the autonomous Kantian subject (see note 7) would supposedly emerge from its "self-incurred immaturity" to obtain enlightenment. ¹⁵⁵ But for a trenchant critic of science such as Baudelaire, however, such supposed progress was just as much a "great heresy of decline." ¹⁵⁶ That is, in terms of the qualitative dimension of experience, the time of modernity asserted itself linearly, for sure, but in the direction of decay. ¹⁵⁷ The new asserted itself less as progress and more as the mere arbitrary displacement characteristic of the commodity form. Like the second hand in Baudelaire's poem *The Clock*, articulating a series of empty, homogenous moments which retained nothing of those that they displaced, each incarnation of the new—of fashions, of scientific discoveries, and the like—marked a similar displacement in which the past was retained only negatively. ¹⁵⁸ Rather than being gathered together and integrated into an increasingly enriched and deepened present, the past was experienced as little more than the product of a mere passing moment, a havingbeen with little to no connection with the now. Time was that which abandoned experience in its rush to arrive at the new.

We can see now how this sense of participation in all its guises—participation as a kind of immersion in stable forms of meaning, participation as an emotional and not merely contemplative engagement with objects, participation as a nearness to one's past—was a casualty

_

¹⁵⁵ Immanuel Kant, "An Answer to the Question: What is Enlightenment?" *Kant: Political Writings*, trans. H.B. Nisbet (Cambridge: Cambridge University Press, 2008): 54.

¹⁵⁶ Baudelaire, "Further Notes on Edgar Poe," The Painter of Modern Life and Other Essays, 98.

¹⁵⁷ "Civilized man has invented the doctrine of Progress to console himself for his surrender and decay." And also: "Progress (in so far as it exists) perfects pain in proportion as it refines pleasure [...and] if the skin of the peoples of the earth continues to become ever more and more delicate, they are clearly pursuing no more than an *Italiam fugientem*, a victory every minute lost, a progress forever denying itself". See Baudelaire, "Further Notes on Edgar Poe," *The Painter of Modern Life*, 98.

¹⁵⁸ "Three thousand and six hundred times an hour the tick / Whispers: *Remember thou!* And—speaking soft and fast, / An Insect's whine—the Present says: I'm now the Past, / And I have sucked your life out through my dirty beak!" See Charles Baudelaire, "The Clock," *The Flowers of Evil*, 151-3.

of the profane temporality of modernity. What we must see now is the role Baudelaire ascribed to art in ameliorating this experience. There was Baudelaire's "incoherent heap of raw materials," a mute nature wholly alienated from the subject; but then there was that heap of materials as actively reimagined by the artist into a nature that could again speak. Conceived of as a function of agency intent on finding that "poetry within history," modernity was less an historical category and more a certain disposition towards the materials of the fleeting present, a particularly active disposition represented most famously by the intent-filled, beauty-seeking activities of the flâneur. 159 Determined to sustain the Technicolor glow of things so characteristic of childhood experience, the flâneur was at once seeking a kind of participation in things in which an alternative, almost dream-like temporality could be carved out within the irredeemably profane stream of everyday life. It was life intentionally lived as art, the only type of living there truly was because of the way such living allowed one to, in Arthur Rhodes's words, "come into more intimate contact with the absolute reality of existence." To actively engage in meaningcreating activity was not merely to satisfy the complacent aestheticism of the dandy but to mask an acute sense of nihilism implicit in a blindly streaming temporality that at times seemed to trace little more than the edges of an abyss. 161

The "poetry within history," then, was in once sense an answer to the potential nihilism implicit in the temporality of modernity. It is this injunction that we find within our epigraph in which it is only by way of time that something transcendent of time might be found: "Your minutes, foolish mortal, are the ore / From which you must extract the gold you're searching

¹⁵⁹ On this notion of modernity as a disposition or an attitude, see Michael Foucault, "What Is Enlightenment," *The Essential Foucault* (New Press, 2003): 48.

¹⁶⁰ Arthur Rhodes, *The Cult of Beauty in Charles Baudelaire, Vol.1* (Lancaster: Lancaster Press, 1929): 7-8.

¹⁶¹ See, for example, Baudelaire, "An Heroic Death," *The Flowers of Evil*, 399.

for!"¹⁶² What we have here, then, is a description of the artwork as a form of imminent critique which attempts to escape time only by working through it. That this contingency was explicitly formative to Baudelaire's aesthetic is nowhere more evident than in its formalization into what he referred to as his "historical theory of beauty." "Beauty," Baudelaire writes,

is always and inevitably of a double composition, although the impression that it produces is single [...It] is made up of an eternal, invariable element, whose quantity it is excessively difficult to determine, and of a relative, circumstantial element, which will be, if you like, whether severally or all at once, the age, its fashions, its morals, its emotions. Without this second element, which might be described as the amusing, enticing, appetizing icing on the divine cake, the first element would be beyond our powers of digestion or appreciation, neither adapted nor suitable to human nature. I defy anyone to point to a single scrap of beauty which does not contain these two elements.163

Poetry relied on history. Beauty, as something contingent upon the time of its making, could thus always be found to take its point of departure from the styles, moods, emotions, fashions, customs, and other things that bore the mark of one's age. As for the second, "eternal" element, it was that extra something-more of the artwork—the remnants of Benjamin's aura, perhaps, or a certain sense of interpretive inexhaustibility—which, while rooted in the work's historical materials, seemed nonetheless transcendent of and impossible to empirically locate within them. "The aesthetic is materialism's uncanny," writes T.J. Clark, ¹⁶⁴ and I think we get precisely this sense of an evocative flickering between matter and its dreamt-of, artistic other in the following passage:

the external world is reborn upon paper, natural and more than natural, beautiful and more than beautiful, strange and endowed with an impulsive life like the soul of its creator. The phantasmagoria has been distilled from nature. All the raw materials with which the memory has loaded itself are put in order, ranged and harmonized, and undergo that forced idealization which is the result of a childlike perceptiveness—that is to say, a perceptiveness acute and magical by reason of its innocence!¹⁶⁵

¹⁶² Baudelaire, "The Clock," *Flowers of Evil*, 153. Translation slightly modified.

¹⁶³ Baudelaire, "The Painter of Modern Life," *The Painter of Modern Life and Other Essays*, 3.

¹⁶⁴ T.J. Clark, Farewell to an Idea, 167.

¹⁶⁵ Baudelaire, "The Painter of Modern Life," The Painter of Modern Life and Other Essays, 11.

For Baudelaire, the world—which by itself was little more than a depraved expanse of raw materials, decayed or with the possibility of becoming decayed—was to be reimagined by way of the artist's "forced idealizations" into something meaningful, but a meaningfulness that relied upon the stuff of the modern moment to have its effect.

Baudelaire, Busoni, Varèse

An acute awareness of time as a coursing vector, experienced largely via scientific change; a theory of beauty in which the latter is reliant upon a slice of that time to do its redemptive work; an acknowledgement of the profane, material substrate of art, coupled with visions of its transmutation into an intimate and evocative magic—with striking theoretical acumen, Baudelaire conceived of the possible place that art could have within a modernity defined in so many ways by disenchantment. It is as a theoretician of this modernity that we can mention him alongside Varèse, whose writings betray such a similar preoccupation with the relationship of the artwork to both the profane materiality of the world and to the fleeting modern moment. In his pervasive rhetoric of petrification and death regarding the art and styles of the past, for example, a rhetoric we encountered in his disdain for the worn-out tempered scale and which we will examine in detail in the following chapter, the composer shared Baudelaire's sensitivity to the all-too-real connection between modernity's breathless temporality and the potential for meaning to decay, a potential that could be overcome only by the repeated return of the artist to the materials of their own time.

Varèse was connected to Baudelaire through at least two sources: his wife Louise, who was a renowned translator of French symbolist poetry, and his mentor Busoni, who is known to

have translated one of Baudelaire's essays on Edgar Allen Poe. Moreover, we find in Busoni's *Sketch of a New Aesthetic of Music* passages that very closely echo Baudelaire's bipartite theory of beauty, the most vivid of which Varèse, it is important to note, penciled brackets around in his personal copy of the book.

The spirit of an art-work, the measure of emotion, of humanity, that is in it—these remain unchanged in value through changing years; the form which these three assumed, the manner of their expression, and the flavor of the epoch which gave them birth, are transient, and age rapidly. Spirit and emotion retain their essence, in the art-work as in man himself; we admire technical achievements, yet they are outstripped, or cloy the taste and are discarded. ¹⁶⁶

The similarities to Baudelaire are undeniable: there is, on the one hand, that elusive and seemingly ahistorical emotional aspect of the artwork—its "spirit"—which recalls Baudelaire's "eternal, invariable element" of beauty "whose quantity it is excessively difficult to determine." Then there is the form that this spirit must take, the material vehicle upon which it is contingent, comprised of the transient character of an epoch evocative of Baudelaire's similarly fleeting circumstantial element. For both, art's intangible beauty is something ever available, but only insofar as it is revealed through the fickle material guises of a particular time.

As we said, Varèse took note of Busoni's passage, and it is worth considering it alongside one of the composer's own:

There is solidarity between scientific development and the progress of music. Throwing new light on nature, science permits music to progress—or rather to grow and change with changing times—by revealing to our senses harmonies and sensations before unfelt. On the threshold of beauty science and art collaborate. 167

There is much here that might initially strike the reader as having diverged from Baudelaire and Busoni. For one, Varèse's comment seems at first to be as much a discussion of two completely

i6 **-**

¹⁶⁶ Ferruccio Busoni, *Sketch for a New Aesthetic of Music*, 1911, Edgard Varèse Library, Harry Ransom Center, University of Texas at Austin: 2.

¹⁶⁷ Edgard Varèse, "The Liberation of Sound," *Contemporary Composers on Contemporary Music*, ed. Elliot Schwartz and Barney Childs (New York: Da Capo Press, 1998): 196.

different domains as it is of what transpires to create beauty within the domain of art itself. And yet we note the last sentence, which sheds light on the rest of the passage: "On the threshold of beauty, science and art collaborate." What Varèse seems to offer us here is his own bipartite theory of beauty similar to those of Baudelaire and Busoni. If for Baudelaire, beauty was a realization of the eternal accomplished through the absorption of the transient into the formal principle of art, I am suggesting that it was equally so for Varèse, except that for the latter, it is science specifically that provides art with its transient content. Beauty, he might have said, is reliant upon science—upon the procession of discoveries that symbolize newer and newer presents—to have its effect.

As has been discussed elsewhere, science in Varèse's scores is often as much poetically implied as it is actually represented in some concrete way by compositional procedures. The processual form of *Intégrales*, for example, in which simulations of spatialized sound attract, repulse, and interact with one another, was inspired by Varèse's study of crystals. ¹⁶⁹ The title itself is a reference to integral calculus, and the rhetoric of projection that Varèse used to describe the experience he wanted to evoke for the listener by way of the music's huge surges of sound elided in his creative imagination with the idea of a musical fourth dimension. ¹⁷⁰ But however tenuously representative of actual science Varèse's works really were, I think that we can see the scientific references therein as providing the work with a crucial symbolic content—symbolic of nature in the present moment—that the work would then transfigure into some ineffable sense of the eternal. "Science *permits* music to progress [emphasis mine]," which is to

1

¹⁶⁸ We could also put this in the language of contingency and simply say that if in Baudelaire, beauty was contingent upon the transient, it was in Varèse as well except that for the latter the transient is represented by science.

¹⁶⁹ See John Strawn's "The Intégrales of Edgard Varèse: Space, Mass, Element, and Form," *Perspectives of New Music* 17/1 (Winter 1978): 155.

¹⁷⁰ See Varèse, "The Liberation of Sound," *Contemporary Composers on Contemporary Music*. For more on the place of science in Varèse's works, see John D. Anderson, "Varèse and the Lyricism of the New Physics," *The Musical Quarterly* 75/1 (Spring 1991).

say, provides it with the crucial ephemeral content (those "harmonies and sensations before unfelt") upon which its beauty is inevitably contingent and which the work needs to accomplish its own continually evolving revelatory task. ¹⁷¹ That science in Varèse's creative imagination was directly aligned with this notion of the transient is evident in the many places he directly equates scientific development with "the vertiginous changes taking place in the world," and it is no mystery as to why. 172 It is the discoveries of science that increasingly mark and provide the rhythm to the historical time consciousness of modernity, both creating the new and aging it, conferring upon the past the sense of obsolescence against which the present stands as a redeemed destination. As such, we can see science as the source of so much of the ontological insecurity implied by Baudelaire's "the ephemeral, the fleeting, the contingent," and in Varèse, I would argue that science has become almost synonymous with the concept of modernity itself.

What remains to be discussed in this section is more about how Varèse might have understood that other side of the Baudelarian equation, the "eternal" side of art as manifested in beauty. We find a cryptic answer to this in a remark Varèse made in a 1928 article in *Le Figaro*: "truth exists only insofar as art gives it a meaning." We will only be able to speculate as to exactly what Varèse meant here, but for the sake of following this Baudelarean thread to its end and of positing a certain theoretical framework to push against and test in the next section, I want to propose that by "meaning" here, Varèse meant a sense of concretion, or the sense offered by the artwork of having endowed the external world, to paraphrase Baudelaire, with impulsive life like the soul of its creator. Truth existed, that is, only insofar as art made it concrete, only insofar

¹⁷¹ This reliance of music upon science was the grounds for Varèse's application for a Guggenheim grant in 1933. His objectives were "to submit to the technicians of different organizations my ideas in regard to the contribution which music—mine at least—looks for from science, and to prove to them the necessity of a closer collaboration between composer and science." Edgard Varèse Collection, Paul Sacher Stiftung.

¹⁷² This particular example is from his unpublished lecture "Sound, the Raw Material of Music." Edgard Varèse Collection, Paul Sacher Striftung.

173 Varèse, quoted in Ouellette, *Edgard Varèse*, 97.

as art imbued the contingent, abstract world represented by science with the glow of privately and directly lived, inner emotional experience outside the ravages of time. We recall here that for the Symbolists, art was to embrace the desiderata of the external world purely for the sake of evoking inner truths that could not be objectively accounted for in that world. Varèse repeatedly betrayed a similar concern for the inner over the outer, writing to Carlos Salzedo, for example, that "too little consideration is given to the human point of view [in my music]—the spiritual essence above the scientific and mechanical." ¹⁷⁴ Art was to provide the truths of science with this human point of view, this meaning that was concretion. This interpretation is made more persuasive when we read Varèse's remark about truth and meaning alongside the passage we explored above: "on the threshold of beauty, art and science collaborate." Between the two statements, a simple syllogism can be made: if truth collaborates with art (to give it a meaning), and science collaborates with art (for the sake of beauty), then perhaps we could say that truth and science represent one epistemological space in Varèse's creative imagination, while meaning and beauty represent another. We might, then, consolidate the phrases to say that abstract scientific truth is meaningful only insofar as it is transfigured through the concretion of art. Or more to our point: it is art that gives science its meaning, that strange, ineffable, interior meaning called beauty.

In the following section, we will complicate this reading when we explore the ways that the new physics had, by Varèse's time, allowed science to seem more art-like itself. As we began to see in the last chapter, notions such as the fourth dimension and quantum mechanics had supplied science with a renewed sense of creative revelation and mystery which its positivist incarnations (the only ones available to Baudelaire) could have never provided. But had

¹⁷⁴ Louise Varèse, "A Looking-Glass Diary, Vol II," unpublished manuscript, Edgard Varèse Collection, Paul Sacher Stiftung.

scientific revelation been the be-all and end-all for Varèse, then Varèse, as we have said, would have become a scientist and not an artist. The mere fact of Varèse's art in the shadow of such revelations testifies to the peculiar form of labor that art continued to perform on those abstract discoveries, and to the modern-day flâneur's unquenchable need to create those "forced idealizations" of nature in which the soul of the artist could, as per Baudelaire's want, somehow be accounted for in detritus the of the world.

To put it another way, it is one thing to say that science and art had become revelatory kindred spirits and quite another to say that those spirits served the same social or psychological function. In the face of the disorienting *experience* of modernity, we must maintain the absolutely crucial difference in kind between what science, as an engine of modernity, articulates in the way of spiritual mystery, and what art, as the privative means of coming to terms with that modernity, attempts as an existential *act* within it.¹⁷⁵ There is no denying, as we will see, that the new physics had a power to confer upon the world a certain art-like radiance, however fleeting that radiance might have been.¹⁷⁶ But this world is inevitably one that cannot be directly lived or experienced. It has become abstract. The totality that is modernity can be intellectually *understood* in its different moments, certainly, but it is an understanding that must remain precisely that: an experience tied to the intellect, beyond the bounds of what the individual can experience directly and concretely. This is in large part because of the sheer scope of the modern world, in whose increasingly bureaucratic, specialized, and transnational structures the individual can no longer recognize the traces of his or her own labor. Art in this model would comprise an

. .

¹⁷⁵ This difference is implicit, of course, in the simple fact that art continues to be needed at all alongside a discipline like science with such supposedly similar revelatory powers. Here, I am thinking of Lukács's remark that "the disintegration and inadequacy of the world is the precondition for the existence of art and its becoming conscious," a statement that Adorno would transform into his ubiquitous assertion that art's very existence in modernity implies a society in which meaning has become problematic. Georg Lukács, *The Theory of the Novel*, trans. Anna Bostock (Cambridge: MIT Press, 1974): 38.

¹⁷⁶ Ibid., 59.

attempt to concretize this abstract experience, to almost literally take matters into its own hands, in order to give to life the sense of lived, immanent meaning or totality it was otherwise without. The would be to enact a symbolic labor upon modernity in order to make that modernity—in Varèse, abstract concepts such as the fourth dimension, say, or hyperspace—into the individual artist's image, as though to provide the ersatz recognition impossible to come by otherwise. It is what Baudelaire described as the "creation of an evocative magic containing at once the object and subject," a sentiment expressed somewhat more pragmatically by Hegel. For the latter, art is practical activity arising from the fact that man

has the impulse, in whatever is directly given to him, in what is present to him externally, to produce himself and therein equally to recognize himself. This aim he achieves by altering external things whereupon he impresses the seal of his inner being and in which he now finds again his own characteristics. Man does this in order, as a free subject, to strip the external world of its inflexible foreignness and to enjoy in the shape of things only an external realization of himself.¹⁷⁸

Varèse's scientific art gives meaning to truth, as he said, helping to strip true science of its "inflexible foreignness" by creating a world, wrought from the real one, in which the subject can find something more of itself.

But we have edged away from our original subject of temporality, and it is important to see how this problem of abstraction is as much tied to the experience of the transient as it is to these more spatially defined experiences. Indeed, the problem of the transient in many ways *is* the problem of abstraction insofar as it involves the inevitably elusive category of the new. Why is the new abstract? Simply because, by virtue of having never been, it can initially be experienced only intellectually rather than as intuitively or directly lived. The concretion art

¹⁷⁸ G.W.F. Hegel, *Aesthetics, Vol.1*, trans. T.M. Knox (Oxford: Clarendon Press, 1988): 31. A similar and more contemporary account of this sentiment would be Apollinaire's in his *The Cubist Painters*. Art "facilitates [the artist's] relation with his fellows" in the sense that "the picture which he offers to the admiration of men will confer upon them, likewise, the glory of exercising their divinity—if only for a moment." See *The Cubist Painters*, 262.

¹⁷⁷ "Our world," Lukács writes," has become infinitely large and each of its corners is richer in gifts and dangers than the world of the Greeks, but such wealth cancels out the positive meaning—the totality—upon which their life was based." Lukács, *Theory of the Novel*, 35.

attempts, then, is also about overcoming time in order to give the new the sense of lived tangibility it is otherwise without. In working immanently through the new, art becomes an attempt to transcend time by way of time, to go "beyond the flow of history through the consciousness of historicity in its most concrete immediacy, in its presentness." To be sure, regardless of what the artwork tries to do or from which historical period it tries to do it, it is the very act of art itself—the simple gesture of setting down to make the artwork—that, as Paul De Man reminds us, already implies this dream of presence and thus separates it off from the activities of the scientist. Art, De Man writes, is the "unmediated free act that knows no past." 180 It is free in the sense that it is a gesture made not as a result of history but in response to it, a private act that undoubtedly needs history, as we have been seeing, but that attempts to assume its redemptive power as something definitively apart from it. 181 If science were "the poetry of today," as Varèse said it was, then it was still not a poetry removed from the temporal stream marked by successive todays. Art, by contrast, was an attempt to "extract the poetry from history," to use Baudelaire's phrase, an attempt to remove history from its own interminable stream so that, transformed within the artwork, it might establish a redeemed relationship to itself.

To complete this section, let us consider a way that Varèse's music might have attempted such a concretion in relation to one of his oft-discussed scientific obsessions: the fourth dimension. We note first off that in its notorious elusiveness, the fourth dimension was a perfect metaphor for modernity's aforementioned abstraction in that it represented an objective reality that, despite being theoretically demonstrable, could in no way be experienced or represented directly. In the next section, we will explore how it was just this elusiveness that, like so many

-

¹⁷⁹ Matei Calinescu, Five Faces of Modernity (Durham: Duke University Press, 1987): 50.

¹⁸⁰ Paul De Man, "Literary History and Literary Modernity" *Daedalus*, 99/2 (Spring 1970): 392.

This is not, of course, to say that art does not have a history of its own.

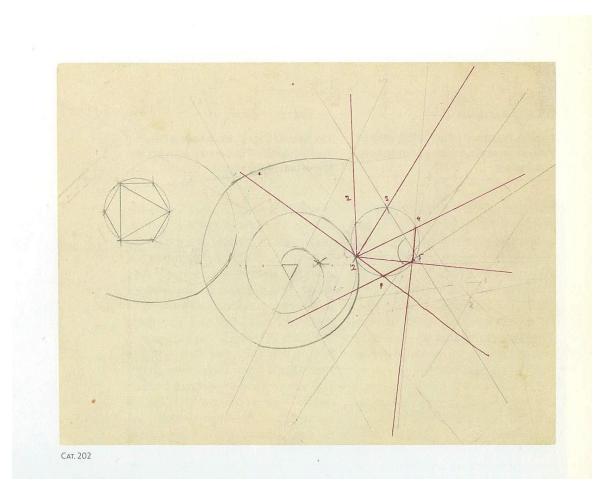
other Janus-faced aspects of modernity, also allowed the fourth dimension to be so immensely seductive for artists of Varèse's time. But for now we merely note its nature as a symbol of intellectual contingency in the wake of history, and further, its nature as something that, while tantalizing, exceeded the bounds of direct experience, begging to be reimagined in a form in which it was put in direct communication with the equally rarefied but much more intimate dimension of the soul.

Varèse made frequent references to the fourth dimension in his lectures and interviews, most prominently in a 1937 *New York Times* piece about his never-realized "Red Symphony," and also in his Santa Fe lecture "The Liberation of Sound." ¹⁸² In both of those texts, the fourth dimension was articulated as something that was to be brought down to the level of music and given expression there by whatever new means of illusionism music could muster. Like the spirals that Varèse drew on his sketches for *Déserts* and elsewhere (see Example 2.1-2.2), spirals of the type that had long been associated with attempts to represent the seeming infinity of the new dimension; and like the geometric hyperprism itself (referenced by Varèse's early orchestral work of the same name), which represented a similar attempt, made by scientists and mathematicians, to concretize that elusive beyond, Varèse's musical fourth dimension surely had something to do with the need to tame and make more tangible this new epistemological space. ¹⁸³

_

¹⁸² See "The 'Red Symphony' Is Due To Explode," *The New York Times*, 4 March 1937. And also Varèse, "The Liberation of Sound," *Contemporary Composers on Contemporary Music*, 197.

¹⁸³ In his 1904 book *The Fourth Dimension*, C. Howard Hinton used the example of the circle that would seem to be traced onto a plane as a spiral passed through it to illustrate the notion of how we perceive one dimension while another is actually in effect. Duchamp, who viewed three-dimensional objects as mere shadows of four-dimensional forms, was also fascinated by spirals, using them in his works *Tu m'*, *Rotary Glass Plates*, and *Rotary Demisphere*. I should also note that the specifically logarithmic spiral (Example 2.1) surely had additional connotations for Varèse. The frequencies making up the tempered scale are themselves logarithmically determined. That Varèse was aware of this is evidenced by his frequent reference in his sketches and writings to the twelfth root of two, the number with which one frequency must be multiplied to get the adjacent, and higher, semitone. For more on spirals as evocations



Example 2.1: Varèse's sketch of a logarithmic spiral. Image courtesy of the Paul Sacher Stiftung, Basel.

of the fourth dimension, see C. Howard Hinton, *The Fourth Dimension* (London: Swan Sonnenschein, and Co., 1906): 27, and also Henderson, *The Fourth Dimension and Non-Euclidean Geometry*," 228.



Example 2.2: A "projected" spiral on a sketch for *Déserts*. Image courtesy of the Paul Sacher Stiftung, Basel.

Varèse's friend Apollinaire basically said as much. Describing the production of art before the arrival of the new physics, he writes:

Until now the three dimensions of Euclidean geometry sufficed to still the anxiety provoked in the souls of great artists by a sense of the infinite—anxiety that cannot be called scientific, since art and science are two separate domains. 184

We note here the Baudelairian nature of Apollinaire's thesis: art, operating within and through the epistemological framework of its own time (here, Euclidean geometry), attempts to circumscribe the infinite—to ameliorate the anxiety it produces—by creating a more concrete

¹⁸⁴ Guillaume Apollinaire, "The New Painting," in *Manifesto: A Century of Isms*, ed. Mary Ann Caws (University of Nebraska Press, 2000): 120.

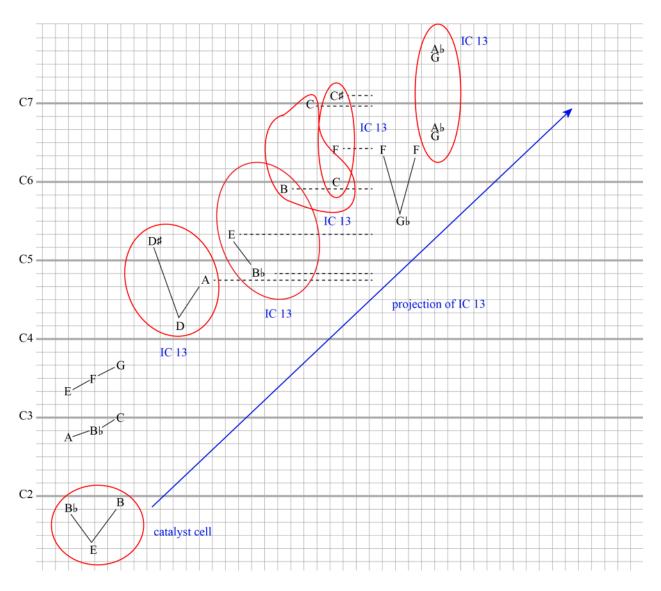
experience of that beyond. It was a need to concretize that persisted as the nature of infinity changed with the arrival of the new physics:

Now, today's scientists have gone beyond the three dimensions of Euclidean geometry. Painters have, therefore, very naturally been led to a preoccupation with [...] the fourth dimension. [The fourth dimension] is generated by the three known dimensions: it represents the immensity of space eternalized in all directions at a given moment. It is space itself, or the dimension of infinity. [...]

That Varèse conceived of his works as just such a head-on engagement with infinity is implied in the following passage, which perhaps reveals the influence of Apollinaire himself:

We have actually three dimensions in music: horizontal, vertical, and dynamic swelling or decreasing. I shall add a fourth, sound projection—that feeling that sound is leaving us with no hope of being reflected back, a feeling akin to that aroused by beams of light sent forth by a powerful searchlight—for the ear as for the eye, that sense of projection, of a journey into space.

We find such a "projection" in the opening bars of *Arcana* (Example 2.3), in which the interval class 13 is seemingly projected upwards and outwards as a widened version of an initial catalyst cell in the bass. Though we cannot speak of anything resembling "anxiety" in the passage above in which Varèse describes such projections, we can speak of a kind of metaphorical engagement happening here with the fourth dimension, one in which the elusive beyond is brought down to the level of the purely musical where its implications of infinity (and loss) can be explored in more domesticated terms. Let us say for now that, audible in the towering culminations of pitches that appear in so many of Varèse's early orchestral works (discussed in more detail in the next chapter), these projections speak, if only hazily, to the meaning that art gives to truth, to a Baudelairean poetry extracted from history through which the ephemeral and contingent somehow becomes beautiful.



Example 2.3: Projection of IC 13 in the opening measures of Arcana

Disenchantment and Possibility: Varèse and the New Physics

It is perhaps helpful to remember that this issue of art's relationship to the ephemeral is in many ways that of modernism in general to the extent that the latter's great subject is this problem and possibility of creating meaning out of the fleeting representational codes of the present. Varèse and Baudelaire were both modernists, we might say, to the extent that they both engaged artistically with the consequences of modernity, whether those consequences were the effects of disenchantment, rationalization, or something else.

But within this broader understanding of modernism, we also need to understand the degree to which the experiences it speaks to change when modernity's codes of representation are challenged to the extent that they are in the early twentieth century. By this I mean the emergence of the new physics, the final replacement of paternal-aristocratic and feudal powers with a capitalist bourgeoisie, and the technological changes and vastly increased time consciousness that came along with both. To be sure, the processes leading up to most if not all of these changes had begun long before Varèse's time. But here we must distinguish a continuum of sorts between an awareness of time in a historical sense—that is, as an experience of transience generated largely through an awareness of history and located largely outside the scope of the individual—and an awareness of time as something much more concrete, time in the present as something continually slipping out from beneath one's feet. Though there are clearly aspects of both in Baudelaire, his writing—particularly in comparison to Varèse—speaks more to the former, to a historical sense of time, rather than as a more existential time involving an individual's experience of the continually decaying present. On its most abstract level, we can link much of this to the more stable nature of nineteenth century science, which was less about

violently uprooting normative conventions as it was the patient, persistent march towards the fulfillment of long-held foundational truths. Though inevitably an engine of temporality, science proper seemed to make itself known for Baudelaire more in terms of the disenchanted natural world into which significance would inevitably decay rather than as the historical, temporal force that generated both significance and decay themselves. We could think of Baudelaire's scientifically delineated world as a world of "second nature" in Lukacs' sense of a "complex of senses—meanings—which has become rigid and strange, and which no longer awakens interiority [...] a charnel-house of long-dead interiorities." 185

To be sure, Baudelaire in many places links science directly to the highly temporal notion of progress. But whereas science might have represented a dubious progress in a quantitative sense, the world it described remained qualitatively the same: reified and dead. What was loathed by the Symbolists, after all, was precisely empiricism's inert, stagnant vision of the world. ¹⁸⁶ It is precisely this world, I think, that is implied by the activities of Baudelaire's flâneur, which—involved as they were in a kind of gathering-together of the profane material world into the redemptive constellations of artworks—seem to have been articulated as much in terms of space as of time. "External nature," we recall Baudelaire writing, [...] is nothing but an *incoherent heap* of raw materials which the artist is invited to *group together* and put in order [emphasis mine]."

With the advent of the new physics, however, it is as though science begins to assert itself to artists less as a source of reified second nature and more as a transient, creative, disruptive historical force. If Baudelaire's "incoherent heap" had been coherent enough as the dialectical other of art, providing at least a relatively stable point of orientation from which art could stake

. -

¹⁸⁵ Lukács, *The Theory of the Novel*, 64.

¹⁸⁶ See Anna Balakian, "Apollinaire and the Modern Mind," Yale French Studies, No. 4 (1949): 83.

its claims, the very Newtonian-Kantian conditions underwriting that stability were now being rewritten, and with them the experiential foundations of the individual itself. This is to say that the already-scant ontological security offered up by modernity—the trust that could be placed in the persistence of the spatio-temporal conditions from which a sense of identity could be drawn—was eroding beneath the individual's feet, and with it any sense at all of a stable present. Thus, where the activities of Baudelaire's flâneur were almost circular, as if to gather together a sense of meaning by way of the artwork, in Varèse, the activities of the artist assume a breathlessly linear character, as though meaning were something fleeting that one was doing well to merely keep up with. If the question for Baudelaire's flâneur was "what can I make of the present?," for Varèse, it was just as much "what will *become* of the present, and perhaps of *me* as someone living in the present." "At a time," Varèse writes,

when the very newness of the mechanism of life is forcing our activities and our forms of human association to break with the traditions and the methods of the past in the effort to adapt themselves to circumstances, the urgent choices which we have to make are concerned not with the past but with the future. We cannot, even if we would, live much longer by tradition. The world is changing, and we change with it.¹⁸⁷

That Varèse was referring at least in part to the new physics is incontestable. In an unpublished lecture given roughly around this same time, he mentioned the aforementioned "vertiginous changes taking place in the world" before quoting one of his favorite passages from Paul Valery (the same one, it should be noted, used by Walter Benjamin as the epigraph of his "The Artwork in the Age of Mechanical Reproducibility"):

For the past 20 years neither matter, nor space, nor time have been what they had always been before. It must be expected that such great changes should transform the whole

.

¹⁸⁷ Edgard Varèse, "The Liberation of Sound," *Contemporary Composers on Contemporary Music*, ed. Schwartz, Elliot and Barney Childs (New York: Holt, Rinehart, and Winston): 196.

technic of the arts, affecting even the inventive faculty, going so far, perhaps, as to modify marvelously the conception of art itself. 188

In another unpublished lecture from around the same time, Varèse—using his own words this time—emphasized the fundamentally disruptive, breathless character of both art and science:

In science a new language is being constantly evolved to furnish new expression for new concepts. [...] To progress, art like science can only live in a state of perpetual unrest and revolution. 189

And we must also mention these words by Varèse's friend Apollinaire, who was perhaps as influential as anyone in turning Varèse on to the artistic relevance of the new physics:

The rainbow is bent, the seasons quiver, the crowds push on to death, science undoes and remakes what already exists, whole worlds disappear forever from our understanding, our mobile images repeat themselves, or revive their vagueness, and the colors, the odors, and the sounds to which we are sensitive astonish us, then disappear from nature—all to no purpose. This monster beauty is not eternal. 190

What must be taken from all of these passages is the degree to which scientific upheaval had translated into a very palpable feeling of instability and increasing time consciousness in the realm of everyday experience. Of all the consequences of this instability, none was more decisive than the one that pertained to the relationship between art and science. As we began to discuss above, so disorienting were the paradigm shifts of turn-of-the-century science that the clear-cut opposition between art and science could no longer be maintained. We remember that for Baudelaire, science and art had born a difference in kind, representing entirely antagonistic

¹⁸⁸ Paul Valéry, quoted in Edgard Varèse, "Sound, the Raw Material of Music," unpublished lecture, Edgard Varèse Collection, Paul Sacher Stiftung. The quote is from Valéry's essay "The Conquest of Ubiquity." See his Aesthetics, trans. Ralph Manheim (New York: Pantheon, 1964). Varèse quoted this passage again in a letter to Dallapiccola. See Ouellette, Edgard Varèse, 173.

¹⁸⁹ Edgard Varèse, "Neo-Classicism and Busoni," unpublished lecture, Edgard Varèse Collection, Paul Sacher Stiftung. 190 Apollinaire, The Cubist Painters, 262.

spheres of knowledge. Indeed, art had drawn much of its identity precisely from its opposition to the spiritually impoverished world of science. It was the latter's what-you-see-is-what-you-get positivism that Baudelaire had directly contrasted with art, pitting the "realists" and "positivists," intent on pointlessly reproducing reality as it "really was," with imaginative artists who were more interested in transfiguring the natural world with the powers of the creative mind.¹⁹¹

But as the seemingly self-evident, Newtonian basis of that natural world began to crumble with the arrival of the new physics, the opposition that had sustained the identity of art and science became increasingly difficult to maintain. Science, in a way, had come to contain its own artful other, implicating such dramatically new modes of experience that its discoveries could suddenly seem to be kindred spirits with art after all. 192 We need only think of the notion of a the fourth dimension here, which for artists and scientists alike came to symbolize an unfathomable beyond to the profane Newtonian time of prosaic experience, to understand how science could now seem to possess its own artistic implications. ¹⁹³ What this ultimately meant was a temporary suspension—or at least complication—of the clear-cut dichotomy between their domains, and one that, as we will see, was not without its share of revolutionary implications. 194 In theory at least, art remained a way of imagining reality otherwise, and yet what science had acquired from the new physics was a sense that it was now beginning to imagine its own reality otherwise, rewriting its own foundations and returning to itself the very sense of spiritual mystery and possibility that it long been without. Thus, an ironic reversal had come about: in the guise of realism and naturalism, art had, to its detriment, absorbed science's

10

¹⁹¹ Baudelaire, "Salon of 1859."

¹⁹² In Allan Thiher's words, after quantum mechanics, it was no longer useful for literature to claim a rivalry with science. See his *Fiction Rivals Science*, 170.

¹⁹³ For more on this, see Henderson, "The Fourth Dimension and Non-Euclidean Geometry in Modern Art."

¹⁹⁴ See for example Werner Heisenberg, *Philosophical Problems of Nuclear Science*, trans. F.C. Hayes (New York: Pantheon, 1952): 119.

obsession with empirical reality, while science had seemingly become, in Varèse's words, the "poetry of today," 195 more adept than even art at "continually renew[ing] the appearance nature has for the eyes of men." 196 With its forays into relativity, fourth dimensional theory, quantum mechanics, and such—all represented in Varèse's private library by authors like Einstein, Arthur Eddington, Jeans, Harlow Shapley, and others—science had changed to become one step closer to art, bound together with the latter as a kindred spirit in the act of "revealing to the senses harmonies and sensations never before felt." ¹⁹⁷

"Felt," not "known." This is no inconsequential detail. For it implied that science was important to Varèse less as the voice of an eternal truth speaking through an increasingly comprehensive network of concepts and more the vehicle for a series of ever-changing subjective creations as kin to the work of poets as anyone. Continually being rewritten, so instable as to have purported the contingency of even time and space, science could now not help but resemble the world-creating gestures of the most ambitious artists.

The greatest spokesman for this viewpoint was once again Varèse's friend Apollinaire (and through him, Nietzsche). If science did little more than undo and remake extant reality, causing "whole worlds to disappear," as he had remarked, then what this meant, Apollinaire felt, was quite simply that "reality will never be discovered once and for all." "Truth is always new," he wrote, "otherwise truth would be a system even more wretched than nature itself." What Apollinaire meant was that the new physics—with the fourth dimension being perhaps the

¹⁹⁵ Varèse, quoted in Louise Varèse, "A Looking-Glass Diary, Vol.II," unpublished manuscript, Edgard Varèse Collection, Paul Sacher Stiftung.

¹⁹⁶ Apollinaire, *The Cubist Painters*. For more on Apollinaire's views on art, see Christopher Grey, *Cubist Aesthetic* Theories (Baltimore: Johns Hopkins Press, 1953).

¹⁹⁷ Varèse, "The Liberation of Sound," 196.

¹⁹⁸ Ibid., 264. "Wretched" because, without the work of artists, it remained inherently meaningless. For more on this, see Willard Bohn, "From Surrealism to Surrealism: Apollinaire and Breton," Journal of Aesthetics and Art Criticism, 36/2 (Winter 1977).

greatest example—had succeeded in showing the relative or subjective nature of our conceptions of reality (and by extension, truth and beauty), to some degree liberating reality from the reified, impoverished, eternal forms that Baudelaire and the symbolists had so abhorred. Scientific views of reality could now very sincerely be called "works of the art of life," man-made conceptual constructs more valuable for how they reimagined and refreshed the world than for how they clarified it.

Of course, Apollinaire wasn't Varèse's only source for these ideas; the notion of the human origin of truth was one Varèse encountered in the works of scientists and science writers as well. We find it, for example, in Eric Temple Bell's book *The Search for Truth*, which Varèse owned and cited often. In his lecture "Music as an Art-Science," whose title already betrays this creative convergence of the two disciplines, Varèse quotes Bell, writing: "reverence for the past no doubt is a virtue that has had its uses, but if we are to go forward the reverent approach to old difficulties is the wrong one!" At first, this passage seems to be about little more than progress for the sake of progress, a hazily-defined need to be "absolutely modern." But when we read Bell's passage in full, we see that this break from the past is warranted not because of some vague need to be modern, but because it allows the truth to come into its own as what it truly is: a subjective creative force:

Thus we free ourselves at last of the most persistent of the stifling myths foisted on us by the dead traditions of a buried past. Reverence for the past no doubt is a virtue that has had its uses, but if we are to go forward the reverent approach to old difficulties is the wrong one. [...] By seeing the *human* origin of these supposed eternal truths we shall see also a possible escape from any type of superstition.²⁰⁰

¹⁹⁹ For more on this, see Balakian, "Apollinaire and the Modern Mind," 82.

²⁰⁰ Eric Temple Bell, *The Search for Truth* (Allen and Unwin, 1946): 25. "Superstition" was also a theme of Harlow Shapley's book *Of Stars and Men*, which Varèse also owned and annotated heavily. See Varèse's own copy in the Edgard Varèse Library, Harry Ranson Center, University of Texas at Austin.

No longer inherited orthodoxy, scientific truth was now inseparably linked to the human creativity at its origins. To discover was essentially to compose, as Apollinaire made clear in his essay "The New Spirit and the Poets:"

Thousands and thousands of natural combinations have never been used in a composition. Scientists imagine them and bring them about, composing, in partnership with nature, this supreme art that is life.²⁰¹

With that, science and art had become kindred spirits, bound together as common acts of image-making oriented around the Nietzschean task of "renew[ing] the appearance nature has for the eyes of men," whether that appearance was in the guise of science's comprehensive yet fleeting kind of "truth" or art's more concrete, sensual take on the same. What cannot be emphasized enough here is the fact that nature—and with it, science—was now inseparable from appearance. If there were such a thing as true nature, it was "wretched" insofar as it was without this appearance, without this human-made clothing, that alone could give it a sense of meaning or wonder. Thus, when Varèse said that "truth exists only insofar as art gives it meaning," we can no doubt still see it as we did earlier: as a dictum having something to do with that enigmatic concreteness that art lends to science. But we must now also see science as itself a kind of art that lent the real an apollonian appearance of its own. If science was the first step towards the creation of this appearance, then art was yet another. And if the experiences they offered were qualitatively different, they were now a difference in degree and not kind.

To discover was now to create: this is essentially what we have been saying. But does this not also mean that to create was now to discover? Let me ask this a little differently: if the mysteries of the new physics had so inspired the work of artists, then might not art in turn be able to inspire or contribute in some way to the creations of science? This is exactly the reciprocal relationship that seems to be implied by Varèse's composite expression "art-science,"

٦,

²⁰¹ Apollinaire, "The Spirit and the New Poets," 312.

which invites the reader to read one term in the other. At first, this symmetry seems a bit strained; it is, after all, much easier to imagine the artistic seductiveness of something like multi-dimensional theory than it is to conceive of how something so abstract as, say, Varèse's *Hyperprism* could lend itself to new theories of the universe. But when we remember that science is now much more on the side of art, of creativity, we see that its means of building on itself and of progressing—that is, of being *science*—have no reason not to be as well. Progress for an art-science need no longer be—indeed, *can* no longer be—progressive in the traditional sense of cumulative rationality. Apollinaire writes:

These new combinations, these new works of the art of life [that we call science], are precisely what is called progress. In the sense [that life itself gives examples of it] such an art exists. But if one thinks of progress as an eternal becoming [never raising man to a higher level], the sort of prophetic call as terrible as those fables of Tantalus, Sisyphus, and the Danaids, in that case Solomon was right in opposing the prophets of Israel. The new does exist, however, independent of progress; it counts for everything in surprise, which is integral to the new spirit—what is newest and liveliest about it. *Surprise is the greatest new spring*. ²⁰²

The new in art was unmoored from the vector of a precise destination. It seems as though Varèse himself concurred, as revealed in a passage we have already encountered:

There is solidarity between scientific development and the progress of music. Throwing new light on nature, *science permits music to progress—or rather to grow and change with changing times*—by revealing to our senses harmonies and sensations before unfelt [emphasis mine]. ²⁰³

After asserting the "solidarity" between art and science, Varèse begins to say that the latter helps the former progress in a traditional sense before softening his rhetoric to realign progress more with mere change. It is a need to qualify the definition of progress that we see again in an unpublished lecture on Charles Ives:

when a new or unfamiliar work is accepted as beautiful on its first hearing, its fundamental quality is one that tends to put the mind to sleep. A narcotic is not always

_

²⁰² Apollinaire, "The New Spirit and the Poets," 312.

²⁰³ Edgard Varèse, "The Liberation of Sound."

unnecessary, but it is seldom a basis of *progress*,—that is, wholesome evolution in any creative experience [emphasis mine]. ²⁰⁴

Through this tempered understanding of progress as surprise and revelation, scientific and artistic creation could be seen to contribute to one another reciprocally because of their common rootedness in the imagination. "To reveal a new world is the function of creation in all the arts," Varèse wrote. ²⁰⁵ It was only as such that Apollinaire could speak of how the fables of art—things like transatlantic flight, or the X-rays first posed by books and such—had become scientific reality, which meant that it was "now up to the poet to imagine new ones for inventors to implement in their turn." ²⁰⁶ Art was, in this sense, to take the baton and run with it, only to pass it back to science once the next stage of its work was done. On and on they would go in an endless relay race of the new and newer, newer and newest, conceivably without end. Before moving on to explore some of the consequences of this cheek-by-jowl relationship with science, let us take a moment to explore the presence of one such nature-rejuvenating scientific idea, the fourth dimension, in Varèse's writings and music.

Hardly could there have been a better example of science imagining the world otherwise than the discovery of the fourth dimension. As we have been saying, the value of science for artists had been its ability to provide renewed images of an otherwise petrified and disenchanted nature, and nothing could have done this with more conceptual elegance—or in a way that was more easily adaptable to the artistic imagination—than a discovery that challenged the nature of

2

²⁰⁴ Edgard Varèse, "Twentieth Century Tendencies in Music," unpublished lecture, Edgard Varèse Collection, Paul Sacher Stiftung. For the sake of context, it helps here to remember here that concurrent composers such as Anton Webern had also spoken of a convergence of science and creation, but one whose progress was not only explicitly teleological but rooted in a more traditional concept of nature. Webern writes: "It is for a later period to discover the closer unifying laws that are already present in [twelve tone works] themselves. When this true conception of art is achieved, then *there will no longer be any possible distinction between science and inspired creation*. The further one presses forward, the greater becomes the identity of everything, and finally we have the impression of being faced by *a work not of man but of Nature* [emphasis mine]." See Anton von Webern, "The Path to Twelve-Note Composition," in *Modernism and Music: An Anthology of Sources*, ed. Daniel Albright (Chicago: University of Chicago Press, 2004): 212.

²⁰⁵ See Varèse, "Rhythm, Form, and Content," Contemporary Composers on Contemporary Music, 204.

²⁰⁶ Apollinaire, "The New Spirit and the Poets," 312.

perception in such a pure and wholesale way. What the fourth dimension symbolized in that artistic imagination was, quite simply, transcendence: a reality beyond the prosaic material given of everyday life.²⁰⁷ And what was art if not itself an attempt to conjure out of the finite, contingent conditions of existence another dimension of experience? Science had managed to do just this, and it was now up to artists to answer in turn.

As we saw, Varèse made frequent references to the fourth dimension. The most extensive reference comes from his lecture "The Liberation of Sound," and as the title of that talk perhaps attests, it was not so much the fourth dimension as such that captivated Varèse but its nature as a symbol of liberating release from the worn-out, petrified forms of creative and non-creative experience alike (a subject we will explore in greater depth in the following chapter). We see this fascination with the beyond in Varèse's work titles. Though they at first seem to all point to their own specific scientific worlds, each presumably with their own keys to interpretation, I would argue that what unites so many of them is their collective reference to this other dimension, so to speak, to this world beyond the prosaic and everyday. Hyperprism evoked the beyond of geometry, representative of the actual fourth dimension discussed above. Arcana implied the beyond both through its reference to alchemy (the metaphysical beyond of material existence) and through its epigraph's reference to imagination as a transcendent power that "begets a new star and a new heaven," images that welcome comparison with a fourth-dimension-like beyond. The "discoveries—new worlds on Earth, in the sky, or in the minds of men" of *Amerique* were no doubt references to similar Arcana-like regions of revelatory experience. And Espace, with its reference to the spatial and metaphorical infinite, undoubtedly had its own metaphysical implications.

²⁰⁷ For more on the fourth dimension as a general symbol of artistic transcendence during this time, see Henderson, "The Fourth Dimension and Non-Euclidean Geometry."

Without question, then, Varèse's works were beholden to some idea of a transcendent space just beyond the threshold of this-worldy experience, and one whose most potent model was the very real beyond that science had articulated in its fourth dimension. But we also know from earlier that, in the terms of everyday experience, the fourth dimensional beyond of science was a woefully abstract, largely intangible one in the face of which the artwork's greatest contribution seemed to be the sense of concretion it could lend. This is how we interpreted Varèse's sound projections, at any rate, calling them "metaphorical engagements" with the fourth dimension that domesticated that bewildering notion within the much more manageable bounds of the artwork. But in the wake of this newfound parity between art and science, in which the disciplines were responsible for mutually supportive (if still radically different) acts of revelatory discovery, we must ask whether or not this notion of art as a mere "metaphorical engagement" with science doesn't give short shrift to the importance of art's engagement with itself. The function of art, Varèse said, was the creation of a world—its own world, we must presume—and with science newly invested with what seemed to be a renewed, even metaphysical, sense of revelation, the pressure was on art not to merely imitate that abstract wonder but to rediscover within its own autonomous domain its own world-making capacity. Concretion, then, was not about making science into art. It was about the absorption and complete transformation of an emergent epistemological space into the way art thought about the possibilities of its own transcendence—one which, if realized, would signify a more meaningful type of beyond than science could ever provide.

And so we're inevitably led to ask: did Varèse's orchestral works ultimately realize anything resembling such a transcendent artistic beyond? We know from our introduction and first chapter that our answer must lean towards no. Technique, as Varèse wrote, would never be

able to rise to the level of that original metaphysical conception. The means of sound projection would remain the mere "wall" that Russolo spoke of whose "window" out onto infinity could be conjured only obliquely. Varèse's attempts at sound projection thus betrayed a music that was trying to escape itself and failing. It was trying to escape the profane materiality of its disenchanted dimension in order to rekindle a metaphysical fire in another. And yet it was an attempt, as Apollinaire had insinuated, that would always be by its bootstraps. "[The fourth dimension in art] is generated by the three known dimensions," which is to say that it was forever contingent upon precisely the profane world that it was trying to escape. And yet it would keep trying—and exuberantly so—because to realize a new artistic dimension would be to return to art a certain dignity that it had for too long been without. Referring to Picasso's work in the wake of the new physics, T.J. Clark writes:

It was not a devising of a new description of the world—one in which, to take the most widely touted example, the terms of space and time were recast in a way that responded to changes out there in physics or philosophy. It was a counterfeit of such a description—an imagining of what kind of things might happen to the means of Western painting if such a new description arose. And a thriving on that imagining: thriving here simply meaning an immense, unstoppable relish at putting the means of illusionism through their paces, making them generate impossible objects, pressing them on to further and further feats of intimation and nuance [...]²⁰⁸

Varèse's sound projections were nothing if not these impossible objects created out of an "immense, unstoppable relish at putting the means of illusionism through their paces," even if that relish resulted only in a "counterfeit description."

But were they means of carving out the eternal within the transient? Had they anything to do with Baudelaire's artistic transcendence of time by way of time? We will need to wait to fully answer. But let us foreshadow the ending here and simply say here that in its failings, Varèse's

2

²⁰⁸ T.J. Clark, Farewell to an Idea, 213—15.

art will assert less an eternity, magically conjured by way of the miracle of form, and more a horizon past which that eternity might one day be realized.

For the time being, however, let us back up. Art had aligned itself explicitly with science—at least to the extent that it now took the latter as a model of inspirational revelatory power. And yet an important consequence emerges: what is certain is that, by aligning itself explicitly with science, art had implicitly acknowledged what could only be the greatest embarrassment to anything with eyes on the eternal: that it existed largely to be surpassed, that whatever world it created would exist only to be supplanted. If Baudelaire's art had seized upon the transient only to draw a frame around it so that, within that hollowed out symbolic space, it could entertain dreams of eternity, it was an eternity that for Varèse was now in lockstep with science and thus destined to be replaced by another.

Now to be sure, this entire problematic is one synonymous with the question of modernism itself. As we have in many ways already seen, art is always at once the absolutely modern *act of making* in the present, and also always an *already made* thing that, like the ashes left behind by the flames of De Man's creative fire, is little more than the corpse of a decayed present that must again be renewed. It was out of this awareness of meaning's inevitable decay—of the mortality of nature in the wake of history—that Baudelaire had formed his historical theory of beauty in the first place. What is of interest to us in Apollinaire and Varèse's writings is the way they call attention to this paradox, to the inevitable entwinement of art with the very temporality it attempts to overcome. In the face of such a heightened consciousness of time, art comes to identify with its aggressor, seeking an end in what by definition could never deliver it.

²⁰⁹ De Man, "Literary History and Literary Modernity," 389.

In an unpublished lecture on Busoni, Varèse put it this way: "art like science can only live in a state of perpetual unrest and revolution." ²¹⁰ Hardly just a one off remark, it was a rhetoric that appeared elsewhere:

Music must submit itself to the rigors of creative anxiety and to the discipline of constant tension. It must rediscover its normal state of permanent revolution together with its desire to be different from what it has been in the masters of the past. [...the] most important element in a work of art is its newness.²¹¹

"Unrest," "revolution," "tension"—none of this is the language of an aesthetic that has any pretense of having extricated itself from time. But then suddenly, neither does the restlessness of science seem to account for this language either. What will be helpful at this point—even if it initially strikes one as far-fetched—is to consider how this interminable revolutionizing, this newness for the sake of itself, elides with the rhetoric of capitalism. Almost imperceptibly, the rhetoric of reimagining, of the creation of new worlds, and of the need for constantly renewed scientific and artistic wonder has begun to blur together with that of commodity production. Capitalism abhors stasis; it must reproduce or it dies. If it produces useful things, it does so not necessarily as ends in themselves but only insofar as they encourage further exchange and with that exchange, further production. This is to say that the products—in the case of art, the artworks—are less important than the circulation that their constant production and consumption encourages. I would argue that we find something of this in Varèse's rhetoric of revolution: a shift from product to process, from the work as an endpoint the eternal in the transient, extracted from the circuit of constant exchange—to the work as a mere point in a chain of endless production. In a sense, then, Varèse's obsession with science

10

²¹⁰ Varèse, "Neo-Classicism and Busoni," unpublished lecture, Edgard Varèse Collection, Paul Sacher Stiftung, Basel.

²¹¹ Varèse, quoted in Larry Stempel, "Not Even Varèse Can Be An Orphan," *The Musical Quarterly*, 60/1 (Jan 1974).

only strengthens this complicity. Connected only dubiously now to notions of progress and yet still charged with the task of constantly creating the new, science comes to reinforce the injunction of capitalism, whose task is to blindly create that new at whatever cost.

What do we make of this capitulation to capitalist time? What does it mean that the lifeblood of art is now in its constant effacement? In 1922, shortly after Varèse arrived in America, Max Weber asked a similar question in regards to science:

"Every scientific 'fulfillment' [...] asks to be 'surpassed' and outdated. In principle this progress goes on ad infinitum. And with this we come to inquire into the meaning of science. For, after all, it is not self-evident that something subordinate to such a law is sensible and meaningful in itself. Why does one engage in doing something that in realty never comes, and never can come, to an end? ²¹²

Historically, what could come to an end was the artwork, whose role had been less to constantly upend the world as it had been to create, by way of its peculiar hermetic language, a definitively new one. Baudelaire's task of finding the eternal in the transient was nothing if not precisely this—the *end*-ness of art, the delineation of a world within and yet outside of time. For the latter, it is as though the artwork participated in the new only insofar as it drew a frame around it to allow for a kind of intimate nearness to a present that was otherwise unobtainable. Now, however, it is as though the eternal was losing out to the mere task of keeping up. Weber had inquired into the meaning of what could never come to an end. And yet in the face of the disorienting experience of time unique to the early 20^{th} century, we are led to wonder instead how the finality of the artwork—the seeming completeness of its formal principle—could ever stand a chance against a social experience so defined by constant change.

What I want to propose is that these different manifestations of the artwork—the work as the "eternal within the transient" and the work as its own constant displacement—ultimately

²¹² Max Weber, "Science as a Vocation," *From Max Weber: Essays in Sociology*, trans. H.H. Gerth and C. Wright Mills (New York: Oxford University Press, 1958): 138.

correspond to two distinct levels of experience, which change in their relative proportions as the experience of time changes through history. Here, I want to once again invoke the distinction we made above between art's imaginative kinship with the discoveries of scientific modernity and its nature as a private act within and in response to the temporality generated therein. I will argue that these in turn correspond to the competing temporalities we invoked in chapter one—the more linear time of the metropolis and more circular time of the village—whose violent juxtaposition was so crucial to the particularly vivid experience of time for early modernism. What emerges between these is, I think, what we can roughly understand to be a general time of the subject (a subjected time, we might say), and a time of the individual, respectively. Our goal will be to see how the artwork responds to both at once—to the former, as something that obeys the injunction to be constantly new, and to the latter as something that, even as it is obeying this injunction, establishes a more intimate relationship to the Baudelairian eternity that otherwise seems to have been occluded from experience.

In our first chapter, we discussed the way that the time of the city—the linear time of clocks, progress, and discovery—could contrast so violently in the early twentieth century (to such a greater extent than today) with the still-pervasive ritualistic, circular time of the village. It was that contrast, I argued, that lent the experience of the former its shock-like character, its alienating otherness, as individuals such as Varèse encountered it for the first time as they moved from rural settings to new jobs in cities such as Paris and New York. What I want to do now is lend a psychoanalytic dimension to that otherness and consider the ways it might have imposed itself as a kind of social injunction to which the individual had no choice but to submit. Indeed,

.

²¹³ My distinction between individual and subject corresponds roughly to Althusser's similar distinction in his "Ideology and Ideological State Apparatuses." See that essay in *Lenin and Philosophy and other Essays by Louis Althusser*, trans. Ben Brewster (New York: Monthly Review Press, 1971): 170-183.

we remember that for Varèse, music was to do no less than "*submit* itself to the rigors of creative anxiety [emphasis mine]" to "rediscover its state of permanent revolution." And we cannot forget another passage from above, worth revisiting in full:

At a time when the very newness of the mechanism of life is *forcing* our activities and our forms of human association to break with the traditions and the methods of the past in the effort to adapt themselves to circumstances, the urgent choices which we *have* to make are concerned not with the past but with the future. *We cannot, even if we would,* live much longer by tradition. The world is changing, and we change with it. The more we allow our minds the romantic luxury of treasuring the past in memory, the less able we become to face the future and to determine the new values which can be created in it [emphasis mine]. ²¹⁵

What is crucial about this passage is the way it allows us to read modernism's abandonment of tradition as occurring not because of some giddy fetishism of the new but rather as the result of this social-capitalist injunction in the face of which the individual has little control.²¹⁶ Moreover, we see it as an injunction that is in many ways ideological because of the way it is misrecognized as an objective necessity. This is what Adorno means when he writes that

the authority of the new is that of the historically inevitable. To this extent it implies objective criticism of the individual, the vehicle of the new: In the new the knot is tied aesthetically between individual and society.²¹⁷

The new exerts its power precisely by seeming unavoidable, as not a choice among others but as a given, and one the individual buys into in a manner that both perpetuates the new and its subjection. As we will come to see, this entire process bears more than a little resemblance to the individual's original subjection to language where, faced with the overwhelming presence of the father, it is forced to abandon a more immediately meaningful kind of experience (tradition, in a sense) for one mediated through the forms of the other (the new, the modern). The substitute

1

²¹⁴ Varèse, quoted in Larry Stempel, "Not Even Varèse Can Be An Orphan," *The Musical Quarterly*, 60/1 (Jan 1974).

²¹⁵ Edgard Varèse, "New Instruments and New Music," 196.

²¹⁶ A fruitful comparison might be made between Varèse's language of the imperative and Schoenberg's. It was the latter who famously said "Art is born of "I must," not "I can." See his *Style and Idea*, trans. Leo Black (University of California Press, 1984): 365.

²¹⁷ Adorno, Aesthetic Theory, 21.

pleasures of the signifier become the ill-fitting means by which the subject must try to recognize itself, and yet the inadequacy of those means assures that that recognition will not happen without a corresponding sense of loss or castration.

Turning to art proper, we find in Marx a very similar language that allows us to understand a related process of alienation in the artwork's turn towards the new. ²¹⁸ There is on the one hand what we might call the ideal relationship of the subject to art, one in which the work is first and foremost a special type of labor through which the subject contemplates his "species being" by, to repeat Hegel's words, "strip[ping] the external world of its inflexible foreignness [...] to enjoy in the shape of things only an external realization of himself." It is a way, in other words, of *feeling at home in the world* and at home in nature, of creating an image of the world that appears inherently meaningful because one can recognize oneself concretely in it. If such an art is an example of what Marx called free production, then the moment of subjection to the new is the moment when this production becomes, like the desire of the linguistic subject, mediated through the other, alienated production from which a certain value or degree of recognition has been extracted. If in language, that sense of loss is an effect of the signifier's inadequacy, in art, we might say that it is caused by *abstraction*, that quotient of the work in which the subject can no longer concretely recognize himself.

Now to be sure—and we will touch on this more below—newness need not necessarily be synonymous with abstraction or alienation, and we need only look to the majority of art before modernism to see exactly how. But at the same time, we should be careful to not assume

2

²¹⁸ The connection with Marx was made by Lacan himself. See particularly the section entitled "The Function of the Good" in *Seminar VII: The Ethics of Psychoanalysis*, trans. Dennis Porter (W.W. Norton, 1997): 218-230.
²¹⁹ The relevant passage in Marx would be: "It is just the working-up of the objective world [...] that man first really proves himself to be a *species being*. This production is his active species life. Through and because of this production, nature appears as *his* work and his reality. The object of labour is, therefore, the *objectification of man's species* life: for he duplicates himself not only, as in consciousness, intellectually, but also actively, in reality, and therefore he contemplates himself in a world that he has created." Karl Marx, *Economic and Philosophic Manuscripts of 1844*, trans. Martin Milligan (Promethius Books, 1988): 76.

that this same art is not still in some way subjugated to the new. If Marx's free production is not yet abstract, it is potentially only because "production [in the name of the new] has not yet outstripped consumption," so to speak. That is, despite its subjection to the new, the subject is still able to recognize itself and its concrete needs in what it produces. What is significant about modernism is that, as what we might call a more advanced stage of production, it can be interpreted as revealing what we might call the truth of the new insofar as the new in modernity is increasingly tied to capitalism. Simply put, the truth of the new is revealed to be the *command*, the fact that "one *must* be absolutely modern" despite all, the new for the sake of only itself. The production of the new arises, that is, not out of some socially articulated need but rather merely for the sake of its own impulsion, its own "permanent revolution," its need to innovate at all costs. ²²⁰ Contrary to more traditional modes, then, modernism would represent a situation in which production had outstripped consumption to reveal its relative indifference towards the latter. ²²¹

We see then how it is in the work's abstraction that this newness-as-command reveals itself: abstraction betrays that degree of freedom robbed from the production process, that ability to feel fully at home in the work's concretion. What is just as important to emphasize here, however, is how this notion of deprivation via abstraction, while qualitatively unique to

,

²²⁰ See, for example, Karl Marx, *Capital: A Critique of Political Economy, Vol.1*, trans. Ben Fowkes (London: Penguin Books, 1990): 293.

Interestingly, it is here that the dimension of science reenters the picture as a similar type of production in excess of consumption insofar as, just as with the modernist work, it increasingly represents a universe that eludes the experiential scope of the individual. It is not difficult then to see the possibility of an elision in the artistic imaginary between science and capitalism, where the new becomes increasingly difficult to discern from mere *difference*, much as Varèse and Apollinaire's qualified notion of progress attests.

²²² Short of proper evidence, it is admittedly presumptuous to assume that the opaque abstractions of modernism must always be experienced as such by composers, or that they automatically translate into experiences of loss or alienation. To do so would be to discount the myriad affirmative or invigorating experiences that can be had before the modernist work, particularly those which have little to do with normative notions of bourgeois subjectivity. But if we presume that modernist abstraction truly does have something to do with the consequences of Varèse's "permanent revolution" or "production for production's sake" carried on in the name of that injunction from the other, then we cannot but have at least a partially critical eye towards its driving mechanisms.

modernism, has its roots in the inaugural command of modernity in general. As we said above, modernity in general begins with an injunction to turn away from the past. Baudelaire's search for poetry within the ephemeral, the fugitive, and the contingent was nothing if not a search for meaning in the wake of the limiting conditions established by that command. As such, modernity must turn towards a present that is now emptied of a priori meaning, ²²³ a blank space from which all significance has been robbed. It is thus in this turn towards the future that the present embodies another kind of abstraction in that its value has yet to be concretized, a space in which the possibility of being at home in the world is in no way guaranteed, and upon which the subject must once again labor in order to try to realize that "external realization of himself." Art in modernity is every bit a form of this laboring, this tireless homebuilding or constant testing to see what—if any—meaning can be created out of that present. In this sense, every turn towards a new present initially brings with it an experience of alienation similar to the experience of abstraction before the modernist work. Or let us put it this way: the experience of abstraction before the modernist work gives synchronic expression to the diachronic experience of modernity in general.

But what is most important is the way both of these experiences bring with them an intensified sense of *futurity*. Meaning has gone from being an always-available condition (tradition) to being something that, now tied inextricably to the new, is either just over the horizon or abstract once it finally arrives. What Nietzsche referred to as the "loss of the mythical home" is precisely this displacement of significance from the presence and onto an indeterminate future, significance as that ever-elusive God "who is coming." 224

Adorno puts it this way: "Itself unattainable,"

²²³ That is, tradition is abandoned, and so meaning must be created afresh.

²²⁴ Nietzsche, quoted in Habermas, *The Philosophical Discourse of Modernity*, 87.

newness installs itself in the place of overthrown divinity [disenchantment, the loss of the "mythical home"] amidst the first consciousness of the decay of experience. But its concept remains chained to that sickness, as its abstraction attests, impotently reaching for a receding concreteness."²²⁵

What Adorno is describing here is a situation of diminishing returns whereby meaning must be sought in the new even as it is increasingly the new that causes a steady impoverishment of the quality of that meaning. This is once again because the experience of the new as something produced solely for the sake of itself eventually comes to displace whatever it might be able to offer in the way of concrete meaningfulness. We find then a continuum of sorts over which the gloomy truth of this solipsistic production gradually reveals itself, beginning with modernity's inaugural turn towards the new and culminating in modernism's potentially dark caricature of it.

But curiously, we might just as productively put this in the language of desire. What, after all, does this nagging sense of futurity, this "God who is coming," and this impotent reach for a "receding concreteness" attest to if not that? We were already nearing this realm when, regarding Baudelaire, we spoke of the incessant decay and renewal of those artistic moments so pregnant with life. Disenchantment was all about this battle to try and maintain some sort of contact with meaning in the wake of time. In many ways, what we find in Varèse's rhetoric is an intensification of this experience to the point where the engagement with artworks begins to take on the character of desire proper—the experience of the present, that is, less as a relatively stable moment of created meaning and more the site of pure difference, the mere "vacuum through which other such moments may metonymically rush, each casually effacing itself for the next."²²⁶ Whether our paradigm here is the signifier-to-signifier movement of a properly

²²⁵ T.W. Adorno, *Minima Moralia*, trans. E.F.N. Jephcott (New York: Verso Press, 2006): 235.

²²⁶ Terry Eagleton, Walter Benjamin, or Towards a Revolutionary Criticism (London: Verso Press, 2009): 27.

psychoanalytic desire or the "permanent revolution" of commodity production, what we must see in the breathless displacement of one new work with another is this implicit sense of a "not yet" to the concretion of meaning, a sense that meaning is always coming, and one that abstractions of modernism only exacerbate.

We will say more about this "not yet" shortly. But let us bracket this discussion for now in order to say something about that other level of artistic experience we mentioned above: the level not of the subject and subjection to the new but of the individual. If the former represented an experience of the artwork as a kind of command-induced constant production for the other, then the latter would involve the experience of art less as this compromised social production and more as a private act within and through that production. It would be the level upon which art, by way of its peculiar way of participating in the new, at once removes the individual from the "tomorrow and tomorrow and tomorrow" of permanent revolution in order to establish a more intimate relationship with the more concrete meaning that it excludes.

Now to be sure, we just finished discussing how nothing is quite so tied to the new as is modernism. And so we hardly need mention again that, insofar as modernism is an art about the consequences of modernity, about the erosion of inherited meaning (Adorno's "decay of experience") and the need to create it anew around every turn, it not only participates in but is in many ways *about* the new. Its great *subject* is the new. To cite T.J. Clark once more, it is a putting to the test of the representational practices of an era to see what concrete meaning can be wrought from those practices' limiting conditions.

What is potentially different about those representational practices as filtered through the artwork, however, is once again their scope, and it is here that we finally return to our Baudelairean reading of Varèse and see how the concreteness we discussed might still be

applicable. By way of the handmade labor that results in art, those otherwise abstract representational practices—in Varèse, the fourth dimension is a perfect example—are brought down to the level of an objective totality in which the individual can finally find himself reflected, if only because it is his/her hand that wrought it. That is, in its ideal form the artwork represents a world, wrought from the abstract real world, in which the individual can feel at home because he recognizes himself and his hand in it. This is what concretion means: the feeling of situatedness and being at home in the world, the sense of a "harmony with external existence...displayed as originating from human activity and as produced thereby."²²⁷

But when we talk about individual artworks in this manner, we do nothing to answer the question of what happens when one home has to be abandoned for another, so to speak. How, in other words, do we reconcile the individual's experience of the singular work with the inevitability of its displacement with another? Or put yet another way, how do we reconcile this private individual with the social necessity of the subject? This is, of course, as much a question for Baudelaire as it is for Varèse, and the answer will once again have to do with that notion of the eternal within the transient, although with the exception that here the eternal will be something gratified across artworks rather than located within singular examples. In other words, we find ourselves once again back in the realm of desire, which we can define here more specifically as the metonymic movement from art object to art object around a central, and very much absent, object/cause. What we must see is how desire represents a compromise of sorts between the level of the subject/subjection and the individual in that it is precisely desire that keeps the subject chained to the continued production of the new, but only insofar as that production in turn maintains an oblique relationship to (the memory of) a more original, nonalienated kind of gratification. Varèse's desire for constant artistic revolution would represent

²²⁷ Hegel, Aesthetics, Vol. 1, 253. See also Fredric Jameson, Marxism and Form, 169.

this necessary movement from work to work which, at the same time, revolves silently around that more original experience that cannot be accounted for in the works themselves. ²²⁸ We can think of this non-alienated experience as being exemplified by Marx's free production in which what one finds in the work is not alienated production (production for the other, from which that crucial quota of "enjoyment" has been removed) but rather a (Hegelian, not Lukacsian) second nature in which the subject can feel at home because it is an objectification of his actions as a free species being. ²²⁹ But psychoanalytic and Marxian minutia aside, the important point is that as the artwork is increasingly produced out of the injunction to be new at all costs, it begins to become detached from its own ideal and to enter into an oblique relationship with its non-alienated double, evoking in effigy what it would truly like to be. "Art," Adorno writes as though channeling Baudelaire, "is not identical to its empiria," and nowhere more so than in modernism. ²³⁰

It is this oblique relationship that will concern us as we turn back to a discussion of Varèse proper and bring this chapter to a close. As we do so, it will help to remember that our desirous composer-subject, chained to the constant production of the new while "impotently reaching for a receding concreteness," is all a more abstract way of describing what we earlier

²²⁸ In psychoanalysis, desire and subjection to the new (in this case, to the signifier) are in many ways one and the same in that it is precisely desire that keeps the subject subjected to/engaged with the symbolic and with the constant "production" of new meanings. It can do this because those signifiers maintain what we will later describe as an oblique relationship to the more original libidinal object they are replacing. That is, they gratify the subject's unconscious desire just enough to keep it engaged with language as an ersatz satisfaction. But that unconscious desire still remains what we above described as that central object/cause. It is the forgotten remainder, foreclosed by language and yet still sought through it. Lacan's dialectic of desire describes the constant "metonymic" movement from new object around this invisible object/cause. On the relationship of subjection to the continued production of meaning, see Lacan, *Seminar VII: The Ethics of Psychoanalysis*, 224.

What is key here is the particularly privileged relationship artworks maintain to this memory as compared to other objects of production. If the role of most signifiers or commodities is to keep the subject distracted and chained to that endless stream of production, art is somewhat different in that, functionally useless, it allows for a kind of nearness to this memory of being, this free production, that other signifiers disallow. That is, art in many ways asserts its own negativity, its own nature as a representation of a lack, and no more so than in modernism. It does not disappear into its use but maintains a kind of opacity, which, almost in the form of a question, provokes the subject into entering into a more intimate relationship with what would be its answer.

put in simpler terms: the increasingly futile attempt, made through the artwork, to feel at home in a world increasingly marked by a radically disorienting experience of time. It has been a question of finding meaning in a present whose window has begun contracting to the point where, transformed into the pure negativity of time itself, it appears to close altogether.

The Threshold

What can be the status of the artwork in such a situation? If the present has ceased to be a fleeting moment of being in which the artwork can secure and confer its tenuous meaning, then how could it be anything but a kind of doomed allegory of the present whose assertions of the limits of experience are just as much those of a promissory future?²³¹ I would argue that the artwork comes to have precisely this status in Varèse, the status of a kind of threshold whose reason for existence is to be crossed.

The word "threshold" is, of course, Varèse's own, which we have already encountered once before. It was "at the threshold of beauty," we remember, "that science and art collaborate." Explaining this earlier by way of Baudelaire, we said that science defined a threshold in the sense that it represented the present at its most transient, which, as only one half of beauty, needed the eternal "something more" of art to make that beauty whole. 232 Science "asks to be surpassed," Weber wrote, as though a significant portion of its being were in its own negation, with every discovery being at once a symbol of presence and a profane allegory of the greater

To be sure, the present is, in a sense, always this threshold at which, to use Bergson's phrase, the present gnaws into the future. But we must remember that we are speaking here in terms of a profane, spatialized, capitalist conception of time. 232 I don't mean to imply here that science and art are like two pieces of a puzzle that are combined to make a whole.

things sure to come.²³³ What we must wonder, then, is whether an art based more and more on this increasingly disorienting temporality of science wouldn't itself ultimately "ask" to be surpassed—if the entire work itself wouldn't come to define the threshold whose claims on the present served as much to define an oblique relationship to that "god who is coming" out of the promissory future.

What we are asking, in other words, is the place and function of the work in relation to the desire that exceeds it. We asked a version of this question in chapter one, in which desire was implicated at the threshold at which the clumsy signifiers of the musical symbolic (the tempered scale) strained asymptotically towards the "infinite gradations" (Busoni, etc.) of the musical real. But we also encounter it in Varèse's continuation of a quote we examined above:

truth exists only insofar as art gives it a meaning. The joy of the artist is in the *hunt*...For my part, *I cannot resist that burning desire to go beyond the limits* [emphasis mine].²³⁴

The artwork's job was to seize the contingent, infinite becoming of truth and impose some sort of meaning on it by way of its peculiar form of objectification. Yet that objectification, as at once a kind of petrification of meaning, could not help but articulate yet another limit that merely created the desire to be crossed. Every work, it seems, is destined to become a new threshold traced by De Man's "ashes left behind by the uniquely shaped flames of a fire." Varèse's "burning" desire to cross the limit is precisely that fire whose cathexis at once initiates the rapid decay of its own material support, creating the need for another in the new, and on and on.

Something of this objectless desire is implied by the epigraph, oft quoted by Varèse, from Busoni's *Enwurf*, in which the "known" and "unknown" define the place of the threshold:

.

²³³ This is, of course, a microcosm of the problem of modernity itself, in which meaning is no longer a given foundation stemming from the agreed-upon, implicitly understood myths and rituals inherited from the past, but is instead constantly created anew, and as such, constantly destroyed.

²³⁴ Varèse, quoted in Ouellette, 97.

²³⁵ We must see this as having every bit to do with the form-giving intention in the novel for Lukacs, which speaks to a world in which meaning is in no way directly given but must instead be tried, tested, and tried and tested again. See *The Theory of the Novel*, 60-1.

What seek you? Say! And what do you expect?"—

I know not what; the Unknown I would have!

What's known to me, is endless; I would go

Beyond the known: The last word still is wanting."²³⁶

The last word is still wanting, the mythical and concrete home as infinitely receding as the boundary of knowledge itself. Varèse and Busoni are essentially blind seekers in the night for whom all that can be said of the object of artistic desire is that it is, quite simply, elsewhere. We see this oblique relationship even more vividly in a lecture Varèse once gave in which he cited Pascal, stating that "the more we enlarge the sphere of our knowledge, the more we augment our point of contact with the unknown." ²³⁷ There couldn't be a better image for the allegorical modernist work than this. Now cheek to cheek with scientific discovery, the work accomplishes a certain type of meaningful intimacy ("contact," in Varèse's word)—but not, it turns out, with anything objectified or immanent within the work itself. Rather, it is an intimacy with the pure negativity of the unknown, a kind of torturous, asymptotic nearness to what wasn't but could one day possibly be.

There forever stands a contradiction, then, between the seemingly infinite search for the unknown and the sense of finality offered by individual works. Art's object-ness, its implicit sense of completion, cannot help but represent the desire for something decidedly outside of the endless quest for the unknown. The task, then, is to somehow take Varèse at his word that the "joy of the artist is in the hunt," but also account for his somewhat contradictory claim that "truth exists only insofar as art gives it meaning." In other words, we must account for the pleasure in the search itself, but also for the residual meanings that accrue in the form of works produced in

²³⁶ Busoni, quoted in Varèse, "Rhythm, Form and Content," Contemporary Composers on Contemporary Music,

Louise Varèse, "A Looking-Glass Diary, Vol.II," unpublished manuscript, Edgard Varèse Collection, Paul Sacher Stiftung.

the process. Meaning demands a structure, a network of relations, some degree of permanence. This is what art gives to truth: that objectification seemingly standing outside of time.²³⁸ The question, then, becomes the following: even though these residual meanings, these art objects, seem destined to disenchantment, what positive content can we nonetheless ascribe to them?

Adorno is once again of help:

The relation to the new [or, to what lies across Varèse's limit, the unknown, etc.] is modeled on a child at the piano searching for a chord never previously heard. This chord, however, was always there; the possible combinations are limited and actually everything that can be played on it is implicitly given in the keyboard. *The new is the longing for the new, not the new itself*: That is what everything new suffers from. What takes itself to be Utopia remains the negation of what exists and is obedient to it.²³⁹

Here, Adorno is distinguishing two types of newness: the "chord never previously heard," which would be a newness ultimately traceable back to the old (the 88 keys of the keyboard), and the truly new, which cannot be objectively accounted for. Art in the age of disenchantment has only the former out of which to conjure some intimation of the latter. That is, it has only the paltry 88 keys of Baudelaire's "incoherent heap of raw materials" to use as a means of creating some semblance of a meaningful, if not necessarily objectively accountable, world (for Varèse, this is the meaning art gives to truth). If art at times seems to have created this alternative in the form of a nature reconciled with the subject, then lest it become ideology, that alternative must ultimately be traced back to the very profane conditions it was trying to transcend.

And yet this is also a moment at which a certain ontology or positive content can be ascribed to the artwork, if only in the form of negativity itself: an ontology of *longing*, to use Adorno's word, the artwork as a kind of representation of a lack. Yes, art is deception, Adorno seems to say elsewhere. Yes, it is a kind of lie. But what remains once this critique has done its

²³⁸ What happens within individual works is, of course, an entirely different matter. Music's temporality (its non-object-ness) is a topic in and of itself, for example. But even that temporality must be congealed within individual works which must take on at least some degree the character here described.

²³⁹ Adorno, Aesthetic Theory, 32.

work; what still stands once the fire has been lit, lingered, and died to ash; is the one aspect of art that—within modernism in particular—we must allow a degree of objective reality:

possibility. 240 "The reality of artworks," writes Adorno, "testifies to the possibility of the possible." Artworks not only create the semblance of a different world; they represent, by way of the modicum of human freedom that brings them into being, the possibility of one day actually achieving it. 242

Adorno is not writing in a vacuum here; his ontology of possibility has early modernist precedents. In his important "Salon of 1859," Baudelaire wrote that the artwork "produces the *sensation* of newness [emphasis mine]," in a sense denying, much as Adorno did, that newness any sort of objective reality. But it was precisely that "sensation," illusive or not, that was perhaps what was most real in the artwork. "The imagination," Baudelaire went on, "is the queen of truth, and the *possible* is one of the provinces of truth. It has a positive relationship with the infinite." Possibility also occupied an important place for Breton in his surrealist manifesto, writing that "imagination alone offers me some intimation of what *can be* [emphasis mine] "244 And there is even some degree to which Apollinaire's high valuation of the notion of "surprise" in art largely concerned possibility insofar as it was based in the sense that the "unnatural" could arise out of the "natural," a sign that some semblance of renewed meaning could still be wrought from a world constantly decaying into petrified forms.

²⁴⁰ Adorno writes: "Yet whoever, rightly, senses unfreedom in all art is tempted to capitulate, to resign in the face of the gathering forces of administration, with the dismissive assertion that 'nothing ever changes,' whereas instead, in the semblance of what is other, its possibility also unfolds." See *Aesthetic Theory*, 18.
²⁴¹ Ibid., 132.

²⁴² "In the end hope, wrested from reality by negating it, is the only form in which truth appears." Adorno, *Minima Moralia*, 98.

²⁴³ Baudelaire, "Salon of 1859," 156.

²⁴⁴ Andre Breton, "Manifesto of Surrealism," *Manifestos of Surrealism*, trans. Richard Seaver and Helen R. Lane (Ann Arbor: Ann Arbor Paperback, 1972): 5.

What is important for this chapter, then, is the question of how we might situate this sense of possibility within a certain historical experience of modernity and its consequent temporality. T.J. Clark describes modernism as something "caught interminably between horror and elation at the forces driving it,"245 at once terrified by the implications of a world in which God is dead (Baudelaire's contingency) and giddy with hope that technology, socialism, or other some other development might somehow take his place. Varèse's impassioned, breathless rhetoric, we suggested, was evidence of an attempt to cope with this period of uncertainty, a commitment to the coming future as exciting as it was terrifying. We must situate Varèse's rhetoric of possibility in this exact same place, within a historically locatable "modernist window" in which the alternatives to recently ousted social and cultural orders had yet to congeal into anything definitive. This is once again that transitional period of "incomplete modernization" in which the consequences of modernization—the replacement of myth with rationality, the sacred with the secular, or more concretely, the ancien règime with bourgeoisie democracy—had yet to colonize all aspects of daily life and thus close the window of hope in regards to what of modernity's promise of a better world it might be able to deliver in the near future. 246 It was uncertain, for example, whether socialism or (what we know today to be) a radicalized capitalism would come out of the Russian Revolution of 1905-7, an uncertainty that was only perpetuated by the revolution that followed shortly before Varèse's move to America.

But in any event, all of these developments—whether they be political or artistic—contributed to a palpable sense of uncertainty and hope in the air, made possible by a particular

2

²⁴⁵ T.J. Clark, Farewell to an Idea, 8.

²⁴⁶ Jameson, *A Singular Modernity*, 141. Writing largely of Paris, Walter Adamson calls this period the "modernist window," a "transitional period in which the relation between market forces, lingering aristocratic standards of taste, individual ingenuity and craftsmanship, and a newly enlarged mass audience was being renegotiated." See his "Apollinaire's Politics: Modernism, Nationalism, and the Public Sphere in Avant-garde Paris," *Modernism/Modernity*, 6.3 (1999): 36. For more on the persistence of older orders into the modernist period, see Arno Mayer's *The Persistence of the Old Regime* (Verso Press, 2010).

historical juncture. It is what Perry Anderson, in the context of precisely this modernist window, has called the "imaginative proximity of social revolution." By revolution, Anderson is referring to both the general sense of anticipation and anxiety in the face of impending change as well as to the proximity of revolution proper. And as we began to see above, revolution had no so small a place in the creative imagination of Varèse himself. Though somewhat politically ambivalent, ²⁴⁸ he had met both Lenin and Trotsky with great enthusiasm and was at times enamored with the revolutionary sentiment pervading Russia. Louise recalls:

[Varèse] believed that the old Russian bear with its new revolutionary physiognomy, which Varèse did not yet recognize as a false face, would receive him and his music with one of those warm Russian embraces he knew so well. For many years, for many of us, the Russian revolution was a fresh scintillating faith. We believed no bad of it, explained away all criticism. Both Varèse and Suzanne [Bing, his ex-wife] had frequented the Russian refugee milieu in Paris before World War I, and, as I have already mentioned, Varèse met Lenin. There, Varèse's own idealization of revolution had lent Lenin a halo and his ruthless regime an aura of sanctity. 249

We see here two things: the first is the aforementioned sense of anticipation that pervaded the modernist window, a "revolutionary physiognomy" that had yet to reveal its "false face." But we also see a close association of this physiognomy with Varèse's own music. Heightening this connection is the fact that, in his personal copy of Lenin's *Imperialism: The Highest Stage of* Capitalism, Varèse routinely underlined the phrase "raw materials," which was one that he often used to describe sound in its function as a building block in his own music.²⁵⁰

This is important. We noted earlier how one of the important ways various modernisms created meaning was by bringing the abstractions of modernity down to the level of the

²⁴⁷ Perry Anderson, "Modernity and Revolution," New Left Review (March-April 1984): 104.

²⁴⁸ See David Schiff's "A Red But No Communist: Varèse in the 30s and 40s," *Edgard Varèse: Composer, Sound* Sculptor, Visionary.

²⁴⁹ Louise Varèse, "A Looking-Glass Diary, Vol.II," unpublished manuscript, Edgard Varèse Collection, Paul

²⁵⁰ V.I. Lenin, *Imperialism: The Highest Stage of Capitalism*, Edgard Varèse Library, Harry Ransom Center, University of Texas at Austin. An unpublished lecture by Varèse at the Paul Sacher Stiftung is entitled "Sound, the Raw Material of Music." We should also note the faith Lenin had in science and technology as necessary components of a revolutionary proletariat.

individual's concrete artistic labor, a labor that was meaningful because, unlike the world itself, the artist could discern his or her reflection in it. What we see here is not only another potential example of that tendency, but also a simple example of how world-historical, scientific, and private-artistic ideas alike could potentially elide together in the same imaginative space. In a letter written to Carlos Salzedo, sent shortly after Varèse had arrived in Paris, we get a sense of the meaningfulness produced by this comingling of scientific abstraction and artistic activity:

Here I am installed in my new boutique for the last two weeks. You'd love it. And you would be pleased with my progress. I have the most beautiful entourage of the real young, and several pupils of talent. I am well known and liked in scientific circles: physic—mathematical—philosophical. I live in an atmosphere of spirituality very favorable to creation and my development. It's magnificent. The new tendency of science is even freeing it from materialism and is becoming pure and luminous. One feels it reflected in the works of Einstein, Jeans, Eddington—and among not a few Americans—and all this is consoling and gives strength.²⁵¹

Art has become a crucial mediator between modernity at its most abstract and concrete emotional, even spiritual, experience. Moreover, it has become infused with a sense of revolutionary possibility whose realization, if just beyond the threshold of the new, nonetheless seems immanent.

Louise Varèse once noted that what captivated Varèse about science was its "tantalizing, continuously withdrawn, and renewed promise of revelation." We would be remiss if we did not somehow connect this incessantly deferred satisfaction to the related promise that Stendhal (and by way of him, Baudelaire) saw in art: its *promesse de bonheur*. Within the coordinates of the modernist window, "revelation" comes to be only a few steps from its unlikely cousin, revolution. Both imply the truly new, the God—

. .

²⁵¹ Varèse to Carlos Salzedo, quoted in Louise Varèse, "A Looking-Glass Diary, Vol.II," 98.

however secular—who is coming out of the promissory future. Modernism and Varèse both must be understood precisely here.

Chapter 3

Varèse, Contact, Sound

"Music is expressive, carrying us out of ourselves and beyond ourselves, into impersonal regions, into the stream of things; permitting us to feel the conditions under which objects exist, the forces playing upon human life. To live, to merge with the stream and become part of forces larger than ourselves, is to feel, to know something about the entire world; music lets us share in a great man's absorption: at least to the degree to which we are capable of being lost to ourselves." —Paul Rosenfeld

What would it mean to touch one's time? To make contact with the new? The question inevitably follows from Rimbaud's injunction, made in the 1870s and so crucial to the modernism of Varèse and others, that one must "be absolutely modern." One must immerse one's entire being in the stuff of the present, the poet seems to say, or risk being defined as little more than an "uninterrupted pastness," tragically contingent upon a spent being found outside of oneself. If Rimbaud's dream was in the end a dream of immediacy—of transcending the interminable stream of history to achieve some sort of pure presence—then it also betrayed an awareness, however latent, of the source of its own impossibility: of the incessant deferral of time from which any dream of presence must draw its breath. To touch one's time, then, with all the unmediated certitude of felt contact: could there be a better symbol—or in some ways, a better mockery—of modernism's utopian aspirations than that?

I offer this question as a way to begin thinking about a number of things: about the persistent rhetoric of contact that pervades both Varèse's writings and the philosophical critique of modernity in general; about the place of that rhetoric of contact within the vivid experience of

, ,

²⁵² Arthur Rimbaud, *A Season in Hell & Illuminations*, trans. Bertrand Mathieu (BOA Editions, 1991): 55.

Translation amended. ²⁵³ Friedrich Nietzsche, quoted in Paul De Man, *Blindness and Insight* (University of Minnesota Press, 1983): 145.

time and disenchantment we have henceforth discussed; and ultimately, about the relationship of Varèse's uniquely physical conception of sound to both. To be sure, several of the themes we will touch upon here will be familiar to us from previous chapters, particularly the last, which was in many ways its own take on this problem of maintaining contact with the "absolutely modern" in the context of a heightened consciousness of time. It was there that Rimbaud's injunction surfaced in Varèse's own writings, taking on the form of a command that could be obeyed in part through art's collusion with science. 254 But whereas there, the command was to be heeded for the sake of something beyond it—the stable sense of meaning constantly denied by the demand for newness, or the sense of possibility the new promised but could never deliver here, that command will be something heeded for its own sake insofar as it will come to be heard as issuing from nothing less than the life force itself.²⁵⁵ The mere act of obeying the command, of being absolutely modern in art, in other words, will at once be an act of maintaining a kind of life-perpetuating contact with the vital stream of modernity apart from which art could only, as Varèse put it, "begin to die." What we find with even the most cursory glance at Varèse's prose are precisely these fantasies of contact with modernity's vital stream—fantasies of lifestifling boundaries breached, of sounds freed from formal prisons to touch other sounds, and of a general condition of sonic and social intimacy associated with the unimpeded flow of the élan vital. What will ultimately interest us here is the particularly tactile nature of these fantasies as well as the way they relate not merely to the generic dreams of transcendence common to so

²⁵⁴ Here again is one of the relevant passages: "At a time when the very newness of the mechanism of life is *forcing* our activities and our forms of human association to break with the traditions and the methods of the past in the effort to adapt themselves to circumstances, the urgent choices which we have to make are concerned not with the past but with the future. We cannot, even if we would, live much longer by tradition. The world is changing, and we change with it [emphasis mine]." Edgard Varèse, "The Liberation of Sound," Contemporary Composers on Contemporary Music, ed. Schwartz, Elliot and Barney Childs (New York: Holt, Rinehart, and Winston): 196. ²⁵⁵ We pick up, in other words, on what De Man discussed as the mere act of creation and its relationship to the present as opposed to the creation itself, already consigned to the past upon creation. ²⁵⁶ Edgard Varèse, Jérom' s'en vat'en guerre," *Eolian Review* (February 1924): 15.

many aesthetics across historical boundaries, but also to a specific form of intimacy born from the acute sense of separation unique to the period we associate with modernism. In other words, I am interested in the way Varèse's dreams of contact live in modernity's condition of diremption, in that feeling or fear, expressed by so many post-war artists and thinkers, of somehow being cut off from or left behind by modernity's vertiginous temporality. It is a feeling that is intimately related to the increasingly bureaucratic, specialized, and differentiated nature of a society in whose ever-changing structures the individual struggles increasingly to recognize itself, and in which the resultant quality of experience—its capacity for generating meaning—is atrophied from felt participation to distanced contemplation.

It is tempting to find in this scenario a description of modernity as fitting for our own time as it is for Varèse's, an image so familiar, admittedly clichéd, and applicable to a now centuries-old social experience as to seem almost meaningless. But while we can certainly characterize our own present as an intensification and continuation of these tendencies towards a disconnected and atomized social experience—a playing out of the "consequences of modernity," to use Anthony Giddens' phrase²⁵⁷—to assume that this experience is comparable in intensity to that of Varèse's generation is to forget that modernity's reach was once not so pervasive and thus potentially much more disorienting when finally encountered. What we discussed in the first chapter as modernity's "incomplete" nature will nowhere be more applicable than here. The metropolis, we remember, could take on its shock-like character for the WWI generation because of the way it contrasted so violently with a still-pervasive, alternate temporality of the rural—that is, with a more circular sense of time based in ritual and tradition

٦.

²⁵⁷ See Anthony Giddens, *The Consequences of Modernity* (Stanford: Stanford University Press, 1990): 3.

as opposed to the linear, irreversible time of development and progress. For Varèse, that alternate temporality was the Burgundian countryside of his childhood, which was no doubt the backdrop against which the shocks of both the war and of city life could register with such intensity. But this is all merely to say that the particular urgency of Varèse's rhetoric of contact—and of the utopian leanings of modernism in general—have little to do with a time such as our own in which the constant displacement generated by capitalism and innovation have grown so ubiquitous as to be virtually invisible. They have to do, rather, with the existential feelings generated by an acute awareness of this disorienting temporality as it emerged out of a historically localizable older order.

We find a breathtaking description of this type of transitional experience in an anecdote from Mexican poet Octavio Paz, himself an astute theoretician of modernity. Describing the richly collected, imaginative sense of time that characterized his childhood, Paz writes:

All time, past or future, real or imaginary, was pure presence. Space transformed itself ceaselessly. The beyond was here, all was here: a valley, a mountain, a distant country, the neighbours' patio. Books with pictures, especially history books, eagerly leafed through, supplied images of deserts and jungles, palaces and hovels, warriors and princesses, beggars and kings. [...] The world was limitless yet it was always within reach; time was a pliable substance that weaved an unbroken present. ²⁶⁰

. -

Walter Benjamin, "The Storyteller," *Illuminations*, ed. Hannah Arendt (New York: Schocken Books, 2007): 84. No doubt glossing Benjamin, Fredric Jameson writes: "In this transitional era, people [...] still live in two distinct worlds simultaneously. This simultaneity can no doubt for the moment be cast in terms of some distinction between the metropolis and the provinces; but it might better be imagined in terms of a situation in which individuals originate in a 'pays', a local village or region to which they periodically return, while pursuing their life work in the very different world of the big city." See his *A Singular Modernity* (London: Verso Press, 1990): 142. In his seminal essay "The Metropolis and Modern Life," Georg Simmel offers something similar: "[The metropolis] creates in the sensory foundations of mental life, and in the degree of awareness necessitated by our organization as creatures dependent on differences, a deep contrast with the slower, more habitual, more smoothly flowing rhythm of the sensory-mental phase of small town and rural existence. Thereby the essentially intellectualistic character of the mental life of the metropolis becomes intelligible as over against that of the small town which rests more on feelings and emotional relationships." See "The Metropolis and Modern Life," in *The Blackwell City Reader*, ed. Gary Bridge and Sophie Watson (Blackwell Publishing, Ltd., 2010): 12.

²⁵⁹ Critic Paul Rosenfeld perhaps had something of this nature in mind when he wrote that "Varèse is the poet of the tall New Yorks; his music showing a relation with the "nature" of the monster towns paralleling that of the elder music to the 'country,' and revealing the new nature to man." See his *Musical Impressions: Selections from Paul Rosenfeld's Criticism*, ed. Herbert A. Liebowitz (New York: Hill and Wang, 1969): 273.

²⁶⁰ Octavio Paz, "In Search of the Present," NobelPrize.org, accessed 10 September 2011, http://www.nobelprize.org/nobel-prizes/literature/laureates/1990/paz-lecture.html

Here, time is a totality gathered together in a meaningful whole, one which renders the remotest things and memories seemingly near. But it is an experience that would soon be shattered by the simple occasion of seeing a photograph of soldiers returning home from the war.²⁶¹ If before, the experience of that event had remained largely within the cohesive inner life of the imagination, it was now torn from that protected space and externalized in all its brute realness as a distant, more authentic temporality from which one had been violently expelled:

From [that moment of seeing the photograph,] time began to fracture more and more. And there was a plurality of spaces. The experience repeated itself more and more frequently. Any piece of news, a harmless phrase, the headline in a newspaper: everything proved the outside world's existence and my own unreality. I felt that the world was splitting and that I did not inhabit the present. My present was disintegrating: real time was somewhere else. My time, the time of the garden, the fig tree, the games with friends, the drowsiness among the plants at three in the afternoon under the sun, a fig torn open [...]: this was a fictitious time. In spite of what my senses told me, the time from over there, belonging to the others, was the real one, the time of the real present. I accepted the inevitable: I became an adult. That was how my expulsion from the present began. ²⁶²

In a single moment of undoing, time has become spatialized, removed from the private durée of collected inner life and externalized as something to experience from without. Like an interminable pageant in which the line between spectator and participant has been sharply defined, the authentic present was now an object unto itself, always elsewhere, and able to be perceived as such only because of one's expulsion from it.

For a different, less anecdotal account of the emergence of this "modernist time sensibility," we can look to the work of historian Peter Galison, who has discussed it in relation to more practical, material concerns: the need to synchronize clocks and time zones in order to

²⁶¹ For more on this change in the perception of time, see for example David Harvey, *The Condition of Postmodernity: An Inquiry into the Origins of Cultural Change* (Oxford: Blackwell Publishing, 1990), 201—283. ²⁶² Paz, "In Search of the Present."

accommodate the increasingly transnational nature of the railroads.²⁶³ Of the late nineteenth century, he writes:

Train lines had altered the experience of time across Europe and North America; more than that, for an ever-growing portion of the population, railroad schedules had come to define time, instantiate synchronicity. Indeed, without the quintessentially modern trains and telegraphs, the temporal structure of the world would, for most people, drift from its moorings. ²⁶⁴

It is interesting to note that railway time throughout Varèse's France wasn't fixed to a single locale until 1888—five years after his birth—and that it wasn't until the 1870s and 1880s that clocks around Paris were synchronized for the first time. The alternate temporality of the urban was thus hardly just a matter for introspective poets; it was a material reality manifested daily in the marvel of the new steam-powered clock faces that would have reminded passers-by—especially those coming from rural settings such as Varèse—of its newly externalized, standardized, reified status. Time, in short, had become an other, a former seat of subjective experience rendered abject and uncanny.

As a way to begin situating this reality in a critical light, it will help to remember that the myriad descriptions of time we find throughout the philosophical discourse of modernity—and we can include here Baudelaire's "the ephemeral, the fugitive, the contingent" from the last chapter—are nothing if not responses to this emergent and seemingly inassimilable temporality. We will remember that what Baudelaire desired was just such a comingling of the subject and nature, itself an implicit critique of an alienated modernity whose best spokesman was Kant. Having defined experience in terms of dirempt subjects and objects, Kantian epistemology gave philosophical expression to the very real sense of separation experienced by those for whom

²⁶³ See Peter Galsion, *Einstein's Clocks, Poincaré's Maps: Empires of Time* (New York: W.W. Norton, 2003).

²⁶⁴ Ibid., 125.

having mere knowledge of the world was not the same as living meaningfully within it. ²⁶⁵ Thus, for Baudelaire, the "duality of art" was "a fatal consequence of the duality of man," a condition which art was to nonetheless rectify through the "creation of an evocative magic, containing at once subject and object." ²⁶⁶ We find related discourses on contact elsewhere, such as in Bergson, for whom the time of modernity was something most authentically experienced from within, rather than through the ready-made filters of spatial concepts, from without. The mimetic theories of Adorno and Benjamin, to name yet another example, were no less concerned with retrieving their own kind of contact between subjective experience and the world, intent on rescuing what of that "nonsensous similarity" had been repressed in the disenchantment of language. ²⁶⁷ The philosophical discourse of modernity has itself, in other words, always been a discourse about contact, operating under the presumptions that modernity embodies a condition of diremption to be overcome; and alternately, that to experience the world uncoercively and meaningfully is in some sense to touch it.

This, at any rate, will be our basic point of departure for coming to grips with Varèse's own tactile fantasies. It is also the perspective that will enable us to interpret those fantasties as implying a desire for a kind of *participation* in time that will resonate strongly with the existential choice Bergson seems to offer between merely knowing time in a spatial sense or actually living it as durée.²⁶⁸ The consequences of choosing the former, of being a mere spectator

٠,

²⁶⁵ Helpful here is Adorno's essay "On Subject and Object," *Critical Models: interventions and catchwords*, trans. Henry W. Pickford (New York: Columbia University Press, 1998).

²⁶⁶ Charles Baudelaire, "The Painter of Modern Life," *The Painter of Modern Life and Other Essays*, trans. Jonathan Mayne (New York: Phaidon Press, 2008): 3.

²⁶⁷ See Benjamin's essay "On the Mimetic Faculty," *Reflections*, ed. Peter Demetz (New York: Schocken Books, 2007): 336.

²⁶⁸ The opening of Bergson's *An Introduction to Metaphysics*, which was one of the more widely read of his works amongst American intellectuals from Varèse's time, makes this distinction particularly dramatic. See *An Introduction to Metaphysics*, trans. T.E. Hulme (Indianapolis: Hackett Publishing Company, 1999): 21.

of modernity, are perhaps nowhere better captured than in a dramatic passage we have already encountered from Varèse's good friend Apollinaire:

The rainbow is bent, the seasons quiver, the crowds push on to death, science undoes and remakes what already exists, whole worlds disappear forever from our understanding, our mobile images repeat themselves, or revive their vagueness, and the colors, the odors, and the sounds to which we are sensitive astonish us, then disappear from nature—all to no purpose. ²⁶⁹

Beneath Apollinaire's bent rainbow, quivering with the crowds, Rimbaud's insistence on being "absolutely modern" seems less the fickle whim of an aesthete or dandy who fears falling out of fashion and more the injunction of someone who, toeing the fringes of nihilism, senses that nothing less than meaning is at stake. 270 We have already spoken in other chapters of how this high valuation of the "absolutely modern" is intimately related to the erosion of the past as a guarantor of meaning in the present, and also to the disappearance of tradition as a source from which the now might draw its self-understanding. 271 It is my contention that the particular urgency of Varèse's rhetoric of contact cannot be understood apart from this very real and sobering consequence of modernity's heightened consciousness of time. To put this differently, I believe that modernism's hyperbolic language, its charged if sometimes forced excitement about its own procedures and possibilities, stems in large part from the simultaneous exhilaration and terror that comes from sensing the contingency behind those procedures, from the awareness that to participate in modernity is to take what is at root a very personal risk: a risk of throwing

²⁶⁹ Guillaume Apollinaire, *The Cubist Painters*, in *Modernism: An Anthology of Sources and Documents*, ed. Vassiliki Kolocotroni (Chicago: University of Chicago Press, 1998): 262.

²⁷⁰ Peter Gay implies that being "absolutely modern" for Rimbaud meant nothing less than that, in the wake of Nietzschean nihilism, art must vigilantly come to the rescue and become its own religion. See his *Modernism: The Lure of Heresy* (New York: W.W. Norton, 2008): 29.

Lure of Heresy (New York: W.W. Norton, 2008): 29.

271 "Without ancestor-worship," writes T.J. Clark, "meaning is in short supply—'meaning' here meaning agreed-on and instituted forms of value and understanding, implicit orders, stories and images in which a culture crystallizes its sense of the struggle with the realm of necessity and the reality of pain and death." See his Farewell to an Idea: Episodes from a History of Modernism (New Haven: Yale University Press).

oneself into artistic gestures or ways of living whose meaning can in no way be guaranteed by tradition but that must instead be obtained by the fact of their newness alone. 272

But participation in modernity nonetheless demands precisely this act of throwing, and perhaps even regardless of what meaning it produces. What will concern us in this chapter in distinction to the last, then, is in part Varèse's high valuation of that mere impulse, that mere gesture of the new, one unmediated by ready-made cultural forms borrowed from the past, as the ultimate gesture of solidarity with modernity's own tireless production. Modernity here will be less something to make sense of through the evocative magic offered by particular artworks and more something to be, something to almost perform by way of a complete devotion to the constant self-refashioning inherent in modernity itself. To maintain contact with the vital stream will thus be to contribute to it, not as any sort of being imposed on becoming but through that creative impulse that brings being into its own in the first place.²⁷³

And yet at its most extreme, it will come in the form of simulating, or even inducing, the abandonment of being altogether in favor of the constant self-overcoming implicit in time itself. Contact can be spiritual. It can be an interpersonal kind of intimacy based in recognition or empathy, a kind of spatialized sense of being-with wholly indifferent to time. But contact can also be literal, a matter for the skin and not the mind, blind to everything but the incandescent moment in which it is initiated. We have already encountered one scenario which will both complicate and provide clues as to which of these Varèse might have preferred. If it was participation via contact that he might have wanted, then one could hardly have participated more intimately with their modernity than did Varèse with his siren, as we saw in our first chapter. It was precisely contact that was decisive in that definitively modern scenario, provided

²⁷² For more on the place of risk in modernity, see Anthony Giddens, *The Consequences of Modernity* (Stanford: Stanford University Press, 1990): 3. ²⁷³ Paul De Man, "Literary History and Literary Modernity" *Daedalus*, 99/2 (Spring 1970): 392.

by a siren which, irrespective of subjective or domestic bounds, inscribed itself into the composer's subconscious. In such a position of vulnerability, we can only imagine that time seemed less like Paz's object to witness from a distance and more like an engulfing maelstrom in which one was caught and helplessly jostled. Whether Varèse's art was meant to redeem that experience through a form of contact of its own will be the subject of the following pages.

Nietzsche, Varèse, Forgetting

In the last chapter, we introduced the notion of the "eternal in the transient" as a way to think about the artwork's relationship to the present in modernity. We considered the idea of the artwork as a site of world creation intent on crystallizing, by way of the most current codes of representation, the stable forms of meaning or concretion that modernity was otherwise without. It was a "creation from the created," intent on hollowing out from within time the faintest meaning outside of time. But as we began to consider Varèse's modernism more closely, a modernism so beholden to the unceasing cravings of a science which, in Max Weber's words, existed only to be surpassed, this reading became increasingly difficult to sustain. Artworks seemed to be less about what they actually manifested in the way of the eternal by way of their form and more about their mere successive acts, collectively realizing what Varèse called their necessary state of "permanent revolution." They manifested a kind of temporal ambivalence in which there was always a question of whether they were to stop time within the bounds of their form, or were actually to assert it as tokens of mere successive difference. Ultimately, the work could do little more than define a limit, establishing a relationship to the concrete somewhere in the promissory future. The revolution loomed large in recent memory; the push of modernity had to be headed *somewhere*, after all.

But there is also the possibility that the push itself was the point. At the root of Varèse's notion of the artwork as "permanent revolution," in other words, it is possible to detect the elevation of the transient itself to a kind of ontological status, sanctioned no doubt by the seeming ubiquity of both scientific and capitalist change, and more importantly, by the conflation of those things into what we might call a more general discourse of life. We could see it as an ideologically conceived vitalism, in other words, embraced by artists as a kind of capitulation to what was, from the perspective of the last chapter's conception of the work, the enemy. In one sense, life is the very thing that destroys the work, what ages it and causes its meaning to fade. But it is also what creates the work, not to mention what flows through and serves as its very support. The question, then, becomes not how the work stops time within time in order to create meaning within it, but rather how the work manifests and even enhances the time of which it is inevitably a part.

It is thus not as much Baudelaire's notion of the eternal in the transient that will be helpful here as much as a peculiarly related idea: Nietzsche's notion of imposing being on becoming. Like Baudelaire, Nietzsche saw the artwork as having a privileged relationship to the eternal in the sense that it achieved the status of the supra-historical, to use Nietzsche's word. ²⁷⁴ But whereas Baudelaire was mostly concerned with the products of this "forced idealization" of the present, the actual artworks, Nietzsche was just as much concerned with the mere act of creation itself, an act which contained the seeds of the constant self-overcoming and beginning-again necessary for sustaining life—and we might say modernity insofar as it was often identified with life—itself. ²⁷⁵ The urgency of this creative action was intimately tied to the

²⁷⁴ Friedrich Nietzsche, "On the Uses and Disadvantages of History for Life," *Untimely Meditations*, trans. R.J. Hollingdale (Cambridge: Cambridge University Press, 2007): 66.

²⁷⁵ "The essential thing in the life process is precisely the tremendous shaping, form-creating force working from within" Nietzsche, *The Will to Power*, trans. Walter Kaufman and R.J. Hollingdale (Vintage Press, 1968): 344.

possibility of nihilism in the face of time, and relatedly, to the question of how one is to live urgently and meaningfully in the present in the face of what Nietzsche felt to be the contingent nature of all values. If history were largely a record of the devaluation of those values—of nature become transient, of withered truths—then any existence mediated through history's recalcitrant forms—memory, past experience, or even knowledge itself as an inevitable product of past experience—would be an impoverished existence. It would be a sublimated, internalized existence experienced though the filter of petrified thoughts rather than externalized through the direct participation in the present afforded by action.²⁷⁶ If the reality of truth were actually its creative, subjective nature, then to truly live was to embrace one's status as a *creator* of history rather than an observer of it, breaking through the mediated cocoons of memory and knowledge in order to actually participate in the world's perpetual creation and destruction.²⁷⁷

We can think of life in Nietzsche, then, as a kind of repetition-avoiding direct contact maintained with the history-creating stream of modernity, one of the most important aspects of which was a radical forgetting. To create in the present was for Nietzsche unthinkable without some degree of willed ignorance of the past. 278 Without forgetting, man would be "condemned to see everywhere a state of becoming" and would "no longer believe in his own being, [...] would see everything flowing asunder in moving points and would lose himself in this stream."²⁷⁹ To overcome this nihilism; to participate in this stream rather than merely be carried along by it, the subject imposed an artificial horizon of experience on becoming, enclosing himself in a kind of framed present within which he could engage with the creation of new culture largely

²⁷⁶ Nietzsche, "On the Uses and Disadvantages of History," 75.

Nietzsche's phrase is "to take part in history." See Ibid., 65.

²⁷⁸ "You must [...] have and acquire the will to ignorance. You need to grasp that without this kind of ignorance life itself would be impossible, that it is a condition under which alone the living thing can preserve itself and prosper: a great, firm dome of ignorance must encompass you." Nietzsche, *The Will to Power*, 328. ²⁷⁹ Nietzsche, "On the Uses and Disadvantages of History," 62.

unmediated by the past.²⁸⁰ No artist, Nietzsche insisted, could ever create without desiring this ahistorical condition.²⁸¹

We cannot help but recall here the disorienting time consciousness discussed in the last chapter, engendered largely by the upheavals of the new physics to which Varèse was so attuned, and exemplified by Apollinaire's description from above in which science "undoes and remakes what already exists" and "whole worlds disappear forever from our understanding," "all to no purpose." And it is as read through this specifically Nietzschean lens—of creation and destruction elevated to a general principle of life, of forgetting as essential to maintaining unmediated contact with that life—that a related discourse begins to emerge in Varèse. In numerous places, we find a similar correlation, for example, between life and the necessity of maintaining a kind of unmediated, boundary-defying contact with the incessant stream of modernity. Similar to Nietzsche, Varèse's obsession with the unmediated present stemmed from a disdain for what he saw to be a rampant and debilitating historical sensibility that insulated people from a real engagement with the present. Not surprisingly, an inability to forget was partly to blame. In a July 1924 article in the Musical Standard, Varèse accused the bourgeoisie of being educated solely in terms of memory, having ceased to learn or to experience anything authentically new. 282 It was a sentiment he later put in more explicitly Nietzschean terms in the journal Possibilities, where he accused composers themselves of being "incapable of

2

²⁸⁰ This is not to say that the past was entirely unimportant to the present but rather that if it was used, it was used in the service of the present.

²⁸¹ Nietzsche, "On the Uses and Disadvantages of History," 64.

²⁸² There is little hope for the *bourgeoisie*. The education of this class is almost entirely a matter of memory, and at [twenty five] they cease to learn, and they live the remainder of their lives within the limitations of conceptions at least a generation behind the times." Edgard Varèse, "The Music of To-morrow," *Musical Standard*, (24 July 1924): 14.

forgetting." They would do well, he suggested, to take as their model Jean Christophe, the titular composer-hero of Romain Rolland's novel, who had made the discovery that

none of the ancient molds were suited to them; if he wished to fix his visions with fidelity he had to begin by forgetting all the music he had heard, all that he had written, to make a clean slate of all the formalism he had learned, of traditional technique, to throw away those crutches of impotency, that bed, all prepared for the laziness of those who, fleeing the fatigue of thinking for themselves, lie down in other men's thoughts. ²⁸⁴

Modernity never stopped to rest. It was virile and unrelenting, and the image of lazing about in bed—one that would return elsewhere in Varèse's writings—was perhaps its most antithetical metaphor. If the past was to be consulted at all, it was to be in the Nietzschean guise of informing action in the present: "great examples of the past should serve as spring boards from which [artists] may leap free into [their] own future." WE contain the past," Varèse wrote, as though to turn the composer-subject into the living embodiment of duration—the past gathered into the present in the service of a pure agency in the now. 286

It is no coincidence that Varèse's chosen place to exercise this forgetting was in America, a so-called "new world" with limited history to impede its burgeoning modernity. America represented immediacy for Varèse. Its deserts and its skies—two elements Varèse referenced almost obsessively throughout his career—were its essence, no doubt partly because they were things that could themselves bear no trace of a past. If sky and desert were symbols of the pure possibility discussed in the last chapter, then they were also symbols of what we might here call the Nietzschean "new beginning" of history-creating life, exemplified by the situation of Varèse himself, we must remember, who had supposedly lost all of his pre-America works in a

²⁸³ Edgard Varèse, "Edgard Varèse & Alexei Haieff Questioned by 8 Composers," *Possibilities* (Winter 1947).

²⁸⁴ Edgard Varèse, "Music as an Art-Science," in Contemporary Composers on Contemporary Music,

ed. Elliott Schwartz and Barney Childs (New York: Holt, Rinehart, and Winston, 1967): 198.

²⁸⁵ Varèse, "Liberation of Sound," 200.

²⁸⁶ Varèse, quoted in Louise Varèse, "A Looking-Glass Diary, Vol. II," unpublished manuscript, Edgard Varèse Collection, Paul Sacher Stiftung.

warehouse fire. This was all to be contrasted with Paris, which was obsessed with history and hardly conducive to his work as a result. To Carlos Salzedo, he wrote:

It's hard getting readjusted to Paris—I like the intelligent minority—unique in the world—but the city less and less—I'[m] fed up both with the Gothic and the 18th century—I have a horror of cemeteries—and I don't give a damn about past traditions—It's like too many truffles—fine for those who eat them, but I refuse to be the one who has to belch them without having shared the feast. I am going to <u>cut loose</u> in my next work and give myself the luxury of living in the year 3000.²⁸⁷

The past was a dead weight on Varèse's back. When reading him, one cannot help but want to shake it off just as badly as he did. What we must be careful to avoid here, though, is the attribution of all of this to yet another modernist case of ancestry repudiation. To be sure, Varèse was never quick to claim his stylistic precursors. But what I am more interested in than any one oedipal swerve is how this need for absolute newness might have arisen from a certain historically unique experience of modernity and temporality, one in which the existential consequences of not being new might have seemed particularly dire. As such, I wonder if we can't view Varèse's embrace of the discourses of vitalism and contact as a way of coming to terms with, and to some extent even owning, modernity's otherwise disorienting and alienating temporality. To contribute to the creation of the absolutely new while seeing modernity as the sum total of all of those creations was in some sense to be modernity, to contribute to the very thing that pushes it forward. To refuse this was not only to declare oneself the other of modernity but also to be left behind by it. And so, in the wake of the upheavals of the new physics, which posed such challenges to dependably meaningful conceptions of the natural world; and in the context of an experience in which "whole worlds disappear forever from our understanding," "all

²⁸⁷ Varèse, quoted in Ibid. For more on this, see Wolfgang Rathert, "Worlds Without End: Amerique," Varèse: *Composer, Sound Sculptor, Visionary* (Boydell Press, 2006).

to no purpose," can we not see the embrace of modernity as a kind of identification with the aggressor? Or at least an assumption of the aggressor's place?

We will return to this idea later. For now, I want merely to propose that this purported identification with modernity—and I mean this in the explicitly psychoanalytic sense—was evidenced by an intense desire for some sort of intimate congress or comingling with the real identified with the maelstrom of modernity itself. We see this desire in Varèse's frustration with all sorts of mediated forms of experience, of which an inability to forget was always at least a latent part. Everywhere, it seemed, the present was encountered not in its raw newness, not directly, but mediated through pre-established historical or political forms, which could take the shape of anything from outworn musical styles to the artificial barriers imposed by the nation state. We get an early inkling of the latter, albeit in a positive spin, in an early *New York Times* editorial from 1919, in which Varèse declares that

in art as well as in politics, we have been jarred out of our traditional isolation. And the result will be good. The contact, the emulation, the competition will spur us to greater accomplishment.²⁸⁸

The élan of modernity knew no political barriers. The nation state was its very anathema, a symbol of the same fatal conservatism by which individuals closed themselves off from contact with the new in order preserve the cherished bourgeoise *interieur*. The nation state was about stasis, separation, protection. Modernity was about movement, collision, stimulation. Apropo of our first chapter, it was about sirens breaching the comforts of both domesticity and ego alike to productively problematize the boundaries between self and other. Once again, it was a fantasy of comingling, constant interchange, and contact.²⁸⁹ "Against provincialism—return to the post-

²⁸⁸ Varèse, "A League of Art," *The New York Times*, March 20, 1919.

²⁸⁹ The notion of overcoming the provincialities of the individual to achieve a more universal experience was forcefully articulated in Randolph Bourne's influential *Trans-National America*, published in the *Seven Arts* in 1916. For Bourne and many other members of the liberal intelligentsia, including Varèse enthusiast Paul Rosenfeld, the cherished notion of cosmopolitanism involved a "desire to transcend the limitations of any and all particularisms in order to achieve a more complete human experience and a more complete understanding of that experience." See

national[ism] where everything is in communication," Varèse scribbled on a random piece of stationary. He continued:

radio, television / transportation means universalization [sic] of human consciousness through interpenetration of various cultures and peoples. Through wide spread inter[?] travels—interchanges, social—intercourse, commerce—exchange—[?] all continents blending all ways of life and customs / a change from particularities [-ism?] [...] provincialism to universalism²⁹⁰

Everything was part of the same vital stream, and nothing more so than science and art. On another piece of stationary, Varèse registered Goethe's endorsement—"Science and art belong to the whole world, and the barriers of nationality vanish before them"²⁹¹—then paraphrased it in an essay on Scriabin: "modernity is not in the confines of any one Nationality [...] this adventurous spirit has always been present in music and will always be the spark that makes for vitality and progress in all the arts and sciences alike."292 The vitalism of modernity inhered in music, and, as such, existed on a much more fundamental level of experience than the spatial conceits of nationalism. The nation state was an island impeding the stream; the real of modernity as manifested in music, the tireless temporal flux of history, was the stream itself.

We have begun to move into a discussion of art and music proper, but before we continue, I want to take a moment to recall the large issue that is at stake. The frustration Varèse so clearly felt in the face of a mediated, history-obsessed culture was surely an idiosyncrasy of the individual Varèse, born in 1881 and into a particular psychology. But we must also see it as resonating with a more general existential conundrum which is at the heart of the disenchanted project of modernity itself: the fact that, without inherited tradition, the subject is in no way guaranteed a meaningful place in or sense of connectivity to the larger social fabric. If before,

Randolph Borne, "Trans-National America," The History of a Literary Radical and Other Papers (New York: S.A.

²⁹⁰ Edgard Varèse Collection, Paul Sacher Stiftung.

²⁹¹ Edgard Varèse, "Scriabin" entry from "Twentieth Century Tendencies in Music," unpublished lecture, Paul Sacher Stiftung.

292
Edgard Varèse Collection, Paul Sacher Stiftung.

that sense of connected meaning came from the assumption of an allotted place in the universal order of things, inherited from the past under the guise of necessity; if it came, in other words, from a world that seemed largely to prefigure the subject, it must now come from the labor and free productive capacity of that subject itself, a newly autonomous subject who must somehow create this meaningful place by means of its own work. This is what disenchantment is all about: the reality of being cut off from God-created nature, and the resultant need to labor on the world to create another, second nature in which to finally feel at home in the world.

Art enters as this second nature par excellence. As we know well at this point, truth exists only insofar as art gives it a meaning. It is what arises, as Hegel wrote, from man's "rational need to lift the inner and outer world into his spiritual consciousness as an object in which he recognizes again his own self." And what is recognition if not another form of contact, albeit decidedly spiritual? A question we can begin to ask is what exactly it was within himself Varèse—seeking to secure this sense of being at home in or contact with the world—might have wanted to recognize. We know that for Hegel, recognition was first and foremost about transcending contingency; an individual overcame its particularity by finding in another the image of itself. It was about that aforementioned labor on the world (in Hegel's case, the "labor of the concept") as an act of home-making, of overcoming one's parochial, nature-alienated status through the realization of (or seeing oneself in) the universal.

What we find in Varèse is a similar if less abstractly articulated preoccupation with this problem of contingency. When he spoke of his desire for the "universalization [sic] of human consciousness through [the] interpenetration of various cultures and peoples," the "blending of

²⁹³ G.W.F Hegel, *Aesthetics*, trans. T.M. Knox (Oxford: Clarendon Press, 1988): 31. Additionally: "Man in his worldly environment must be domesticated and at home, that the individual must appear as having his abode, and therefore as being free, in nature and all external relations, so that both sides, (i) the subjective inner totality of character and the character's circumstances and activity and (ii) the objective totality of external existence, do not fall apart as disparate and indifferent to one another, but show that they harmonize and belong together," 252-3.

all ways of life," and for being "jarred out of our traditional isolation," he was speaking of a desire to transcend the status of the mere arbitrary individual in order to somehow make contact with a greater whole. Like Octavio Paz above, for whom modernity always threatened to be happening elsewhere or leaving one behind, he was betraying a fear of provincialism, of being cut off from the universal, bereft of contact with modernity's supposed life-giving élan.

But if art was to be the means through which this sense of provincialism was overcome, then it also had to overcome that sense of provincialism itself. Because art in modernity is no longer a kind of Pythagorean mirror of a well-ordered, God-created cosmos but is rather a profane act of labor by the contingent creator-individual, it risks representing a truth no more universal than that individual's own provincial experience. ²⁹⁴ It risks representing the contingent Varèse of the French countryside we spoke of above, shut off from modernity's greater *elan*. As such, we might say that what Varèse needed to recognize in art was not so much any one provincial world as much as the much more universal impulse of creation itself, prior to individuation. ²⁹⁵ Only as such could Varèse, speaking of musical worlds so completely alien to his own, say that while "listening to music by Perotin, Machaut, Monteverdi, Bach, or Beethoven, we are conscious of living substances" that "are 'alive in the present". What made this music alive was clearly not the way it reflected that present—Perotin had little to do with quantum physics—but rather the way it still bore a trace of the world-creating vital impulse responsible for creating its own present—however long past—and all presents throughout history in the first place. Even works from the 13th century could be seen to embody the life principle that brought them into being, one hardly different from that of the modern project in general.

٠,

²⁹⁴ For more on this, see the introduction of this dissertation.

²⁹⁵ Of course, Varèse's consistent use of mathematical and scientific material in his works—things that circumvented the pitfalls of provincialism by way of their pure ahistorical abstraction—also went towards this end, as we have discussed elsewhere.

²⁹⁶ Varèse, "Autobiographical Remarks," unpublished manuscript, Edgard Varèse Collection, Paul Sacher Stiftung.

"Music," Varèse echoed, "has always contained that adventurous spirit of modernity as a whole." ²⁹⁷

But in terms of Varèse's own present, the particular present of which, we are conjecturing, he wanted to feel a part, those older forms would not do. If they embodied moments in the history of that indivisible vital impetus—Bergson might have called them "eddies in the stream"—then Varèse could participate in and carry on that impetus only by the creation of the new. One simply had to keep going. "Art is subject to the same laws as life," Varèse wrote. "Life is effort, movement, progress. For the mind as for the body, to cease struggling is to begin to die." 298

We are now in a better position to see how this high valuation of the artistic impulse of creation could elide so well with something such as Varèse's views on insular, life-stifling effects of the nation state. Art ceased struggling (Varèse's word, we remember) precisely when it traded its blind embrace of new techniques for the safe and anachronistic use of pre-fabricated musical forms, forms which Varèse—once again using the language of separation and

²⁹⁷ Again, we remember De Man's conception of art as that "unmediated free act that knows no past." We see this somewhat ahistorical modernism in Varèse's reading of Beethoven, for example, in whom he seems to have found something of a reflection of his own frustrations as a modernist: "It was of such a phantasmagoria of sound that Beethoven must have dreamed when he wrote the Ninth symphony and, knowing that he could never realize it with the medium at his command, at that period, he stripped himself in his last quartets." See Louise Varèse, "A Looking-Glass Diary, Vol.II," unpublished manuscript, Edgard Varèse Collection, Paul Sacher Stiftung.

²⁹⁸ Edgard Varèse, Jérom' s'en vat'en guerre," *Eolian Review* (February 1924): 15. This coupling of art with the rhetoric of movement and life was common in Varèse's circles. In the journal *Eolian Review*, to which Varèse himself contributed, Marion Bauer wrote: "The secret of healthy art is movement; as with a pool of water, inaction means stagnation." And earlier: "Evolution is change, nothing stands still,--Time, Life, Art. [...] Art mirrors Life and thus reflects change as Life changes." See her "The Spirit of Modernism: An Analytical Study of Modern Life in its Relation to Art," *Eolian Review* (Specifics lost). Of course, it is Bergson's vitalism that perhaps captures the spirit best: "Our freedom, in the very movements by which it is affirmed, creates the growing habits that will stifle it if it fails to renew itself by constant effort: it is dogged by automatism. The most living through becomes frigid in the formula that expresses it. The word turns against the idea. The letter kills the spirit." See *Creative Evolution*, 127. And Nietzsche: "I offer my conception of what is *modern*.—In its measure of strength every age also possesses a measure for what virtues are permitted and forbidden to it. Either it has the virtues of *ascending* life: then it will resist from the profoundest depths the virtues of declining life. Or the age itself represents declining life... Aesthetics is tied indissolubly to these biological presuppositions" *The Case Against Wagner*, trans. Walter Kaufmann (Vintage Press, 1967): 190.

mediation—called a "protection against the adventure of living." For art to recreate rather than create was quite simply akin to its self-alienation from its own principle. And insofar as it ceased at that point to participate in the very vital stream that was its essence, so too did the composer or spectator whose own "vital impulse" could no longer, to use critic Paul Rosenfeld's expression, merge with a larger stream. It was as though, when cordoned off into those conceptual readymades, detached from any sort of direct participation in the novelty of the new moment, life could only spin in place, stagnate, and ultimately die, robbed of the friction it needed to continue on its vector, making and remaking itself in becoming. "Music written in the manner of another century is the result of culture," wrote Varèse, "and, desirable and comfortable as culture may be, an artist should not lie down in it."²⁹⁹

That these processes of making and remaking, of struggling and steaming ahead in solidarity with modernity, played themselves out in the measure-to-measure dramas of Varèse's scores should be obvious to anyone who has had even the most superficial listen. Hardly ever is there a moment of rest or reduction of musical tension. Huge sonic gestures surge ahead, colliding with one another as though to enact their own merging with the stream. And rare is the moment when the listener can "lie down" in the easy comfort of a straightforward repetition or other mediated encounter with the new. In a rhapsodic passage, saturated with the language of contact and boundary-breaking we have been examining, critic Paul Rosenfeld put it this way:

One feels the force which thrusts up towers of steel and stone to scrape the clouds, and creates new instruments and combinations, and forms new field theories, seeking, on many fronts, here, there, again and again, to break through the hopelessly dirty crust of life into new clean regions. Balked, it persistently returns to the breach; till at last a new light, a new constellation, a new god, answers its wild penetrations from afar. 300

²⁹⁹ Varèse, "Autobiographical Remarks," unpublished manuscript, Edgard Varèse Collection, Paul Sacher Stiftung. ³⁰⁰ Paul Rosenfeld, Musical Impressions, 278.

It was in Varèse's *Espace* manifesto, we will remember, that this same notion of breaking through crusts appeared, and we see Rosenfeld here affirming in Varèse's music so much of what the composer would have wanted: a resistance to musical inertia and the "dirty" (read: old and overused) sedimentations of tradition, coupled with the revelation of a fundamental vital force flowing through and making possible the stuff of the modern.

We would be relatively safe in assuming that the musical structures responsible for these "wild penetrations" into the vital stream were those frequent moments of violent culmination in Varèse's large orchestral works in which pitches pile mercilessly atop one another to form towering dissonances. And it is in *Arcana* specifically that these culminations "persistently return to the breach," enacting what Rosenfeld elsewhere identified as a kind of passacaglia in which the culminations surge upwards before returning to a series of continuously varied bass ostinatos, which in turn catalyze the process anew. What this stream of ostinato-culmination combinations brings to mind is a series of musical science experiments in which the composer places a select group of volatile pitches into intimate proximity before standing back to watch their explosive interaction. They enact a sort of musical heuristic, in other words, a process of feeling around in the dark that we could see as the ultimate means of maintaining a kind of unmediated—and strikingly vulnerable—type of contact with the new.³⁰¹

We should note that, more often than not, these dense passages involved the use of all twelve notes. In chapter one, we discussed Varèse's use of that saturated technique, coupled with the music's articulation of diverse interval spans, as his way of inching closer to the gapless continuum of the musical real, and it is perhaps not difficult to see how that notion might elide in a composer's creative imagination with the idea of the similarly unbroken vital stream. But more

_

³⁰¹ Here, we remember the theme of the blind seeker from the end of the last chapter, and Busoni in particular: "What seek you? Say! And what do you expect?" / I know not what; the Unknown I would have! / What's known to me, is endless; I would go / Beyond the known: The last word still is wanting."

important, I think, than any sort of continuity and contact internal to these isolated passages is a contact and continuity that existed between them. Varèse often referred to "sound masses" in his music, and passages such as these culminations were undoubtedly what he had in mind. We can see the use of all twelve-tones therein, then, as an attempt at a certain density, possessive of a kind of musical mass, whose resultant forms could then set in motion to collide and make contact with other masses:

When these sound-masses collide, the phenomena of penetration or repulsion will seem to occur. Certain transmutations taking place on certain planes will seem to be projected onto other planes, moving at different speeds and at different angles. There will no longer be the old conception of melody or interplay of melodies. The entire work will be a melodic totality. The entire work will flow as a river flows.³⁰²

The "entire work will flow as a river flows," that is, as the élan vital flows. No wonder that Varèse equated Schoenberg's version of the twelve-tone method as a "hardening of the arteries." In the latter's music, in which each instance of a row brought with it a sense of self-enclosed and self-sufficient completion, Varèse must have sensed the kind of suffocating stasis that would inevitably snuff out the life impulse rather than perpetuate it. What's more, the notion of the "unity of musical space" must have seemed to neutralize all directionality, mass, and momentum in music ("there is no absolute down, no right or left, forward or backward"), a thought that could not be more antithetical to the hurling sound masses and heaving vectors evoked by Varèse's scores. Thus, rather than comprising self-enclosed entities whose sonic

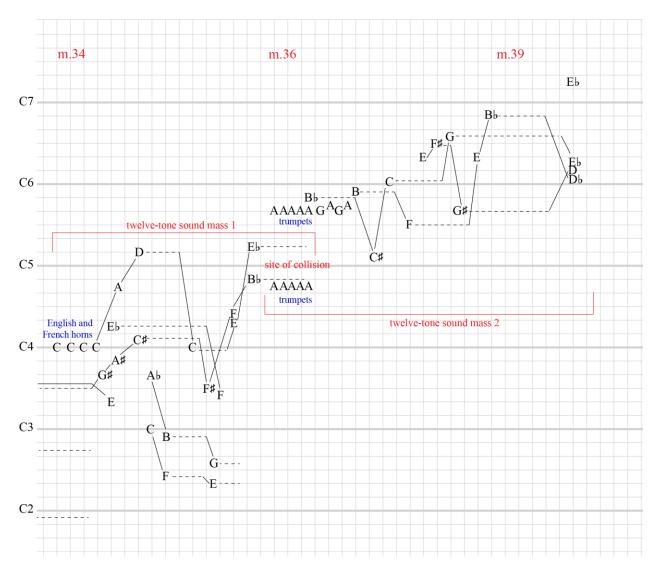
3(

³⁰² Varèse, "New Instruments and New Music," *Contemporary Composers on Contemporary Music*, 197.

Varèse, quoted in Gunther Schuller and Varèse, "Conversations with Varèse," *Perspectives of New Music* 3/2 (Spring-Summer 1965).

³⁰⁴ "The unity of musical space demands an absolute and unitary perception. In this space, as in Swedenborg's heaven (described in Balzac's *Seraphita*), there is no absolute down, no right or left, forward or backward. Every musical configuration, every movement of tones has to be comprehended primarily as a mutual relation of sounds, of oscillatory vibrations, appearing at different places and times. To the imaginative and creative faculty, relations in the material sphere are as independent from directions or planes as material objects are, in their sphere, to our perceptive faculties." Arnold Schoenberg, "Composition with Twelve Tones," reprinted in Daniel Albright's *Modernism and Music: An Anthology*, 199.

existence was "independent from directions or planes," to use Schoenberg's phrase, Varèse's twelve-tone sound masses were volatile agglomerations of musical matter that repeatedly collided with and broke open adjacent masses in a spectacular transfer of sonic energy. We can see an example of these colliding sound masses in mm.34—37 of *Arcana* (Example 3.1). At m.34, the English horns and horns signal the beginning of a new culmination with their repeated Cs. Both instruments then surge upwards to a D5 as the other instruments come in with staggered entrances, quickly filling the space with all twelve notes, which form a tall block of sound. In m.36, however, another sound mass seems to emerge from the sustained tones, announced by the repeated A in the trumpets, which, like the horns before, initiates its own twelve-tone culmination, completed by m.39.



Example 3.1: Colliding twelve-tone sound masses in mm.34-39 of *Arcana*. Dashed lines indicate sustained notes

This is not the musical equivalent of a "protection against the adventure of living."

Rather, it is the enactment of that adventure itself, one in which the new is engaged with head-on and life is spurred continuously onwards, invigorated by each new encounter.

The Diabolical Parsifal: Contact on the Skin

Until now, we have been speaking of this vital push of modernity as a kind of disembodied force, sensed much more than seen, and very much in line with the kind of Bergsonian metaphysics that was all the rage at the beginning of the century. 305 We talked about making contact with that force, yet largely in the figurative sense of a kind of post-national comingling of peoples, of the vicarious experience of past modernities in older yet still vital works, or of the visceral yet largely intangible experience of the new coursing through new works in solidarity with the larger stream. Art in this conception took on its meaning as mere gesture, in both imagined and real solidarity with the creative destruction of modernity. But this disembodied notion of contact, it turns out, can only get us so far in an age in which contact was just as likely to take the form of sirens etching themselves directly into a composer's subconscious or of the much more darkly literal forms of contact implied by the devastating global conflict that was World War I. I will say briefly that this uncomfortable proximity of metaphysical-mythological conceptions of contact with their brutally literal equivalents must have something to do with the dilemma Marx posed in the Grundrisse, in which it was asked: if in older art, it is by way of mythology that man masters nature, then what can become of myth (and thus art) once man's mastery of nature becomes, through technological domination and instrumental rationality, real?³⁰⁶

3

³⁰⁵ For more on this see Carol Oja, *Making Music Modern: New York in the 1920s* (New York: W.W. Norton, 2003). ³⁰⁶ "Is the view of nature and of social relations on which the Greek imagination and hence Greek [mythology] is based possible with self-acting mule spindles and railways and locomotives and electrical telegraphs? What chance has Vulcan against Roberts & Co., Jupiter against the lightening-rod and Hermes against the Credit Mobilier? All mythology overcomes and dominates and shapes the forces of nature in the imagination and by the imagination; it therefore vanishes with the advent of real mastery over them." See Marx, *The Grundrisse*, in *The Marx-Engels Reader*, 245—6. For context, see Andrew Bowie, *Aesthetics and Subjectivity from Kant to Nietzsche* (Manchester: Manchester University Press, 2003): 270-1.

This conundrum is best understood, I think, if we take Marx's question to be about the fate of meaning. As a vestige of myth, art has traditionally been a site in which the subject can imagine its reconciliation with nature, or at least come to understand how it fits into the latter. This would again be that process whereby the non-alienated participation in the world is confirmed by the spiritual process of recognizing oneself in another, whether that other is person or work of art. But the question we will need to ask is what then happens to meaning once a composer begins speaking of contact not as spiritual recognition but as an actual physical experience of sound on skin? Let us leave it at that for now and return to our discussion Varèse himself to consider a slightly different form of contact than we have considered before.

When Varèse spoke glowingly above about being "jarred out of our traditional isolation" in both art and politics, he did so, strikingly, in the context of the war. The year was 1919, and that "traditional isolation" he referred to was Europe prior to the sublime, never-before-seen spectacle of armies spilling across political borders across the whole of the continent and into battle. Ironically, it was the war for Varèse that had catalyzed a kind of healthy comingling of men across national boundaries, one that art would do well to emulate. It was thus in the same article that Varèse proposed a "League of Nations in Art" as an organization that could enable just that kind of transnational contact. It would be an international meeting place of art meant to encourage invention through reciprocal exchange and inspiration—through contact, in other words, of the conceptual kind.

But the war metaphors did not stop there. Strikingly, Varèse expressed almost the exact same sentiments after the next world war, writing that "when the atomic bomb fell, nationalism

was wiped out. Today is one complete world, not individual countries barred from the rest."³⁰⁷ Fragments from the manifesto for Varèse's unpublished work *Espace* continue this war-inspired narrative of breaking through the barriers of social mediation to achieve some sort of contact, professing an ecstatic vision of "humanity on the march," of voices "penetrating each other, superimposing, repulsing [...], colliding, crashing," of "China, Russia, Spain, The Fascist States and the opposing democracies, all break [through] their paralyzing crusts" to comingle in a common spirit. ³⁰⁸ If the pre-war sense of political isolation symbolized an impoverished, suffocating kind of experience, insulated from the life-giving contact with the new, then the clash of worlds during the war symbolized the kind of direct contact with modernity's vital core that was the very essence of life itself.

At this point, we are still in familiar territory. Even if Varèse's fantasies of contact found resonance with something as unlikely as the war, then it was with the war as what we might call a cultural phenomenon, as unpalatable as that idea might be: the unimpeded exchange of ideas, the exposure of provincial souls to some greater onrush of humanity. We should note at this point that in 1915, Varèse himself served in the war. Working first as a bike messenger, he eventually asked to be transferred to the first machine gun battery but was refused the position because of issues related to his health. Though his tenure as a soldier was brief, that first-hand experience surely had a hand, for example, in his 1937 decision to organize a committee dedicated to raising money to buy an ambulance for the Spanish Republic, where it was reported that wounded soldiers were dying from a lack of proper care. This is all to say that we cannot explain away the place of the war within Varèse's creative imagination as the mere romanticized construct of someone who had been spared its more gruesome realities. It would seem at this

30

³⁰⁷ Varèse, quoted in Harold C. Schonberg, "Art—From the Shoulders Up," *Musical Digest* (March-April 1946): 35.

³⁰⁸ Varèse, quoted in Henry Miller, *The Air-Conditioned Nightmare* (New York: New Directions, 1970): 163-4.

³⁰⁹ See Fernand Ouellette, *Edgard Varèse*, trans. Derek Coltman (New York: The Orion Press, 1968): 42.

point, rather, that what grabbed Varèse about the war was war at its most abstract. Or rather, war as a mere symptom of a more fundamental vital tendency that could somehow be considered apart from its traumatic reality. The possibility of a kind of oneness with the current of life—a nascent, vaguely mystical globalization—had reared its head, if only by way of a dark parody of itself.

But we cannot be satisfied with this still somewhat mystical notion of contact either. As it turns out, Varèse's war rhetoric ran deeper still. "I imagined myself to be a diabolic Parisfal," Varèse wrote, "searching not for the Holy Grail but for a bomb that would blow wide open the musical world and let in sounds—all sounds, at that time called "noise"—and sometimes even today." To Varèse's nationalism-destroying atomic bomb, he had added another—a purely musical bomb whose reach in its own realm would be equally absolute.

What do we make of this? At this point, can we comfortably continue reading Varèse's rhetoric of war and contact as mere metaphor? I would say decisively not, and the reason has to do with one fact: the contact Varèse intended was in many ways meant to be literal. Of all the things Varèse valued about music, one of the most important for this chapter was its physical immediacy. Among the arts, it was the only one whose materials were seen to make actual contact with the listener's body. We can trace this way of understanding sound to Varèse's encounters with Herman von Helmholtz, particularly his influential treatise *On the Sensations of Tone as a Psychological Basis for the Theory of Music*, which Varèse had read and grown fond of by the time he began composing all of his major works. It was early on in that treatise that Varèse must have read about music as something that "stands in a much closer connection with pure sensation than the other arts," and about how the experience of listening to music was not

2

³¹⁰ Varèse, "Autobiographical Remarks," unpublished manuscript, Edgard Varèse Collection, Paul Sacher Stiftung.

"based on a conception but on the thing itself." Channeling Helmholtz several years later, Varèse asked rhetorically, in a 1939 lecture given in New Mexico: "when you listen to music do you ever stop to realize that you are being subjected to a physical phenomenon?"³¹² Later, in the publication *The Commonweal*, he elaborated, speaking of how music's "power of suggestion is more compelling than that of any of the other arts, since its actual physical attack is more difficult to escape and more all-pervading."³¹³

A "power of suggestion" based in a "physical attack" that was "difficult to escape" music here seems to have persuaded by physical force, and a musical bomb surely all the more so. In a dark inversion of Kant's complaint, made in his *Critique of Judgment*, that music's inescapability robbed the subject of its freedom, Varèse saw that very inescapability as one of music's greatest virtues, the quality by which it assured that none of the confining boundaries we examined above would remain intact to inhibit the direct contact of subject and world. 314 The subject was "subjected to a physical phenomenon," which is to say, made into the physical phenomenon's subject, violated, much like Varèse before the siren in chapter one, to the point of losing its autonomy. Once more, we recall our original thesis: that all of this language of contact

³¹¹ Herman Ludwig F. von Helmholtz, On the Sensation of Tone as a Physiological Basis for the Theory of Music, trans. Alexander J. Ellis (London: Longmans, Green, and Co., 1875): 3. It should be noted that Helmholtz was himself still beholden to the metaphysical in many ways. Still, what Varèse seems to have taken from him was less metaphysics and more a deep understanding of the physical realities of sound as something that established a privileged material relationship to the ear.

312 Varèse, "Music as an Art-Science," Contemporary Composers on Contemporary Music, 199.

³¹³ Varèse, "Organized Sound for the Sound Film," *The Commonweal*, 13 December 1940: 204. Compare to Schopenhauer, as quoted by Nietzsche: "Music is distinguished from all the other arts by the fact that it is not a copy of the phenomenon, or, more accurately, of the adequate objectivity of the will, but an immediate copy of the will itself, and therefore complements everything physical in the world and every phenomenon by representing what is metaphysical, the thing in itself." See Nietzsche, *The Birth of Tragedy*, Section 16.

³¹⁴ "Over and above all this, music has a certain lack of urbanity about it. For owing chiefly to the character of its instruments, it scatters its influence abroad to an uncalled-for extent (through the neighborhood), and thus, as it were, becomes obtrusive and deprives others, outside the musical circle, of their freedom. [...] The case is almost on a par with the practice of regaling oneself with a perfume that exhales its odours far and wide. The man who pulls his perfumed handkerchief from his pocket gives a treat to all around whether they like it or not, and compels them, if they want to breathe at all, to be parties to the enjoyment, and so the habit has gone out of fashion." See Immanuel Kant, The Critique of Judgment, trans. James Creed Meredith (Oxford: Clarendon Press, 1952): 196.

and touching, of immediacy and absorption into the stream of life, ultimately betrays a desire to participate in modernity. We must turn our attention now to understanding how that desire might have been fulfilled by a solution so implicated in violence.

To begin to answer, it will help to take a moment and situate Varèse's rhetoric of contact historically. When we do, we quickly realize that it is only in recent history that the question of music's materiality versus its immateriality, as well as the question of the subject's separation from either, could have made any sense at all. For the Greeks, Platonic conceptions of the universe demanded that matter be seen as largely coextensive with disembodied spirit, even if it was the latter—as form, eidos—that was ultimately privileged. For Pythagoras and his later interlocutors, that immaterial spirit took the form of the pure abstractions of music's numerical ratios, which were in turn thought to mirror those of the entire cosmos, allowing someone such as Aristides to see music as the paradigm of order for both soul and universe alike. We find similar understanding of music in the neo-platonic interpretations of the early modern period, in which music was seen to be a privileged substance serving as an intermediary in the great chain of similitudes that connected the airiest vapors and godly ideas to matter at its most dense. Though music traversed both material and immaterial realms, its function was to convey to the former the invisible bond it had with the more perfect latter, a kind of vessel binding together all things.³¹⁵

In other words, there was never a question of man's lack of participation in or contact with the larger order of things; in the enchanted world, soul and cosmos forever resonated as one and the same music. "Man is intermediate between eternal things and generable and corruptible things," said Pietro Pompanazzi, "and he is put in the middle not so that he may be excluded but

³¹⁵ See Gary Tomlinson, *Metaphysical Song: An Essay on Opera* (Princeton: Princeton University Press, 1999).

truly so that he may participate. Whence he may *participate* in all extremes [emphasis mine]."³¹⁶ In its immateriality, music helped this participation to happen, serving as the spiritual glue binding together soul and cosmos as one and the same.

With the emergence of modernity, we can no longer speak of music's relationship to the cosmos as involving the same sort of metonymic connectivity or resemblance to nature. If the musical "work"—inasmuch as it could be called that—was originally seen as a mere elaboration of the larger God-created "music of the spheres," the modern work in its autonomy comes to be cut off from that chain of similitudes, enclosed now within a form which implicates human—not divine—creativity and which can alone determine its meaning. Nonetheless, in Hegel and well after, music remains a means by which that gap is bridged and the soul comes to resonate in harmony with the external world, even if it is a world that is now fully mediated by the subject. In the musical work, Hegel writes, "what comes before us is no longer the peaceful and material shape but the first and more ideal breath of soul." This is not the place for a full account of the history of musical metaphysics. But suffice it to say that from Pythagoras well into the twentieth century, music continuously takes on this role of cosmic or spiritual binding agent, connecting all things and providing contact between subject and world.

It would seem at first as though Varèse's highly physical conception of sound changes all of this. Music here seems no longer to be made up of the disembodied ratios invisibly binding together the Pythagorean cosmos, nor is it the incarnation of incorporeal spirit that it was for Hegel. No longer is it valued precisely for its decisively non-physical character. Instead, we are

_

³¹⁶ Ibid.,10.

³¹⁷ For more on this, see Hans Robert Jauss, "Poiesis," *Critical Inquiry* 8/3 (Spring 1982): 596.

³¹⁸ Hegel, *Aesthetics, Vol. II*, 890. "With sound, music relinquishes the element of an external form and a perceptible visibility." "The ear [...] without itself turning to a practical relation to objects, listens to the result of the inner vibration of the body through which what comes before us is no longer the peaceful and material shape but the first and more ideal breath of soul."

approaching something resembling Nietzsche's aesthetics as "applied physiology" in which music's effects can be spoken of only in materialist or biological terms. What for Hegel was the "formless breath of soul" has become for Varèse a "physical phenomenon" rooted in the "raw material of sound," capable, in its most effective form, of nothing less than "hitting the hearer on the back of the neck." Varèse's connection to Helmholtz begs us to link this rhetoric with the scientific materialism that was so prevalent at the end of the nineteenth century in which metaphysics ceded to an empiricism based in purely material explanations of the physical world. Music must live in sound," Varèse said, as though to insist that music's intangible, elusive characteristics could only be discussed as functions of the sober, circumscribed, and disenchanted material world.

In terms of our subject of contact, then, what this would mean for listeners is that they could surely feel a sense of connectivity by way of music with the alienated modern world. But if earlier, that connectivity came from hearing one's reflection in that world, or from resonating in sympathy with some sort of cosmic frequency, it would now come simply as a feeling registered on the skin. From such a reading, we might then entertain a kind of linear progression throughout history in which the perfectly disembodied Pythagorean ratios were over time profaned into their crudely physical equivalents, representing a change in the *quality* of contact emblematic of the increasingly impoverished social experiences we associate with the darker side of modernity. "You can have contact," the Varèseian sonic seems to say at times, "but only via 'imagination

3 1

³¹⁹ Friedrich Nietzsche, *Nietzsche Contra Wagner*, trans. Thomas Common (London: H. Henry and Co. Ltd., 1896): 67.

<sup>67.
&</sup>lt;sup>320</sup> Edgard Varèse, quoted in "The 'Red Symphony' Is Due To Explode," *The New York Times*, 4 March 1937.
³²¹ We can find the seeds of this thinking in Hanslick's *On the Musically Beautiful*, which can be seen as an early attempt to reconcile German Idealism and romanticism with the scientific materialism of Büchner and others. It is interesting to note that Hanslick himself refers to "the material for tone" as "raw material." See Mark Buford, "Hanslick's Idealist Materialism," *19th-Century Music*, 30/2 (Fall 2006). See also Sanna Pederson, "Romantic Music Under Siege in 1848," in *Music Theory in the Age of Romanticism*, ed. Ian Bent (Cambridge: Cambridge University Press, 1996).

not dependent on mythology,' as Marx once described art in the age of science.³²² Only as a brute literalism, shorn of its metaphysical content.

But such a reading would in the end be insufficiently dialectical. It would ignore the degree to which narratives of disenchantment only tell one side of the story, and how the mythologies they seemingly displace so often return to the where they areleast expected. This reversal is indeed what seems to happen in Varèse. Sound was surely the "raw material" of music, but music, as it turns out, was also what he referred to as the "corporealization of the intelligence in sound."323 In other words, if sound was the basic material out of which music was made, then that sound was not merely some crude, mute substance built up into something that could finally speak as "music," but rather something that, in a peculiar way, already spoke, something that was already mediated by human intelligence and conceptual labor. 324

What "hit the hearer on the back of the head," then, was perhaps less disenchanted than we have supposed. Though there was clearly a physical element to Varèse's sonic intimacy (and one which we will discuss more below), we must also somehow account for the "intelligence in sound" as having no less a role to play in establishing the desired connectivity. As such, we are not as far from Hegel as we'd once thought. It should be admitted that to many, Hegel will seem out of place in this or any other discussion of modernism insofar as more than a century exists between him and Varèse, and nothing could seem further from the angular, severe world of the

³²² Karl Marx, Grundrisse: Foundations of the Critique of Political Economy, trans. Martin Nicolas (New York: Penguin Press, 1973): 110.

³²³ Varèse, "Music as an Art-Science," 207.

³²⁴ I am reminded of another passage from Marx here, in which raw material is proven to be not quite so raw: "With the exception of the extractive industries, in which the material for labour is provided immediately by Nature, such as mining, hunting, fishing, and agriculture (so far as the latter is confined to breaking up virgin soil), all branches of industry manipulate raw material, objects already filtered through labour, already products of labour. Such is seed in agriculture. Animals and plants, which we are accustomed to consider as products of Nature, are in their present form, not only products of, say last year's labour, but the result of a gradual transformation, continued through many generations, under man's superintendence, and by means of his labour. But in the great majority of cases, instruments of labour show even to the most superficial observer, traces of the labour of past ages." Marx, Capital, Vol.1, trans. Ben Fowkes (Penguin Press, 1990): 287—8.

latter's music than Hegel's lofty language of the spirit. But we must not forget that Hegel the idealist is merely the symptom of what is for us a more important Hegel: Hegel the philosopher of modernity, whose own struggle to situate musical meaning at a particular juncture of materiality and immateriality is still so relevant to someone like Varèse. It is in this light, then, that we can speak of a provocative resonance between Varèse's aforementioned "corporealization of the intelligence in sound" and Hegel's definition of art as the "sensuous appearing of the idea." Both, it would seem, involve a material manifestation of immaterial human spirit or cognitive capability in the otherwise non-human material world. Let us stay with this Hegelian Varèse for a bit longer, then, to see how far he can take us.

Leaving aside the matter of "corporealization" for a moment, we can assume that by "intelligence in sound," Varèse meant the mathematical logic that underlay the natural overtone series, the calculable interaction of particular frequencies with one another, and other sonic phenomena with which he was so often consumed. In the language of Hegel, we could say that this "intelligence in sound" was the appearance in nature of the concept, a concept initially searched for out of that need, discussed above at length, for the subject to find itself reflected and feel at home in the world. This would be an intimacy with the world created out of a sense of spiritual participation, a bridging of subject and object by way of seeing some aspect of oneself in the materials of the work of art.

Taking this Hegelian narrative a step further, Varèse's subsequent "corporealization" of this intelligence in sound, this concept as found in nature, would be the stage of art proper,

³²⁵ See Volume 1 of Hegel's *Aesthetics*.

³²⁶ Indeed, Varèse's sketches are often littered with references to logarithmic functions such as the twelfth root of two, specific frequency indications, and other mathematical ephemera.

³²⁷ See the chapters on natural beauty and art beauty in Hegel's *Aesthetics*. I have also found Jean Hyppolite's discussion of Hegel and nature helpful. See his *Genesis and Structure of Hegel's Phenomenology of Spirit* (Evanston: Northwestern University Press, 1974).

created because the concept as found in nature is deemed to be inadequate. As the story goes, the ratios and mathematical laws found there cannot but remain dead abstractions, indifferent, as Hegel says, to their sensuous existence and to the dynamic life of the soul that they evoke. Art is summoned here to create a second nature in which the concept isn't merely a frozen abstraction or immediacy but rather something concrete—something that presents itself as having come to be through practical, temporal activity. Put more simply, art for both is summoned to *create* a sense of meaning and recognition where it cannot otherwise be adequately *discovered*; ³²⁸ "truth exists," we remember Varèse saying, "only insofar as art *gives* it a meaning [emphasis mine]."

Finally, music proper would enter here much as it would for Hegel: as a particularly privileged form of that artistic truth, valued because of the inextricable relationship truth in modernity has to temporality. It should be no surprise to us that, for the most part, Varèse would have mostly agreed with Hegel that "sensuous existence was wholly evanescent," that time was "the being of the conscious subject," and it was only in music that the subject could experience the constant negation and becoming of identity that was the essence of the experience of modernity itself. It is in Hegel, after all, that the question with which we started this chapter—namely, of how one can be absolutely modern—has its existential roots: time in Hegel is the site of the spirit's alienation in history, the "destiny of the unfulfilled spirit," which prevents experience from ever being grasped in an instant of its entirety. In music, however, the subject

•

³²⁸ "Nature is not the concept but only the concept's past, and reason cannot truly satisfy itself by observing it. Even less can it grasp the I by observing it, for observation freezes the concept in being, although the concept is not being but becoming, the self-positing of self. For this reason, though the philosophy of nature and more general all the natural sciences must play a part in the phenomenological development in which consciousness learns to discover itself and re-discover itself as spirit, it cannot have [...] a preponderant role. Theoretical reason will give way to practical reason: instead of discovering itself the I will pose itself; instead of ascertaining itself it will create itself [in the artwork, for example]." See Hyppolite, *Genesis and Structure*, 233.

³²⁹ Hegel, *Aesthetics, Vol.II*, 908.

³³⁰ For more on this, see Giorgio Agamben, *Infancy and History: On the Destruction of Experience*, trans. Liz Heron (Verso Press, 2007): 107-8.

could be filled with the temporal becoming of modernity, and, by being filled with it, participate in and make contact with it.³³¹

But we must nonetheless bracket this discussion of Hegel for now in order to begin seeing how his model, while useful as a point of departure, can only get us so far in understanding the much more fragmented and abrasive experience of modernity congealed within Varèse's works. Though we can certainly speak of the Varèseian subject's intimacy with some sort of temporally experienced intelligence in sound, for example, we must also account for the change in the *quality* of that intelligence that must inhere in the music of someone like Varèse, who was so preoccupied with the necessity of forgetting.

Forgetting is not what the Hegelian subject would have experienced in music. Musical time (and the concept's development therein) was the means by which the subject experienced its own constant negation, for sure, but a negation that was constantly reabsorbed into a persisting unity all the while. This would in part be because of the transparent nature of a musical motif's development over time, enabling the subject to apprehend that development much as its own: as a past remembered, retained in, and constantly reabsorbed into a new present through an ever growing process of concretion.

In Varèse, however, I would argue that the temporal life of music had become less the site of the subject's experience of its own preservation over time and more the site of its pure dissolution into it, enabled by a process of forgetting congealed therein. If in Hegel, music

³³¹ It is worth mentioning, however, that Hegel's aesthetics involve an ambiguous physicality of its own. As we said above, if contact could be spoken of in Hegel's system, it was largely a spiritual contact produced through the process of recognition. But musical recognition, as it turns out, relied on materiality and implied a more invasive type of contact than we might have otherwise supposed. In the case of martial music, for example, it "arouses the soul to the rhythmical beat of the march, *makes the individual full of the fact of his marching* and steeps him in the harmonious action of it [emphasis mine]." Or much more Varèse-like, it "*penetrates* into the self of conscious life, *seizes* hold of the same in virtue of the most simple aspect of its existence, and places the Ego in movement by means of the motion in Time and its rhythm [emphasis mine]." For this particular translation, see Walter Lippman, *Musical Aesthetics: A Historical Reader, Vol.*2 (Pendragon Press, 1988): 105-6.

encouraged the self's discovery of itself by way of the concept in sound, I want to suggest that in Varèse's music, the listening process involves the discovery of the mere concept—irrespective of the self—in sound.³³² It is the symbolic as untied from the imaginary, an encounter, in other words, with intelligence (or the concept) as something that was no longer threaded through the subjective place from which it had traditionally been viewed.

We can see this as a difference in the abstract and the concrete. What the Hegelian subject recognized in the concept was its own coming to be. It recognized intelligence as *its own* intelligence, intelligence not as mere abstract information but as an intimately and concretely experienced state of the concept that was, in a sense, the subject's own. But if we recall our Varèse from chapter one, however, we know that this subject-centered interpretation of intelligence is much harder to sustain. What was for Busoni a search for "nature mirrored and reflected in the human breast" had become for Varèse a search for a nature defined by those frequencies which exceeded human hearing, for example, and by incarnations of the musical real and other elements that were largely indifferent to any sort of humanism. 333 It was a kind of intelligence which, when temporalized in music, could not as easily be experienced by the subject as its own dialectical coming to be. Instead, it was intelligence as something detached from subjective experience and immured within a life of its own—intelligence as a blindly moving, creative-destructive force, experienced in the pure presence of its pursuit of newness at any cost.

22

³³² Another way of putting this is to make a distinction between an intelligent self recognizing that self in sound and a self recognizing mere intelligence in sound.

³³³ Following our discussion in chapter two, we could say that this was a result of "production for production's sake," that stage reached as a result of the capitalist demand to be new at all costs in which both knowledge and commodities cease in many ways to reflect the concrete needs and being of the subject, betraying instead their status of having been produced for the sake of newness alone. What is often called the "crisis of representation" in connection to modernism, in which the traditional gratification of bourgeois subjectivity's image in the artwork is no longer feasible in light of larger socio-scientific truths that demand that image's utmost fragmentation and dismemberment, could be interpreted as one consequence of this production in excess of consumption.

In Varèse's music proper, we can see this in his treatment of the overtone series as such, and in how the temporal elaboration of that series seems to drive a relentless process of creation and destruction so indicative of that inassimilable modernity we have been describing. In Beethoven, we can speak of the presence of the overtone series, of course, but only as something filtered through and circumscribed by that subjective lens called tonality, that slice of the overtone series in which the subject can recognize itself. It is circumscribed not only in terms of the limited number of tones employed but also in the way that those tones venture out only so far within individual motives (repeated, of course, on the level of form) before returning home again and again (the opening of Beethoven's *Eroica* symphony, for example, which returns to E-flat four times in the span of a single measure of its opening theme).

In Varèse's *Arcana*, however, it is as though that highly circumscribed overtone series, which in Beethoven had asserted itself almost circularly as that constant departure and return of a subject, has unfurled itself from that subjective container of tonality, no longer appearing in a manner conducive to the subject's reflection but stretched out into its raw, unfiltered, towering self. The overtone series, in other words, appears not in an abbreviated, domesticated version but in the full light of its terrifyingly sublime fullness. In its moments of upwards-surging pitch culmination, it is as though, while not articulating the literal series, the music nonetheless mimics and temporalizes the piling up of partials that occurs therein, lurching upwards through the tones in such a way that there is no longer that Beethovenian circle of identity's return but instead the infinite line along which intelligence, in the form of higher and higher partials, theoretically harder and harder to hear, ultimately leaves the subject behind. Moreover, it is a sense of leaving-behind that is only amplified by the way each culmination seems to bring about its own destruction, coursing upwards only to come crashing down to begin again.

As with the passage examined above, it takes no wild imagination to hear this as the music of modernity at its most sublime. We might take a step further and say that it is music in which the subject is forced to defend at all times against those Benjaminian shocks discussed in Chapter 1, shocks that kept the subject glued to the perpetual present with little recourse to memory. Adorno's remark that Varèse "uses technology for effects of panic" perhaps says as much. 334 But it is because modernism is always that Janus-faced thing, seemingly caught between horror and elation in the face of the impulses driving it, that we can just as easily talk about that other side of its dialectic: the surrender to this sublime creative-destructive force as a liberating radical forgetting. Music here embodied what modernity had raised to an ontological principle: modernity as a vital force, as constant "effort, movement, progress," as a struggle without which "both the mind and the body" would "begin to die." In this light, and in a manner fitting for a composer who, in his words, didn't give a damn about the past, we can see this excerpt as almost euphorically demolishing its own past—demolishing the possibility of musical memory—for the sake of that perpetual newness, performing in sonic form— dare we say making contact with?—that sublime creation and destruction that was seen to comprise modernity's core.

~

³³⁴ Adorno, T.W. "The Aging of the New Music," *Essays on Music*, ed. Richard Leppert (Berkeley: University of California Press, 2002): 194.

³³⁵ Compare to Bergson: "Our freedom, in the very movements by which it is affirmed, creates the growing habits that will stifle it if it fails to renew itself by constant effort: it is dogged by automatism. The most living thought becomes frigid in the formula that expresses it. The word turns against the idea. The letter kills the spirit." See *Creative Evolution*, trans. Arthur Mitchell (New York: Dover, 1997): 127. And Nietzsche: "I offer my conception of what is *modern*.—In its measure of strength every age also possesses a measure for what virtues are permitted and forbidden to it. Either it has the virtues of *ascending* life: then it will resist from the profoundest depths the virtues of declining life. Or the age itself represents declining life... Aesthetics is tied indissolubly to these biological presuppositions" See *The Birth of Tragedy and The Case Against Wagner*, 190.

And as goes the music, so goes the person attending to it. What these passages enable in the listener is a feeling of connecting intimately with the becoming and constant creation-destruction inherent in the stream. ³³⁶ Rosenfeld, again, put it well. To repeat our epigraph:

Music is expressive, carrying us out of ourselves and beyond ourselves, into impersonal regions, into the stream of things; permitting us to feel the conditions under which objects exist, the forces playing upon human life. To live, to merge with the stream and become part of forces larger than ourselves, is to feel, to know something about the entire world; music lets us share in a great man's absorption: at least to the degree to which we are capable of being lost to ourselves.³³⁷

Repeatedly, Varèse referenced music's ability to do this better than any other art. It was a connectivity based in music's peculiar physicality, which conveyed the changing nature of the physical world directly to the listener's body.

The Barriers of the Body

My argument has been that Varèse's rhetoric of immediacy and contact stems from what is at root a desire to participate in and somehow apprehend that elusive thing called modernity. We have seen how that desire translated into a pervasive disdain for any sort of mediated relationship to the present, whether in the guise of the use of outmoded musical forms or even of musical performers themselves, condemned by Varèse as irritating middle men that inhibited "direct contact with the public." Most recently, we saw this in the way the abstract musical content itself seemed to encourage in the listener a kind of Nietzschean forgetting that kept the listener fully engaged with the fleeting moment.

_

³³⁶ That Varèse saw his music as a direct conveyor of this experience is evidenced by his disdain for musical performers, who he condemned as irritating middle men that inhibited a composer from making "direct contact with the public." ³³⁶ The latter quote comes from Varèse's manifesto for the International Composer's Guild, which is full of other references to contact. For more from Varèse on the mediated relationship to the public, see "Edgard Varèse on Music and Art: A Conversation Between Varèse and Alcopley," *Leonardo*, 1/2 (April 1968): 187. For a reproduction of the ICG manifesto, see *Edgard Varèse: Composer, Sound Sculptor, Visionary*, 120.

³³⁷ Rosenfeld, *Musical Impressions*, 225.

But in all of Varèse's talk about dispensing with barriers inhibiting the direct contact with the absolutely new; and at the most extreme reaches of his dream of pure temporal immediacy, unhindered by the inertia of the world, we cannot help but wonder whether the ultimate barriers to be dispensed with were those of the listening subject itself. There is a fine line, in other words, between merely participating in modernity and becoming one with it, and it is this line that will concern us from here on out.

We know that music was privileged by Varèse for the way its temporal nature allowed the listener a sense of vivid intimacy with the creative-destructive becoming that characterized modernity. But what we cannot forget is the degree to which this intimacy was in many ways literal. If shortly above, we were concerned mainly with more metaphorical or cognitive kinds of intimacy based in recognition-like processes, here we must remember that those experiences relied for their intensity upon music's peculiar physicality, which served to actually connect subjects and world to create that unique sense of linking up with the stream.

But it is when we combine this embrace of music as a kind of conduit between listener and that temporal flux of modernity with Varèse's understanding of the ideal listener as itself hardly more than that same temporal flux that we begin to see exactly what is going on here. In his unpublished lecture "Sound, the Raw Material of Music," Varèse describes the way music is able to assert itself as purely immaterial existence before suggesting that it ultimately helps the listener to experience itself as the same:

In music, the auditive sensations themselves form the matter of the art. We do not transform these sensations into symbolic objects of external phenomena. For example, when in concerts we notice especially certain sounds produced either by brass, woodwind or string instruments, our pleasurable sensation does not reside in the evocation or representation for us of the material existence of any of those instruments, but in the sensation of sound emanating from them. "The idea peculiar to music, and which music gives", [Julien] Benda says, "and which other arts would be incapable of giving, is that of immaterial existence presenting, in short, the condition of being a being without being an object." For this reason matter-of-fact persons whose musical enjoyment is limited to

tunes and who enjoy life from the hips down, are bored listening to music. Its abstraction seems a negation of concrete existence, and consequently of their own. 338

To truly merge with the stream of things, as Rosenfeld described the ideal experience of modernity, was here to experience the eclipse of everything in subjective life that tended towards the condition of the object. It was to experience a self-abandonment to modernity's becoming that was directly opposed to the accrual of memory on the level of musical content, for example, or the petrified nature of anachronistic musical forms on another. As such, hips-down listeners were not wrong to experience music as a "negation of concrete existence." They were wrong, rather, in understanding that negation as a bad thing. What I am suggesting is that for Varèse, to truly touch one's time, to be "absolutely modern," was in a sense to *become* time, abandoning the time by which one is constituted as a persisting and remembering subject to embrace time at its essence, time as pure becoming, creation, and destruction, time as the Dionysian.

That music was to offer at the very least an ersatz version of this Dionysian experience is hinted at in the following excerpt from a *New York Times* editorial, in which the experience of music is once again compared directly to the experience of war. Varèse writes:

At first war and its attendant dangers bring a new, overwhelming sensation of the uncertainty of life and the certainty of death, the energy and determination of a fighting army, the spirit of a great nation. All this inspired the soldier at the beginning. But soon the drudgery, dirt, monotony, horror, make everything commonplace. One seems to lose the power of new sensations. But the effect of music in mental stimulation is unfailing. I can awe us with the majesty of nature; make us laugh in the very joy of living, cry at the tragedy of life. It can today inspire us with a will to do the work of the world. 339

War, as that which makes apparent the "overwhelming sensation of the uncertainty of life and the certainty of death," reveals to the subject an otherwise-concealed ontological truth: the basis of modernity in the experience of transience. Like something straight out of *The Birth of*

³³⁸ Varèse, "Sound, the Raw Material of Music," unpublished lecture, Edgard Varèse Collection, Paul Sacher Stiftung.

³³⁹ Edgard Varèse, "A Talk With Mr. Varèse," *The New York Times*, 30 March 1919.

Tragedy, this "drudgery, dirt, monotony, [and] horror" ultimately numb the mind, robbing it of "new sensations," whereupon art is summoned to redeem that experience, helping, as Nietzsche would say, to "save the eye from gazing into the horrors of night and to deliver the suspect by the healing balm of illusion from the spasms of the agitations of the will." We should take Varèse's recourse in the next two sentences to the decidedly un-modernist notions of laughter, tears, and inspiration with a grain of salt. As we have seen, if Varèse was concerned with anything, it wasn't so much laughter and tears as it was the underlying force that could so quickly turn one into the other. And although art could reveal those same ontological truths only via illusion, its value here nonetheless lay in the closeness it allows the listener to those truths. "Art," Varèse wrote later in the same editorial, "has brought us face to face with the real." 340

But in other ways, and as we already know, it could actually bring the listener much closer to the real than that. How does one remain face to face with music as it is, to paraphrase a later Varèse, striking them on the back of the head? How does one remain face to face with that "bomb that would blow wide open the musical world and let in sounds—all sounds, at that time called 'noise'—and sometimes even today"? We are back, in other words, to Varèse as that "diabolical Parsifal," writing in the wake of war, for whom music wasn't so much a means of "mental stimulation" as it was a means of mental shock. Far from desiring the merely simulated dissolution of the listener in cases like this, Varèse seems to have wanted his sonic contact to achieve the real thing as well.

Regarding Arcana, André Jolivet recalled how Varèse wanted sound to cause the listener to "cease to think of himself [by way of a] force which carries one away and leads to

³⁴⁰ Edgard Varèse, "A League of Art," The New York Times, 23 March 1919.

dematerialization."³⁴¹ It is a scenario similar to the one Varèse imagined for his abandoned work *The One All Alone*, which was to use giant, blinding spotlights, among other things, to affect a kind of "apocalyptic unity" and "terror," ultimately leading to the "transmutation of one form of matter into another."³⁴²The scenario for the work was to involve an astronomer, inspired directly by Nietzsche's Zarathustra, whose fate was itself transmutation: being "decomposed, disintegrated, and absorbed into the Star."³⁴³ Based around the ultimate being who was not also an object, it was a vision of immateriality that had its origins partly in a dream. As Louise recalls:

[In the dream, Varèse] was in a telephone booth telephoning to me in Paris when one arm after the other seemed to evaporate and the next thing he knew he was with me in a hotel room in Paris, "reintegrated"—like a wireless photograph. So, he imagined his Nietzschean Astronomer escaping from a mad and murderous crowd, disintegrated and translated to the stars by Sirius and his companion the white Dwarf. It was by instantaneous radiation that the white dwarf signaled and that the Astronomer, a scientific uebermensch, caught them and signaled replies.³⁴⁴

I cannot help but imagine the "mad and murderous crowd" here as being comprised of those recalcitrant bodies, so heavy with the inertia of tradition, that were seen by Varèse to oppose his vision of a perpetually "dematerialized" stream of modernity. The astronomer would be Varèse, searching into space for the unheard and the unfelt, the crowd would be the naysayers, protesting, as they do in *The One All Alone*, his insistence on moving forward at whatever cost, and the end result would be the liquidation of Varèse's body by a beam of radiation into the pure, non-individuated immanence of the very becoming that the process of perpetual discovery symbolized. That this liquidation would have been a good thing is evidenced

³⁴¹ Jolivet, quoted in Bridget Conrad, F. "The Source of Jolivet's Musical Language and his Relationship with Varèse and Messiaen," Ph.D Dissertation, CUNY Graduate Center, 1994.

³⁴² Louise Varèse quotes her husband as saying "It will be a modern Apocalypse—terrifiant, angoisant, exaltant." See "A Looking-Glass Diary, Vol.II," unpublished manuscript, Edgard Varèse Collection, Paul Sacher Stiftung. ³⁴³ Ibid.. 33.

³⁴⁴ Ibid., 30.

by the fact that music was to contain "passages of ecstasy—terror—everything but a morbid decadent feeling."³⁴⁵ In other words, the musical "apocalypse" was to be that Nietzschean beginning-again and self-overcoming that was to be embraced if life was to achieve the conditions necessary for it to live.

We must see radiation here in the same way as sound. Both convey energy through space and eventually bring that energy into direct contact with a terminating surface. In the context of *The One All Alone*, then, Varèse's comment about how music's "physical attack is more difficult to escape and more all-pervading" makes us wonder whether the listener's fate wasn't ultimately to be that of the astronomers. Sound and spotlight alike seem to be things intended to literally break open the recalcitrant shell of the listener's subjectivity, annihilating the final barrier separating them from world to create *the condition of the possibility for experiencing the new*.

Here, it is not so much Nietzsche who is Varèse's model as Nietzsche's disciple Artaud, with whom Varèse briefly collaborated and who spoke no less enthusiastically about the possibility of establishing a renewed contact between the public, art, and life. Varèse read Artaud's *The Theater and Its Double* and would have no doubt encountered and identified with Artaud's comment that "without an element of cruelty at the root of every spectacle, the theater is not possible. In our present state of degeneration it is through the skin that metaphysics must be made to re-enter our minds." The skin, that is, as the site of pure, pre-cognitive immediacy, receptive to the shock of the new and yet immune to the identity-preserving tendency of the mind to parry new experiences by filtering them through the old.

3.

³⁴⁵ Louise Varèse, "A Looking-Glass Diary, Vol.II" unpublished manuscript, Edgard Varèse Collection, Paul Sacher Stiftung.

³⁴⁶ Antonin Artaud, *The Theater and Its Doubles* (New York: Grove Press, 1958), 99.

Vitalism and Materialism: Towards a Reconciliation

Artaud's comment raises an interesting final issue. Can we speak of a strict delineation, or at least a similar coexistence, in Varèse's rhetoric of something we might call the purely physical and something we might call the metaphysical? If so, might we be able to do as Artaud does and see one as the necessary condition of the other? Admittedly, this subject could fill a dissertation of its own, and so I will only gesture towards a possible answer here. It will lie in the clarification of a temporal ambivalence that has persisted in our discussions of the musical present thus far.

At times, we have spoken of this present as a continuous flux and perpetual becoming, while at others, the discussion has tended more towards a specific moment in that becoming, one that we have described variously as an experience of panic or shock, as a theoretical moment of being absolutely modern, or otherwise. Bergson discussed the former in terms of duration, an authentic, non-spatialized experience of time in which the "continuous progress of the past [...] gnaws into the future and [...] swells as it advances."³⁴⁷ For the most part, Varèse's music embodies what we might call a highly contracted version of this duration insofar the degree of the past that bleeds into the present is minimized to maximize that coveted experience of the now. What I want to propose is that we see works like Arcana, which also featured those periodic violent culminations of sound, as involving the occasional further contraction of that duration into moments approaching what Bergson called "pure presence," initiated by the heightened sensation of making physical contact with sound. These moments would embody Jolivet's sonic "force which carries one away and leads to dematerialization," comprised of moments in which the ear is struck by a heightened, almost traumatic physicality (because of

³⁴⁷ Henri Bergson, Creative Evolution, 4.

both volume and saturation of pitch space) in order to establish an opening of sorts through which metaphysics might be allowed its fragile connectivity. This would be that place, blown open by the musical bomb, which would allow "all sounds to come rushing in through the resulting breach."

Of the present, Bergson writes:

My present consists in the consciousness I have of my body. [...] In that continuity of becoming which is reality itself, the present moment is constituted by the quasiinstantaneous cut effected by our perception in the flowing mass, and this section is precisely that which we call the material world. Our body occupies its center; it is, in this material world, that part of which we directly feel the flux in its actual state the actuality of our present lies. If matter, so far as extended in space, is to be defined (as we believe it must) as a present which is always beginning again, inversely, our present is the very materiality of our existence [emphasis mine]. 346

Jolivet's "force" here would be these "quasi-instantaneous cuts" in the listening subject's flowing mass, moments of extremely contracted duration that foreground the experience of the memory-less (perhaps even traumatized) bodily present. The experience of matter without memory was for Bergson one of "pure perception," an experience of the real in which matter was no longer seen as existing for (and thus apart from) a subject, sliced up into sections of differing usefulness as determined by past experience, but as a single "vibrating mass" that the subject, in Bergson's words, "touched, penetrated, lived." In Arcana, it is as though the listener experiences the constant contraction of duration into these penetrative, explosive moments moments that in effect open up the subject to an experience of object, sound, and modernity unmediated by memory—before that window of duration widens again, allowing the subject to experience itself as the time that it has always been. Varèse said that music must live in sound. Here, that sound has opened the door to music.

³⁴⁸ Henri Bergson, *Matter and Memory*, trans. N.M. Paul (Zone Books, 1990): 138—9. Translation slightly altered. ³⁴⁹ Ibid., 69.

If formalism in music represented a "protection against the adventure of living," as we remember Varèse calling it, then we can only assume that the truer experience of modernity and of any music created in its name was an intensely vulnerable one. It was an experience of hanging off the bow—not the back—of modernity's careening ship, coursing through Rilke's "night, when a wind full of infinite space gnaws at our faces."³⁵⁰

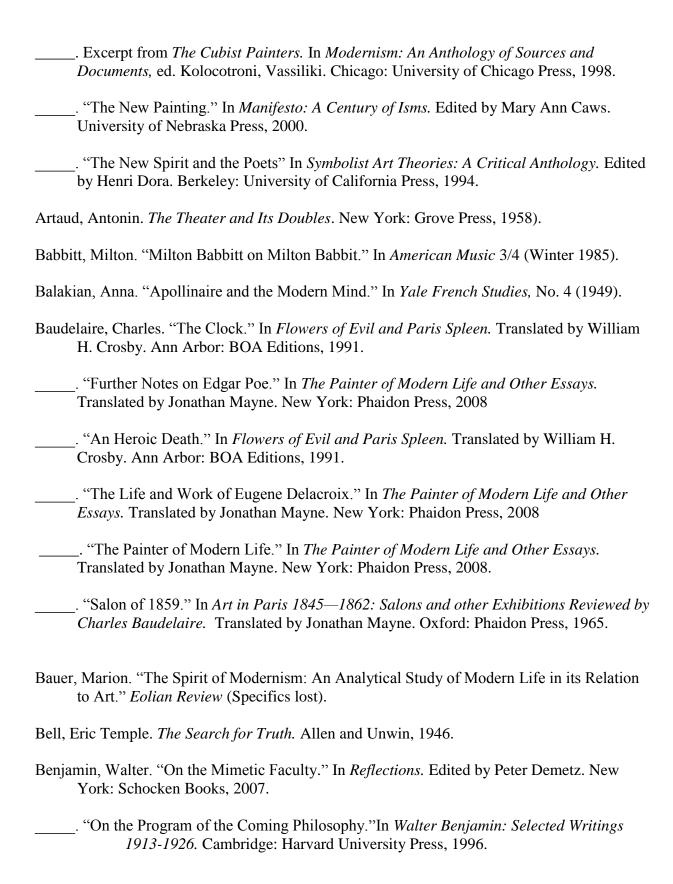
But that vulnerability was a fine price to pay to realize a dream of contact deeply connected to the related social dream of a world in which meaning is no longer contingent upon the mediation of signs and subjects but is immanent in the structures of society itself. If for Varèse and others, that dream takes on the guise of touching, it is because what is hoped for in the experience of modernity is a type of meaning rooted in the felt participation in one's time—a kind of intuitive, bodily sense of belonging—rather than in the mere distanced contemplation of its relentless, inassimilable becoming. If the latter is an atrophied, castrated form of experience, one in which feeling has been removed from thought, then I think we can see music here an attempt to return to experience something of that affective dimension, an attempt to create a second-order modernity with a renewed sense of nearness to and felt participation in its disenchanted materials. Forced to pass through the skin before arriving at the brain, sound both induces the shock indicative of modernity's impoverished, inassimilable type of experience while at the same time opening up the subject to the possibility of something better. Music instigates a lifting of the subject's leaden gates, suspending, if only in a flash, their self-policing, self-preserving boundaries in order to let in the breathless modern world.

, _

³⁵⁰ Rainer Marie Rilke, *The Duino Elegies & Sonnets to Orpheus*, trans. Stephen Mitchell (New York: Random House, 2009): 3.

Bibliography

- Abrams, M.H. The Mirror and the Lamp: Romantic Theory and the Critical Tradition. London: Oxford University Press, 1971.
- Adamson, Walter. "Apollinaire's Politics: Modernism, Nationalism, and the Public Sphere in Avant-garde Paris." In Modernism/Modernity, 6.3 (1999).
- Adorno, T.W. Aesthetic Theory. Translated by Robert Hullot-Kentor. Minneapolis: University of Minnesota Press, 1997. . "The Aging of the New Music." In Essays on Music. Edited by Richard Leppert. Berkeley: University of California Press, 2002. . *Minima Moralia*. Translated by E.F.N. Jephcott. Verso Press, 2006. . "On Subject and Object." In Critical Models: interventions and catchwords. Translated by Henry W. Pickford. New York: Columbia University Press, 1998. . "Why is the New Art So Hard to Understand?," In Essays on Music. Edited by Richard Leppert. Berkeley: University of California Press, 2002. Agamben, Giorgio. Infancy and History: On the Destruction of Experience. Translated by Liz Heron. Verso Press, 2007.
- Albright, Daniel. Modernism and Music: An Anthology of Sources. Chicago: University of Chicago Press, 2004.
- _. Quantum Poetics: Yeats, Pound, Eliot, and the Science of Modernism. Cambridge University Press, 1997.
- . Representation and the Imagination: Beckett, Kafka, Nabakov, and Schoenberg. University of Chicago Press, 1981.
- Althusser, Louis. Lenin and Philosophy and Other Essays by Louis Althusser. Translated by Ben Brewster. New York: Monthly Review Press, 1971.
- Anderson, John D. "Varèse and the Lyricism of the New Physics." In *The Musical Quarterly* 75/1 (Spring 1991).
- Anderson, Perry. "Modernity and Revolution." In New Left Review. (March-April 1984).
- Apollinaire, Guillaume. The Cubist Painters. Translated by Peter Read. Berkeley: University of California Press, 2004.



- . "On Some Motifs in Baudelaire." In Illuminations. Translated by Harry Zohn. New York: Schocken Books, 1969. "The Storyteller." In *Illuminations*. Translated by Harry Zohn. New York: Schocken Books, 2007. Bergson, Henri. Creative Evolution. Translated by Arthur Mitchell. New York: Dover, 1997. . An Introduction to Metaphysics. Translated by T.E. Hulme. Indianapolis: Hackett Publishing Company, 1999. . *Matter and Memory*. Translated by N.M. Paul. Zone Books, 1990. Bernard, Jonathan. The Music of Edgard Varèse. New Haven: Yale University Press, 1987. "Pitch/Register in the Music of Edgard Varèse," Music Theory Spectrum, Vol.3 (Spring 1981). Bohn, Willard. "From Surrealism to Surrealism: Apollinaire and Breton." In Journal of Aesthetics and Art Criticism 36/2 (Winter 1977). Bourne, Randolph. "Trans-National America." In The History of a Literary Radical and Other Papers. New York: S.A. Russel, 1956. Bowie, Andrew. Aesthetics and Subjectivity from Kant to Nietzsche. Manchester: Manchester University Press, 2003. Breton, Andre. "Manifesto of Surrealism" In Manifestos of Surrealism, trans. Richard Seaver and Helen R. Lane. Ann Arbor: Ann Arbor Paperback, 1972. Buford, Marc. "Hanslick's Idealist Materialism." In 19th-Century Music, 30/2 (Fall 2006). Busoni, Ferruccio. The Essence of Music and Other Papers. Translated by Rosamond Levy. New York: Dover Publications, 1957. Sketch of a New Esthetic of Music. Reprinted in Three Classics in the Aesthetic of Music. New York: Dover Publications, 1962.
- Calinescu, Matei. Five Faces of Modernity. Durham: Duke University Press, 1987.
- Chua, Daniel. *Absolute Music and the Construction of Meaning*. Cambridge: Cambridge University Press, 1999.
- Clark, T.J. "Clement Greenberg's Theory of Art." In Critical Inquiry 9/1 (September 1982).

. Farewell to an Idea: Episodes from a History of Modernism. New Haven: Yale University Press, 2001. . "Modernism, Postmodernism, and Steam." In October (Spring 2002). Conrad, Bridget F. "The Source of Jolivet's Musical Language and his Relationship with Varèse and Messiaen." Ph.D Dissertation, CUNY Graduate Center, 1994. Danauser, Hermann. "The Varèse Myth." In Edgard Varèse: Composer, Sound Sculptor, Visionary. Edited by Felix Meyer and Heidi Zimmermann. Woodbridge: The Boydell Press, 2006. De Man, Paul. Blindness and Insight. University of Minnesota Press, 1983. "Literary History and Literary Modernity." In *Daedalus* 99/2 (Spring 1970). Derrida, Jacques. "Freud and the Scene of Writing." In Writing and Difference. Translated by Alan Bass. University of Chicago Press, 1978. Eagleton, Terry. Walter Benjamin, or Towards a Revolutionary Criticism. London: verso Press, 2009. Ellenberg, Henri F. The Discovery of the Unconscious: The History and Evolution of Dynamic Psychiatry. Basic Books, 1970. Foster, Roger. Adorno: The Recovery of Experience (SUNY Press, 2007). Foucault, Michel. "What is Enlightenment?" In The Essential Foucault: Selections from the Essential Works of Foucault 1954—1984. Edited by Paul Rabinow and Nikolas Rose New York: The New Press, 2003. Freud, Sigmund. Beyond the Pleasure Principle. Translated by James Strachey. New York: W.W. Norton, 1989. . "Project for a Scientific Psychology." In The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume I. 1950. "A Note Upon a 'Mystic Writing-Pad." In The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume XIX (1923—1925): The Ego and the Id and Other Works. Galison, Peter. Einstein's Clocks, Poincaré's Maps: Empires of Time. New York: W.W. Norton, 2003.

Gay, Peter. Modernism: The Lure of Heresy. New York: W.W. Norton, 2008.

- Goehr, Lydia. *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music.* Oxford University Press: 2007.
- . "Radical Modernism and the Failure of Style: Philosophical Reflections on Maeterlinck-Debbusy's *Pelléas et Mélisande*." In *Representations* 74 (Spring 2001).
- Giddens, Anthony. The Consequences of Modernity. Stanford: Stanford University Press, 1990.
- Grey, Christopher. Cubist Aesthetic Theories. Baltimore: Johns Hopkins Press, 1953.
- Habermas, Jürgen. The Philosophical Discourse of Modernity. Cambridge: MIT Press, 1987.
- Hale, Nathan. *Rise and Crisis of Psychoanalysis in the United States, Vol.II.* Oxford University Press, 1995.
- Hanslick, Eduard. *On the Musically Beautiful*. Translated by Geoffrey Payzant. Indianapolis: Hackett Publishing, 1986.
- Harvey, David. *The Condition of Postmodernity: An Inquiry into the Origins of Cultural Change.* Oxford: Blackwell Publishing, 1990.
- Hegel, G.W.F. *Aesthetics: Lectures on Fine Art, Vol.1 & II.* Translated by T.M. Knox. Oxford: Clarendon Press, 1988.
- _____. *Phenomenology of Spirit*. Translated by A.V. Miller. Oxford: Oxford University Press, 1977.
- Heidelberg, Michael. "The Evolution of Helmholtz's Philosophy of Science." In *Hermann von Helmholtz and the Foundations of Nineteenth-Century Science*. Edited by David Cahan. University of California Press, 1994.
- Heisenberg, Werner. *Philosophical Problems of Nuclear Science*. Translated by F.C. Hayes. New York: Pantheon, 1952.
- Helmholtz, Hermann L.F. *On the Sensation of Tone as a Physiological Basis for the Theory of Music.* Translated by Alexander J. Ellis. London: Longmans, Green, and Co., 1875.
- Henderson, Linda Dalrymple. "The Fourth Dimension and Non-Euclidean Geometry in Modern Art: A Conclusion." In *Leonardo*, 1984 (17/3).
- Hinton, C. Howard. *The Fourth Dimension*. London: Swan Sonnenschein, and Co.: 1906.
- Hirsbrunner, Theo. "Varèse and La Jeune France." In *Edgard Varèse: Composer, Sound Sculptor, Visionary*. Edited by Felix Meyer and Heidy Zimmermann. Woodbridge, Suffolk: The Boydell Press, 2006.

- Hoffmann, E.T.A., *E.T.A. Hoffmann's Musical Writings:* Kreisleriana, The Poet and the Composer, *Music Criticism*. Edited by David Charlton. Cambridge: University of Cambridge Press, 1989.
- Hyppolite, Jean. *Genesis and Structure of Hegel's Phenomenology of Spirit*. Evanston: Northwestern University Press, 1974.
- Jameson, Fredric. A Singular Modernity. London: Verso Press, 1990.
- _____. Marxism and Form. Princeton University Press, 1974.
- Jauss, Hans Robert. "Poiesis." In Critical Inquiry 8/3 (Spring 1982).
- Johnson, Julian. *Webern and the Transformation of Nature*. Cambridge: Cambridge University Press, 1999.
- Josepivici, Gabriel. *What Ever Happened to Modernism?*. New Haven: Yale University Press, 2011.
- Jung, Carl. *Modern Man in Search for a Soul*. Translated by W.S. Dell and Cary F. Baynes. San Diego: Harcourt Brace Jovanovich, 1933.
- Kahn, Douglas. *Noise, Water, Meat: A History of Sound in the Arts.* Cambridge: MIT Press, 2001.
- Kant, Immanuel. *The Critique of Judgment*. Translated by James Creed Meredith. Oxford: Clarendon Press, 1952.
- _____. "An Answer to the Question: What is Enlightenment?" In *Kant: Political Writings*. Translated by H.B. Nisbet. Cambridge: Cambridge University Press, 2008.
- King, William W. "Baudelaire and Mallarme: Metaphysics or Aesthetics?" In *The Journal of Aesthetics and Art Criticism* 26/1 (Autumn 1967).
- Kittler, Friedrich. *Discourse Networks: 1800/1900*. Translated by Michael Metteer. Stanford: Stanford University Press, 1990.
- _____. *Grammaphone, Film, Typewriter*. Translated by Geoffrey Winthrop-Young and Michael Wutz. Stanford University Press, 1999.
- Lacan, Jacques. *The Four Fundamental Concepts of Psychoanalysis*. Translated by Alan Sheridan. New York: W.W.Norton, 1998.
- _____. *Seminar VII: The Ethics of Psychoanalysis*. Translated by Dennis Porter. New York: W.W. Norton, 1997.

- Lenin, Vladimir. *Imperialism: The Highest Stage of Capitalism*, Edgard Varèse Library. Harry Ransom Center, University of Texas, Austin.
- Lippman, Walter. Musical Aesthetics: A Historical Reader, Vol.II. Pendragon Press, 1988.
- Lukács, Georg. *The Theory of the Novel*. Translated by Anna Bostock. Cambridge: MIT Press, 1974.
- Mallarmé, Stéphan. "The Blue." In *Collected Poems and Other Verse*. Translated by E.H. and A.M. Blackmore. Oxford: Oxford University Press, 2006.
- . "The Book: A Spiritual Instrument." In *Selected Poetry and Prose*. Edited by Mary Ann Caws. New York: New Directions Publishing, 1982.
- Mattis, Olivia. "Varèse's Multimedia Conception of Déserts." Musical Quarterly 76/4 (1992).
- Miller, Henry. The Air-Conditioned Nightmare. New York: New Directions, 1970.
- Marx, Karl. *Grundrisse: Foundations of the Critique of Political Economy*. Translated by Martin Nicolas. New York: Penguin Press, 1973.
- _____. *Economic and Philosophic Manuscripts of 1844*. Translated by Martin Milligan. Promethius Books, 1988.
- _____. "Manifesto of the Communist Party." In *The Marx-Engels Reader*. Edited by Robert C. Tucker. New York: W.W. Norton, 1978.
- Michelson, Peter. Speaking the Unspeakable: The Poetics of Obscenity. SUNY Press, 1993.
- Morgan, Robert P. "Secret Languages: The Roots of Musical Modernism." In *Critical Inquiry* 10/3 (March 1984).
- Nietzsche, Friedrich. *The Case Against Wagner*. Translated by Walter Kaufman. Vintage Press, 1967.
- _____. *Nietzsche Contra Wagner*. Translated by Thomas Common. London: H. Henry and Co. Ltd., 1896.
- "On the Uses and Disadvantages of History for Life." In *Untimely Meditations*. Translated by R.J. Hollingdale. Cambridge: Cambridge University Press, 2007.
- _____. *The Will to Power*. Translated by Walter Kaufman and R.J. Hollingdale. Vintage Press, 1968.

- Oja, Carol. Making Music Modern: New York in the 1920s. New York: W.W. Norton, 2003.
- Oppenheim, James. "What Jung Has Done." In *The New Republic*. April 26, 193?.
- Ouellette, Fernand. *Edgard Varèse*. Translated by Derek Coltman. New York: The Orion Press, 1968).
- Paz, Octavio. *Children of the Mire: Modern Poetry from Romanticism to the Avant-Garde*. Cambridge: Harvard University Press, 1974.
- . "In Search of the Present." NobelPrize.org, accessed 10 September 2011, http://www.nobelprize.org/nobel_prizes/literature/laureates/1990/paz-lecture.html
- Pederson, Sanna. "Romantic Music Under Siege in 1848." In *Music Theory in the Age of Romanticism*. Edited by Ian Bent. Cambridge: Cambridge University Press, 1996.
- Perlis, Vivian and Libby Van Cleve. Composers' Voices from Ives to Ellington: An Oral History of American Music, Vol. 1. New Haven: Yale University Press, 2005.
- Picker, John. Victorian Soundscapes. Oxford: Oxford University Press, 2003.
- Rabinbach, Anson. *The Human Motor Energy, Fatigue, and the Origins of Modernity*. Berkeley: University of California Press, 1992.
- Rather, Wolfgang. "Worlds Without End: *Amerique*." In *Edgard Varèse: Composer, Sound Sculptor, Visionary*. Boydell Press, 2006.
- Rhodes, Arthur. *The Cult of Beauty in Charles Baudelaire*, Vo.1. Lancaster: Lancaster Press, 1929.
- Rilke, Rainer Marie. *Duino Elegies & Sonnets to Orpheus*. Translated by Stephen Mitchell. New York: Random House. 2009.
- Rimbaud, Arthur. *A Season in Hell & Illuminations*. Translated by Bertrand Mathieu. BOA Editions, 1991.
- Rosenfeld, Paul, An Hour with American Music. Westport: Hyperion Press, Inc., 1979.
- _____. *Musical Impressions: Selections from Paul Rosenfeld's Criticism.* Edited by Herbert A. Liebowitz. New York: Hill and Wang, 1967.
- Schiff, David. "A Red But No Communist: Varèse in the 30s and 40s." In *Edgard Varèse: Composer, Sound Sculptor, Visionary*. Edited by Felix Meyer and Heidi Zimmermann. Woodbridge: The Boydell Press, 2006.

Schoenberg, Arnold. "Composition with Twelve Tones." Reprinted in *Modernism and Music:* An Anthology of Sources. Edited by Daniel Albright. Chicago: University of Chicago Press, 2004. . Style and Idea. Translated by Leo Black. University of California Press, 1984. Schonberg, Harold C. Schonberg. "Art—From the Shoulders Up." *Musical Digest* (March-April 1946) Schuller, Gunther. "Conversations With Varèse." In Perspectives of New Music, 3/2 (Spring-Summer 1965). Schwartz, Elliott and Barney Childs, editors. Contemporary Composers on Contemporary Music. New York: Holt, Rinehart, and Winston, 1967. Shapley, Harlow. *Of Stars and Men: The Human Response to an Expanding Universe*. Boston: Beacon Press, 1958. Simmel, Georg. "The Metropolis and Modern Life." In *The Blackwell City Reader*, ed. Gary Bridge and Sophie Watson. Blackwell Publishing, Ltd., 2010. Stempel, Larry. "Not Even Varèse Can Be an Orphan." In *The Musical Quarterly*. LX/1 (January 1974). . "Varèse's 'Awkwardness' and the Symmetry in the 'Frame of 12 Tones': An Analytic Approach." In *The Musical Quarterly*, 65/2 (April 1979). Strawn, John. "The Intégrales of Edgard Varèse: Space, Mass, Element, Form," Perspectives of New Music 17/1 (Autumn-Winter 1978). Thiher, Allen. Fiction Rivals Science: The French Novel from Balzac to Proust. University of Missouri Press, 2001. Tomlinson, Gary. Metaphysical Song: An Essay on Opera. Princeton: Princeton University Press, 1999. Valéry, Paul. "The Conquest of Ubiquity." Aesthetics. Translated by Ralph Manheim. New York: Pantheon, 1964. Varèse, Edgard. "Edgard Varèse & Alexei Haieff Questioned by 8 Composers." In Possibilities (Winter 1947). "The Electronic Medium." In Contemporary Composers on Contemporary Music.

Edited by Elliot Schwartz and Barney Childs. New York: Da Capo Press, 1998.

"Jérom' s'en vat'en guerre." <i>Eolian Review</i> . February 1924.
"A League of Art." The New York Times. March 20, 1919.
"The Liberation of Sound." In <i>Contemporary Composers on Contemporary Music</i> , edited by Elliott Schwartz and Barney Childs. New York: Holt, Rinehart, and Winston 1967.
"Music as an Art-Science." In <i>Contemporary Composers on Contemporary Music</i> , edited by Elliott Schwartz and Barney Childs. New York: Holt, Rinehart, and Winston 1967.
"The Music of To-morrow." Musical Standard. July 24, 1924.
. "New Instruments and New Music." In <i>Contemporary Composers on Contemporary Music</i> , edited by Elliott Schwartz and Barney Childs. New York: Holt, Rinehart, and Winston, 1967.
"Organized Music for the Sound Film." In <i>The Commonweal</i> . December 13, 1940.
Papers. Edgard Varèse Collection. Paul Sacher Stiftung.
Program note to <i>Intégrales</i> .
"Que la musique sonne." Translated by. Louise Varèse. 391, no 5. June 1917.
"Rhythm, Form, and Content." In <i>Contemporary Composers on Contemporary Music</i> edited by Elliott Schwartz and Barney Childs. New York: Holt, Rinehart, and Winston 1967.
"A Talk With Mr. Varèse." <i>The New York Times</i> , March 30, 1919.
Figaro, 1928.
Varèse, Edgard and Alfred Alcopley. "Edgard Varèse on Music and Art: A Conversation Between Varèse and Alcopley." In <i>Leonardo</i> , 1/2 (April 1968).
Varèse, Edgard and Gunther Schuller. "Conversations with Varèse." In <i>Perspectives of New Music</i> , 3/2 (Spring-Summer 1965).
Varèse, Edgard and Louise Varèse. Edgard and Louise Varèse Collection. Harry Ransom Center, University of Texas.

Varèse, Louise. Varèse: A Looking-Glass Diary, Vol.1. New York: W.W. Norton, 1972.

- Weber, Max. "Science as a Vocation." In *From Max Weber: Essays in Sociology*. Translated by H.H. Gerth and C. Wright Mills. New York: Oxford University Press, 1946.
- Webern, Anton von. "The Path to Twelve-Note Composition." Reprinted in *Modernism and Music: An Anthology of Sources*. Edited by Daniel Albright. Chicago: University of Chicago Press, 2004.
- Werner Heisenberg. *Philosophical Problems of Nuclear Science*. Translated by F.C. Hayes. New York: Pantheon, 1952.
- Wilheim, Andras. "The Genesis of a Specific Twelve-Tone System in the Works of Varèse." In *Studia Musicologica*, 19/1 (1977).
- Wolin, Richard. "Benjamin's Materialist Theory of Experience." In *Theory and Society* 11/1 (Jan 1982).
- The New York Times. "The 'Red Symphony' Is Due To Explode." 4 March 1937.
- Zimmermann, Heidy. "Recycling, Collage, Work in Progress: Varèse's Thought in Speech and Writing." In *Edgard Varèse: Composer, Sound Sculptor, Visionary*. Edited by Felix Meyer and Heidy Zimmermann. Suffolk: The Boydell Press, 2006.