ARVO PÄRT’S “BERLINER MESSE”: AN APPROACH TO UNDERSTANDING AND INSTRUCTING SERIAL TECHNIQUES IN A MINIMALIST FRAMEWORK

By
Jesse Logan Miller
Liberty University

A MASTER’S THESIS PRESENTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN MUSIC EDUCATION

Liberty University
April 2018
ARVO PÄRT’S “BERLINER MESSE”: AN APPROACH TO UNDERSTANDING AND INSTRUCTING SERIAL TECHNIQUES IN A MINIMALIST FRAMEWORK

By Jesse Logan Miller

A Thesis Presented in Partial Fulfillment

Of the Requirements for the Degree

Master of Arts in Music Education

Liberty University, Lynchburg, VA

April 2018

APPROVED BY:

Rebecca Watson, DMA, Committee Advisor

Gabriel Miller, PhD, Committee Reader

Vernon Whaley, PhD, Dean of the School of Music
ABSTRACT

The music of Estonian composer Arvo Pärt is something of a phenomenon. Pärt’s music has made a profound connection with audiences, granting Pärt immense popularity and making him the most performed living composer in the world. Equally a phenomenon is his own unique tintinnabuli technique that lies at the heart of Pärt’s music and draws as much upon serialism as it does Gregorian chant. While much has been written on Pärt and his original tintinnabuli technique, this qualitative case study focuses on a major work ostensibly overlooked in scholarship, Arvo Pärt’s “Berliner Messe.” The study focuses on the serial aspects of tintinnabuli and “Berliner Messe” that operate within a minimalist framework. In addition to traditional forms of musical analysis, non-traditional musical analyses pioneered by Pärt experts, such as Paul Hiller, are also employed. Additionally, attention is given to the relationship between text and music, metrical features of Pärt’s music, and a brief literature review is conducted in order to establish the context of “Berliner Messe.” The content of the analysis provides a better understanding of the construction of “Berliner Messe” while the methods of analysis determine whether previous analytical models are appropriate for “Berliner Messe.” Lastly, a determination of the educational value of “Berliner Messe” is made in teaching serialist and post-tonal concepts to students followed by recommendations for classroom applications.

Keywords: Arvo Pärt, “Berliner Messe,” analysis, serialism, education, tintinnabuli, Paul Hillier, 20th century music

---

Acknowledgements

I would like to thank my family and most especially, my parents, to whom I owe everything and whose support has long preceded this project. Every possession I own, every opportunity I have, and any talent I have mustered is because of them and I will never be able to adequately express my gratitude. Praise be to God, who has delighted in using them as instruments of His grace, to richly bless me and teach me His name. Now to Him who is able to do far more abundantly than all that we ask or think, to Him who loves us and has freed us from our sins by His blood and made us a kingdom, priests to His God and Father, to Him be glory and dominion forever and ever.

---

2 Eph. 3:20 (ESV)
3 Rev. 1:5b-6 (ESV)
# Table of Contents

Abstract

Acknowledgements

List of Figures...........................................................................................................iii

List of Abbreviations...................................................................................................v

CHAPTER ONE: INTRODUCTION ..............................................................................2
  Background..................................................................................................................2
  Statement of the Problem .........................................................................................2
  Statement of the Purpose .........................................................................................3
  Significance of the Study ........................................................................................3
  Research Questions ................................................................................................4
  Definition of Terms ..................................................................................................4

CHAPTER TWO: LITERATURE REVIEW .....................................................................8
  Section I: Contextual Information..........................................................................8
  Section II: Musical Style .........................................................................................12
  Section III: Text and Music ....................................................................................14
  Section IV: Metrical Devices ..................................................................................15
  Section V: Significance of “Berliner Messe” ........................................................17
  Section VI: Serialism and Education ......................................................................20

CHAPTER THREE: METHODS ....................................................................................24
  Introduction ...............................................................................................................24
  Research Methodology ..........................................................................................24
  Analytical Methods ................................................................................................24
  Design ......................................................................................................................25

CHAPTER FOUR: FINDINGS .....................................................................................27
  Section I: Biography and Contextual Information ..............................................27
  Section II: Tintinnabuli .........................................................................................37
  Section III: “Berliner Messe”: An Analysis ..........................................................46
  Section IV: Applications for Classroom Instruction ............................................74

CHAPTER FIVE: CONCLUSION ..................................................................................90
  Summary of Study ..................................................................................................90
  Summary of Purpose ............................................................................................90
Summary of Findings and Prior Research ................................................................. 91
Limitations.................................................................................................................. 91
Recommendations for Future Study ........................................................................ 92

REFERENCES .................................................................................................................. 93

APPENDICES .................................................................................................................. 97
LIST OF FIGURES

Figure 1: Hillier’s four melodic modes ................................................................. 40

Figure 2: T-voice (represented by stemless quarter notes) positions in relation to M-voice
(represented whole notes) ...................................................................................... 41

Figure 3: A possible third proximal position ................................................................ 42

Figure 4: Roeder’s 3rd proximal position, with T-voice in red ........................................ 43

Figure 5: Possible third position T-voice in red, disregarding octave notes .................. 43

Figure 6: Overview of ‘Berliner Messe’ movements, key areas, and textures ................ 47

Figure 7: mm. 1-3 of “Kyrie,” Berliner Messe, soprano and alto lines, Universal Edition UE 19
858 ........................................................................................................................... 48

Figure 8: mm. 5-6 of “Kyrie, Berliner Messe,” choral section, Universal Edition UE 19 858 .. 49

Figure 9: Charts mapping use of M and T-voices in “Kyrie” ..................................... 50

Figure 10: Structural M-line in alto is implied (green) by T-1As voice in soprano, mm. 11-12. 51

Figure 11: Number of active voices in the “Kyrie” ...................................................... 52

Figure 12: Operations conducted on text to extract values ........................................... 54

Figure 13: mm. 1-4 of Gloria, Universal Edition UE 19 858 ........................................... 55

Figure 14: M-voices in axial movement: alto (red) and first violin (blue), mm. 1-4 ............. 56

Figure 15: Extracted tone row in bass part, Veni Sancte Spiritus, mm. 1-14 .................... 60

Figure 16: Construction of the prime row with the M-voice in red, T-voice in blue .......... 60

Figure 17: Cyclical permutations of the 22-pitch row, with prime row in bold ............... 63

Figure 18: Mm. 1-6 of Credo, “Berliner Messe,” Universal Edition UE 19 858 .................. 65

Figure 19: Prime form of the 23-note tone row in “Credo” ............................................. 66

Figure 20: Extraction of pitches in the row, with extracted pitches in bold ..................... 67
Figure 21: Mm. 1-2 of Sacntus, Berliner Messe, Universal Edition UE 19 858. .......................... 68

Figure 22: Compound tintinnabuli in canon at the fourth in second system of “Agnus Dei,”

Universal Edition UE 19 858. ............................................................................................................. 69

Figure 23: Opening of the initial canon round in “Agnus Dei,” Rehearsal A, Universal Edition

UE 19 858. ........................................................................................................................................... 70

Figure 24: Opening of second canon round in Agnus Dei, with exchanged material, Universal

Edition UE 19 858. .................................................................................................................................. 70

Figure 25: Conclusion of “Agnus Dei,” seven beats after Rehearsal B, Universal Edition UE 19

858.......................................................................................................................................................... 72

Figure 26: Hillier’s four modes presented in a matrix. Asterisks denote extensions of the modes.

................................................................................................................................................................. 87
# LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Term</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode Voice</td>
<td>M-voice</td>
</tr>
<tr>
<td>Tintinnabuli Voice</td>
<td>T-voice</td>
</tr>
<tr>
<td>M-voice, Mode 1</td>
<td>M-1</td>
</tr>
<tr>
<td>M-voice, Mode 2</td>
<td>M-2</td>
</tr>
<tr>
<td>M-voice, Mode 3</td>
<td>M-3</td>
</tr>
<tr>
<td>M-voice, Mode 4</td>
<td>M-4</td>
</tr>
<tr>
<td>T-voice, 1&lt;sup&gt;st&lt;/sup&gt; position superior</td>
<td>T-1s</td>
</tr>
<tr>
<td>T-voice, 1&lt;sup&gt;st&lt;/sup&gt; position inferior</td>
<td>T-1i</td>
</tr>
<tr>
<td>T-voice, 1&lt;sup&gt;st&lt;/sup&gt; position alternating from superior</td>
<td>T-1As</td>
</tr>
<tr>
<td>T-voice, 1&lt;sup&gt;st&lt;/sup&gt; position alternating from inferior</td>
<td>T-1Ai</td>
</tr>
<tr>
<td>T-voice, 2&lt;sup&gt;nd&lt;/sup&gt; position superior</td>
<td>T-2s</td>
</tr>
<tr>
<td>T-voice, 2&lt;sup&gt;nd&lt;/sup&gt; position inferior</td>
<td>T-2i</td>
</tr>
<tr>
<td>T-voice, 2&lt;sup&gt;nd&lt;/sup&gt; position alternating from superior</td>
<td>T-2As</td>
</tr>
<tr>
<td>T-voice, 2&lt;sup&gt;nd&lt;/sup&gt; position alternating from inferior</td>
<td>T-2Ai</td>
</tr>
</tbody>
</table>
Chapter One: Introduction

Background

Arvo Pärt’s music has been called many things, including “minimalist,” “mystic,” “holy minimalism,” “transcendent,” “other-worldly,” and “antidote to Modernism,” among others. Each contain truth in a descriptive sense, but none of these terms define Pärt’s music. Most know Pärt’s early works such as “Spiegel im Spiegel,” “Cantus in Memoriam of Benjamin Britten,” and “Fratres,” but “Berliner Messe” offers a wonderfully different experience on a much larger scale. While there are many works written on Pärt and his original technique, few works have been dedicated to “Berliner Messe.” Fewer yet have contemplated the role that Pärt’s music might play in music education. Therefore, the audience for this project includes any who desire a deeper look into Pärt’s music, as well as students of analysis, composers who are interested in combining serial techniques with tonality, and educators looking for new, more effective ways to teach serial techniques to students.

Statement of the Problem

Since Pärt is such a singular voice among twentieth century music, academic research on some of his music can be well-worn territory. Much has been written about his early tintinnabuli works and much has chronicled his rise to international fame. However, one of Pärt’s major works, “Berliner Messe,” is something of an exception that has received significantly less scholarly attention given to its construction and workings. While an absence of an academic research and material is not atypical for a piece just 28 years old, it does not diminish the significance or pressing necessity to fill this gap, especially since “Berliner Messe” is one of just

---

four major choral works by Pärt (that is, works that last longer than 25 minutes). While early works such as “Fur Alina,” “Spiegel im Spiegel,” and “Fratres” provide a pure distillation of his tintinnabuli work, research and analysis on “Berliner Messe” has the opportunity to reveal a more flexible, mature, and advanced usage of Pärt’s original technique on a much larger scale. This offers a powerful opportunity to affect the way we understand and teach the music of Arvo Pärt in both ensemble and theoretical contexts.

**Statement of the Purpose**

The purpose of this project then is to shed some academic light on this major work, establishing the sort of framework for understanding “Berliner Messe” that exists for many of his other pieces. This framework includes the intended outcomes of providing necessary contextual information on both Pärt and “Berliner Messe,” specifically tracing Pärt’s usage and development of the tintinnabuli technique and other serial compositional techniques, with considerations given to the relationship between text and music and the metrical devices that are often hallmarks of Pärt’s work. It is the aim of this project then to present Pärt’s work as education tool in theoretical analysis, ensemble performance, and in compositionally combining serialism with tonality.

**Significance of the Study**

The ramifications of this project include filling a gap in the literature on Pärt’s music, potentially changing the way we view and teach Pärt’s music from being simply a return to tonality or “holy minimalism” to recognizing the intricacies and complexity of the work. Similarly, the approach to this music combination of tonal and serial techniques in Pärt’s music provides a less dichotomous model to these topics than is typically presented in music education.
The minimalist framework that houses Pärt’s techniques then holds the opportunity for a more accessible introduction to serialism in music education.

**Research Questions**

During the course of research, the five basic research questions are posed: (1) What is the necessary contextual information to understand Arvo Pärt’s “Berliner Messe”? (2) What elements comprise Arvo Pärt’s musical style, both technically and aesthetically? (3) What is the relationship of music to text in “Berliner Messe”? (4) In what ways, if any, are metrical devices used in the form of the “Berliner Messe?” and (5) In what ways, if any, is “Berliner Messe” a suitable educational tool?

**Definition of Terms**

There are many musical terms used in this thesis but none so vital as the definitions for *serialism* and *minimalism*. *Serialism* was primarily developed by Arnold Schoenberg and his twelve-tone technique that he and his students employed, guiding aspects such as melody, harmony, and structure. Since then, serialism has expanded beyond this to include more (or fewer) parameters and under different techniques. The fact that serialism is associated with dodecaphonist music of composers such as Arnold Schoenberg, Anton Webern, Alban Berg, Karlheinz Stockhausen, and Milton Babbitt creates an unspoken and defining assumption that serialism is or must be atonal (that is, without a tonal center). This thesis challenges that assumption, as well as assertions that serialism is a single style, “highly specialized technique,” or even a philosophy. Instead, Paul Griffith’s definition of serialism as “a method of

---


composition in which a fixed permutation, or series, of elements is referential (i.e. the handling of those elements in the composition is governed, to some extent and in some manner, by the series).”

On the other hand, *minimalism* is a greatly problematic term, especially when used in relation to Arvo Pärt. Paul Hillier, likely regarded as the pre-eminent expert on Pärt, states that “the label ‘minimalist’ is misleading, too culturally determined, to stand uncontested or at least unexplained.” Part of the problem is that the term originated from visual arts to describe works by sculptures such as Frank Stella, Tony Smith, and Donald Judd that displayed elemental and simple forms in repetition. Complicating things further, in music, early definitions followed composer La Monte Young’s definition of “that which is created with a minimum of means.” Young’s definition, however, is itself misleading since economy of means does not necessarily equate minimal means. Pärt himself echoes this: “Reduction certainly doesn’t mean simplification, but it is the way – at least in an ideal scenario – to the most intense concentration on the essence of things.” There are often many associations with the term ‘minimalism’ in music, primarily repetition, but also tonal stasis, brevity, fast tempo, quick pulsing, and ostinatos that often describe minimalism in the American tradition of John Adams or Steve Reich, but do not necessarily apply to Pärt’s work, much less “Berliner Messe,” which contains essentially no direct repetition. Hillier also warns that the term is too often used as “a label of convenience by

---


8 Hillier, 16.


which a composer can be dismissed as unworthy of serious attention.”\textsuperscript{11} Moreover, Arvo Pärt does not seem fond of the term.\textsuperscript{12} So while the term is riddled with potentially inaccurate associations, due to the widespread acceptance of the term in the musical community, the term ‘minimalism’ is used here reluctantly, holding to Keith Potter’s broader definition of “a style of composition characterized by an intentionally simplified rhythmic, melodic, and harmonic vocabulary,”\textsuperscript{13} since that can aptly describe Pärt’s music.

The term ‘tonality’ is more straightforward. In this thesis, it “refers to the orientation of melodies and harmonies towards a referential (or tonic) pitch class.”\textsuperscript{14} That is, it refers to music that exhibits a hierarchy of pitches, and at the top of this hierarchy is a pitch or tonal center. Pärt’s music is often referred to as tonal, when in fact, it may be more accurately described as modal\textsuperscript{15} or neomodal.\textsuperscript{16} However, for the purposes of this thesis, and since modal music has a pitch center, and the distinction seems largely unnecessary since this definition encompasses modal music and therefore still accurately describes Pärt’s music. Additionally, there are several instances within “Berliner Messe” that are clearly more tonal than modal. Usage of this term, however, is not meant to imply a functioning tonality of the common practice era since the

\textsuperscript{11} Hillier, 13.


\textsuperscript{15} Hillier, 92.

hierarchy of pitches in Pärt’s music do not operate on functions of scale degrees or harmonies but in a decidedly post-tonal manner. Yet, a hierarchy exists, of which the (mostly tonic) triad is central, thus Pärt’s tintinnabuli music is neither wholly tonal nor non-tonal, but rather a reworking of tonality.¹⁷

*Dodecaphony* in some cases refers explicitly to the twelve-tone technique of serialism, but here is used a broad term that inclusively refers to both atonal and serialist music.

For a definition of ‘*tintinnabuli*’, see chapter four, to which section two is entirely devoted.

¹⁷ Robinson, 83.
Chapter Two: Literature Review

The works selected for this study establish valuable information on the reclusive Pärt, his worldview, musical techniques, as well as provide a precedent for an analysis for Pärt’s compositions. Pärt’s music has often invited skepticism and reluctance from scholars because of its ostensible simplicity and phenomenal popularity. However, even in the fundamental stages of exploring Pärt’s tintinnabuli technique, the complexity of the technique and originality of its inception alone cause Pärt to stand out among contemporary composers. In “Berliner Messe,” not only is this exemplified, but we find an opus that proves to be a compositional watershed for Arvo Pärt. The information here then collects contextual information as well as previous analyses on his original tintinnabuli technique before reviewing literature related to the broader topics of serialism and education.

Section I: Contextual Information

The first classification of the literature focuses on contextual information. While the life and background of the composer is not the focus of the study, no piece is divorced from its context and influences. This section primarily establishes the circumstances leading up to the composition of “Berliner Messe” and provides a context in order to determine what should be looked for during the analysis.

*The Music of European Nationalism: Cultural Identity and Modern History* is geared towards musical readers and lay-people alike, Philip Bohlman’s book tracks the historic development of a variety of kinds of music that spans from operas to military music to folk songs and everything in between even as nationalism continues to sound throughout Europe. While

---

music can create connections and bridge differences in ideology and class, Bohlman’s work on European nationalism would not be complete without including how prominently music factors in cultural identity and how it can be used to divide as much as unite. Bohlman’s work spans vast time periods, from Middle Ages to post-Communist Estonia, where Arvo Pärt emigrated from in 1981.

Similarly, The Baltic States: Years of Dependence, 1940-1990 explores in broad scope the Baltic states of Latvia, Estonia, and Lithuania during the years under the control of the Union of Soviet Socialist Republics. Included are analyses and descriptions of how these nations endured five decades of Russian colonialism, suppression of their own culture and language, and social upheaval. Of course, both the similarities and differences of these countries’ history are compared. In these histories, the authors discuss the regulation of music under communism with details on Arvo Pärt’s tempestuous career as a Soviet Composer. This contributes to the study at hand in shedding light on the composer’s life and context under which he began forming his own tintinnabuli technique.

Such Freedom, if only Musical: Unofficial Soviet Music During the Thaw follows the death of Joseph Stalin in 1953, when Soviet composers eventually began exploring and testing the bounds of their artistic freedom by engaging in “unofficial” music, a legal gray area under the USSR. This book follows efforts made during the 1960s by composers such as Andrey Volkonsky, Edison Denisov, Alfred Schnittke, and Arvo Pärt as they experimented with a vast array of techniques that generated a politically charged reception. Peter Schmetz’s careful

---


research into this period and musical analysis is supplemented with interviews and first-hand accounts of many of the important composers of this era. This naturally contributes considerably to forming an understanding of Pärt’s early compositional period context.

While many listeners and scholars have acknowledged the role of the mysterious and spiritual in Pärt’s music, few have attempted to explore how it works within Pärt’s music as in *Arvo Pärt: Out of Silence.* Peter Bouteneff’s book provides the unique perspective of Pärt’s work from within the Eastern Orthodox Christian tradition, which has been the pillar of Pärt’s music since 1970. With special interest given to Pärt’s silent period, it traverses Pärt’s Orthodox Christian faith and philosophy, seamlessly illuminating our understanding of Pärt’s music. Since “Berliner Messe” is an explicitly sacred piece, Bouteneff’s meditation on the role of spirituality in Pärt’s music contributes to this study substantially.

Even after more than twenty years, *Arvo Pärt* remains the single most authoritative and complete work on Arvo Pärt. Spanning philosophy, biography, analysis, and performance instruction, Paul Hillier’s close proximity to Pärt and role as principal conductor for Pärt’s musical premieres make Hillier an essential starting point for anyone seeking to better understanding Pärt or his work. As a scholar of other minimalists, such as Steve Reich, Hillier is uniquely qualified to address Pärt’s usual classification in this school and among 20th century music. Hillier’s book will contribute to my research on almost every point of inquiry, from biography, to exploration of spirituality, style classification, demonstration of tintinnabuli, performance practice, and analysis.

---


The dissertation *The Song of the Convert: Religious Conversion and its Impact on the Music of Franz Liszt, Arvo Part, and John Coltrane*\textsuperscript{23}, is particularly interested in the impact of conversion to religion upon three specific composers, one of which is Arvo Pärt. Among other factors, it weighs the musical style, content, and methods of delivery and how these factors changed after conversion. Focusing on Pärt, it explores how Pärt considers that he has no such thing a secular composition. Even Pärt’s instrumental music has a history of utilizing sacred titles, such as “Trisagion.” This is reinforced by the spiritual perspective through which Pärt views his tintinnabuli technique. The exploration of spirituality in the construction, not just in a single piece, makes this a valuable source for this study.

*The Cambridge Companion to Arvo Pärt*\textsuperscript{24} is actually a collection of essays from a variety of prominent international scholars. As such, a variety of content is explored, from biography, to chapters on the tintinnabuli technique, to discussion on Pärt’s creative process. Among the most helpful for the purposes of this study will be Andrew Stanton’s essay, “Arvo Pärt: In His Own Words.” While the composer declined an interview, Pärt did write several letters in 2010 inviting dialogue on his music. Also contributing to this research will be Benjamin Skipp’s essay “The Minimalism of Arvo Pärt: An ‘Antidote’ to Modernism and Multiplicity?” in determining the significance of Pärt among 20th century music.

*Arvo Pärt’s White Light: Media, Culture, Politics*\textsuperscript{25} is another collection of essays from the some of the same experts on Arvo Pärt and his music. These essays are focused into an

---


investigation into both the causes and effects of Pärt’s music and particularly his success in connecting with audiences. Seeking to dig deeper than the rhetoric of “holy minimalism,” it is approached from the different vantage points of empathy, commerce and art, healing and technology, political legacy, and performance practice. The conclusion is that Pärt is becoming something of a cultural figure via the profound impact his music is making.

In *Arvo Pärt in Conversation*, Enzo Restagno conducts an extensive and valuable interview with the reclusive composer Arvo Pärt, who explains his artistic journey and worldview. Perhaps most notable about this interview is that it also includes Nora Pärt, Arvo’s wife, and reveals how just how deeply influential she is in Arvo’s music and career. Additionally, there is a musicology essay by Leopold Brauneiss, which is likely the most complete examination on tintinnabuli evolution from 1976-2010. Also included are acceptance speeches by Pärt, and an exploration of spiritual components by Saale Kareda. Both Nora Pärt’s influence and her perspective are valuable and unique contributions to this study, as is the articulated philosophy by Pärt himself.

**Section II: Musical Style**

The second classification of literature includes works focusing on Pärt’s musical style, principally, his tintinnabuli technique. Within a larger conversation on post-modern music, *Postmodernism: A Guide for the Perplexed* (Browning, G. K., Halcli, A., & Webster, F. 2000), the authors discuss the advent of so-called “holy minimalism,” its constituents, characteristics, and influences. Considered a principal figure of holy minimalism, Arvo Pärt factors largely in the discussion with the other principle composers of holy minimalism, John Tavener and Henryk

---

Gorecki. Browning and Webster discuss possible causes for the rise of holy minimalism as well as the similarities and differences Pärt’s music has with Tavener’s and Gorecki’s. Though not an in-depth study on Pärt, Browning and Webster verbalize many of the perceptions of holy minimalism and Pärt, including skepticism from academics and scholars.

Anabel Maler’s “Compound Tintinnabulation in the music of Arvo Pärt” is a thesis dedicated to a very specific technique Pärt uses that Maler codifies as ‘compound tintinnabulation’. She first defines ‘compound melody’ as consisting as two independent voices inhabiting the same line, and then applies the definition for when Pärt combines the two voices of his tintinnabuli technique into a single musical line. Maler then examines the occurrences of compound tinnabulation in Tabula Rasa (1977), Annum per Annum (1980), Es sang vor langen Jahren (1984), and L’Abbé Agathon (2004). The research done contributes to the analysis of “Berliner Messe” since this technique occurs in multiple movements, each with different parameters and features.

The article “Pärt's evolving tintinnabuli style” from Perspectives of New Music aims to briefly explain Pärt’s original tintinnabuli technique, its origin, and how it is generally used. Offering comparisons to Schoenberg’s creative hiatus followed by the establishment of a new compositional technique, Michael Chikinda also separates him from Steve Reich’s reaction to modernist music. Additionally, Chikinda attempts to chart how the technique has changed since its inception and debut in “Fur Alina.” This article is pivotal for understanding Pärt’s “Berliner

---


As one of the few works dedicated to Arvo Pärt’s “Berliner Messe,” the paper Two tangled golden threads: Arvo Pärt, his tintinnabulation technique, and his Berliner Messe offers a look at how Pärt’s tintinnabuli technique is used throughout “Berliner Messe” according to Forrestal’s analysis. Additionally, sections are devoted to understanding Pärt himself, which does the already brief analysis an unfortunate disservice. Along with addressing connections or classification of minimalism, Forrestal also includes a discussion on tintinnabulation and pandiatonicism. Finally, after describing the processes of analysis, Forrestal tackles analysis of “Berliner Messe” piece by piece. Along with the analysis itself, the inherent strengths and weaknesses of this approach contribute to the form of the proposed study.

The dissertation Arvo Pärt and Three Types of his Tintinnabuli Technique also explores Pärt’s tintinnabuli technique but digs deeper than previous attempts by demonstrating that Pärt’s creation and usage of the technique may have evolved over time, but typically still adhered to one of three forms. Oranit Kongwattananon features an analysis of six works, none of them “Berliner Messe,” but their inclusion provides a better framework for analyzing tintinnabuli in other works. The final section in the paper contains an analysis of Pärt’s “Fratres,” in which the form is compared to that of a passacaglia and the perspective of a violinist on the idiomatic techniques Pärt employs in the violin and piano arrangement of “Fratres.”

Section III: Text and Music

---


The third classification of the literature centers on the relationship between text and music, a most prominent concern for Pärt in his choral works. The article “Text Und Liturgie Bei Arvo Pärt” from the International Journal of Musicology examines the importance of text and liturgy in Pärt’s music, specifically “Berliner Messe.” Despite the seemingly simple textures of “Berliner Messe,” there is a complex and intricate relation of text and music in a structure that, according to Goldberg, creates the music of “Berliner Messe” itself. Goldberg tracks Pärt’s search for a fundamental new expression of music to create something of a liturgical space that Goldberg believes warrants analysis. Gille Deleuze’s “Différence en Répétition” factors largely into Goldberg’s philosophical analysis and serves as the basis for Goldberg’s assertion that Pärt’s “Berliner Messe” is a subtle game between identity and difference.

**Section IV: Metrical Devices**

The fourth class of literature looks at metrical devices in Pärt’s music. This group of literature establishes unique metrical approaches to some of Pärt’s music. “Transformational aspects of Arvo Pärt's tintinnabuli music” from the Journal of Music Theory focuses on the strict, elemental processes of composition with regard to mathematical formalism derived from musical transformation theories. Analysis of Pärt’s “Fratres,” “Passio,” and “The Beatitudes” yields valuable generalizations that may apply and illuminate “Berliner Messe.” A key contribution to the current research is made by exploring how Pärt’s iconic harmonic process, tintinnabulation, which often governs the creation and process of melody, exhibits melodic meaning and makes it possible to perceive areas and distinctions of harmony along with

---


fundamental systems for cadences. John Roeder’s analysis concludes by suggesting Pärt’s music as a unique balance of a mechanical melodic and harmonic system with powerful nuance and expression.

“Deterministic techniques in Arvo Pärt's Magnificat” from The Choral Journal\textsuperscript{33} is aimed as an analysis for conductors learning and teaching Pärt’s music. Allen Simon’s article examines the rhythmic and textural structures of Pärt’s “Magnificat,” as well as melodic processes and pitch textures. The closing section contains a brief exploration of dynamics, choral voicing, and texture patterns. Simon begins to classify some of Pärt’s works as more minimalistic, while others contain more serial characteristics, of which “Berliner Messe” is named. While much attention is given elsewhere to the basic function of Pärt’s tintinnabuli technique, Simon’s analysis provides this study with much needed application of this technique into the varying textures of the choir.

As the most recent publication to be included in this thesis, Andrew Shenton’s \textit{Arvo Pärt’s Resonant Texts: Choral and Organ Music 1956–2015}\textsuperscript{34} provides valuable and new material on Pärt’s choral and organ music. “Berliner Messe” was of course first performed with chorus and organ, but Shenton traces all the transformations of the piece that is the focus of the present thesis. This includes the 2009 “Missa Brevis” arrangement of the Kyrie and Agnus Dei for a twelve-cello ensemble that celebrated the twentieth anniversary of the fall of the Berlin Wall, which demonstrates how, in the absence of text, the Kyrie actually takes on a consistent triple meter pulse.


Section V: Significance of “Berliner Messe”

The fifth class is dedicated to situating “Berliner Messe” among Arvo Pärt’s music and 20th Century Music. “Transcending the Icon: Spirituality and Postmodernism in Arvo Pärt's "Tabula Rasa" and "Spiegel im Spiegel" from Twentieth Century Music examines two of the predominant perspectives of the musical value of Pärt’s music, that it is “spiritually deep” or “musically flat,” exposes the inherit biases of both positions, and carefully uncovers the modernist subjective translation of musical value. Maria Cizmic also takes issue with attempts to transform Pärt’s music into what she views as the linguistic, marketable, and visual rhetoric in holy minimalism that was driven by western audio sales in the 1980s. She then attempts to analyze and situate two of Pärt’s instrumental works, “Tabula Rasa” and “Spiegel im Spiegel,” in the context of postmodernism and spirituality and in an alternative view of musical value.

Paul Griffiths’ seminal Modern Music and After examines Western art music in the wake of World War Two. Griffiths links the disruptive music of the time as reflective of the conflict, but ultimately follows the music not the conflict, discussing how so many different approaches to composition occurred, converged, and diverged. Every major composer in modernity is examined, including Arvo Pärt, and is given a brief overview. In this edition, Griffiths’ definitive study even extends into the twenty-first century. Both Griffith’s material on serialism as well as the portion on Pärt illuminates aids this study in answering nearly every point of inquiry.


The dissertation *Arvo Pärt’s Te Deum: A Compositional Watershed*\(^{37}\) provides an excellent and definitive source for understanding the workings and meaning of Te Deum through research, analysis, and a brief interview with the composer himself. Stuart Greenbaum’s research takes into account more than just notes on the page, but also acoustic phenomenon during recordings, as well as changes made to the work since its initial release. In addition to offering a unique interview with Pärt, Greenbaum’s understanding and thorough analysis of “Te Deum” affords the current study an opportunity of properly and thoroughly situating “Berliner Messe” among Pärt’s other long-form compositions and 20th century music.

“Discovering the choral music of Estonian composer Arvo Pärt” from the *Choral Journal*\(^{38}\) is brief article takes a look exclusively at Pärt’s choral music up until the time of writing. The article is certainly written through the lens of a choral conductor and offers comparisons and contrasts to several other choral composers in order to enhance the performance and teaching of Pärt’s music. Dividing his music into three periods, she offers a brief analysis of a piece from each period. Particular attention is paid towards “Miserere,” “Missa Syllabica,” and “Solfeggio.” Lyn Schenbeck’s analysis of these choral works provide a great blueprint for analyzing the choral aspects of “Berliner Messe” in addition to forming a contextual backdrop of Pärt’s choral works within which to situate “Berliner Messe.”

“Out of place in the 20th century: Thoughts on Arvo Pärt's Tintinnabuli Style” from *Tempo*\(^{39}\) comments on Pärt’s tintinnabuli compositional style and how this forms a consistent


style that is wholly unique in 20th century music. Attention is devoted to the intention of the style, the skepticism Pärt’s work has encountered, and the three characterizing elements that oppose fixation of the means of the music. Benjamin Skipp contends that while many of the composers termed “minimalist” have relinquished their artistic voice to electronic means or fixed processes, Arvo Pärt stands out amongst such composers. He also considers Robert Schwartz’s classifying term “neo-medievalist” and Josiah Fisk’s negative designation of “new simplicity” to describe the monochromatism of Pärt’s music.

_Choral Music in the Twentieth Century_ is intended as a guide for conductors and choral singers, Nick Strimple’s personal and yet comprehensive book encompasses a wide range of choral composers from Elgar to Paul McCartney. Even less familiar choral music is surveyed, such as Latin American and Caribbean music, African and Middle Eastern music, and music from the Pacific Rim. Essentially every style’s repertory and characteristics are critically evaluated and situated, including the choral music of Arvo Pärt. Strimple’s perspective on a global scale of choral music assists this study in situating “Berliner Messe” and Pärt’s music on the broader level of choral music of all time periods. One might assume that, given the enormous breadth of the book, Strimple’s treatment of Pärt’s music might be too broad to be meaningful, but Strimple recognizes the serial structures in place in Pärt’s music and offers a brief but insightful comparison to other serial composers.

Stephen Wright’s entry “Arvo Pärt” in _Music of the Twentieth-Century Avant-Garde: a Biocritical Sourcebook_ looks to provide an overview of Pärt, his tintinnabuli technique, the

---


philosophical basis, but also his differences from American minimalism and associations with other “holy minimalists.” Perhaps most interesting is Wright’s determination of Pärt’s musical significance as a whole. Wright concludes that due to Pärt’s lack of engagement in the ‘cult of personality,’ Pärt’s impact on other composers has been largely aesthetic rather than technical. He speculates that future generations will likely perceive Pärt and his tintinnabuli technique as something of an anomaly.

Section VI: Serialism and Music Education

The last category in this literature review is concerned with sources related to serialism or music education in general or in combination. Clifford K. Madsen and John M. Geringer’s "Responses of Multi-Aged Music Students to Mid-20th-Century Art Music" in the Journal Of Research In Music Education\(^42\) was a study conducted on students that ranged in age from kindergarten to graduate students to discover how each group “liked” mid-twentieth century art music. They include several serial music pieces in their selection of twentieth century music and their findings indicate that, following kindergarten, students generally tend to progressively dislike serialism as they get older. Perhaps the most alarming aspect was that taking a course in twentieth century music literature made no significant difference on whether graduate students liked the music or not. Although “liking” serial music may not be the chief end of education, this research suggests that the current approach to teaching serialism, that hopes education leads to appreciation, is not working.

---

Philip Ball’s contribution to the *Interdisciplinary Science Reviews*, “Schoenberg, serialism and cognition: Whose fault if No one listens?” examines the relationship between serialism and how human cognition perceives music. Ball essentially follows up with Milton Babbit’s famous essay and asks if the masses really are to blame for not enjoying serialism. Ball does not dismiss serialism for those who have learned to enjoy it, but rather identifies the exact characteristics of serialism that actively work against human cognition that lead most people to dismiss serialism from being considered music. Ball’s work is especially valuable to the present research since Pärt’s use of serial techniques are either completely different or do not rely on the traditional serial characteristics Ball identifies that thwart human cognition from perceiving serialism as music.

Charles Hoffer’s *Introduction to Music Education* is, as its name suggests, an introductory overview of the field of music education. The scope is limited to general music courses but it otherwise rather comprehensive, addressing everything from criteria for curriculum to common challenges and difficulties of the profession. He straightforwardly deals with the nature of teaching and is immensely practical, even including sample questions and projects. Hoffer’s criteria for curriculum is of particular interest to this thesis in answering the final research question relating to whether “Berliner Messe” would be an appropriate inclusion for music curriculum.

---


“Education through Movies: Improving teaching skills and fostering reflection among students and teachers” is a publication of Creative Education written by several authors who are predominantly from the medical field: Pablo Gonzalez Blasco, Mariluz González Blasco, Marcelo R. Levites, Graziela Moreto, James W. Tysinger. One of the reasons why the authors recommend movies as an educational tool is rooted in human psychology. Human brains develop feelings before the ever form rationale or even concepts, thus movies lay groundwork for further education but are also conducive to the progressive development of reflection in both students and teachers. Given the prominent appearance of Pärt’s music in film, this entry provides significant value in the considerations of the practical application of “Berliner Messe” in the classroom.

The Department of Education in the state of Virginia has issued their Sample Music Curriculum for Virginia Public Schools Kindergarten – Grade Twelve by Bruce B. Stevens as a state standard of learning. It provides standards for various levels of education and achievement that includes categories for general music classes, instrumental class, and choral groups. While the standards are fundamental, it also makes suggestions as to recommended listening, repertoire, assessment methods, and vocabulary. These standards contribute to determining, in very practical terms, what ways “Berliner Messe” can be used as an educational tool.

The sources gathered in this literature review indicate deceptive complexity and originality as hallmarks of Pärt’s music, and particularly of works like “Berliner Messe.” Due to

---


scholarship that started only some 20 years ago, music scholars are only gradually recognizing the legitimacy and uniqueness of Pärt’s music. Meanwhile, literature on serialism and education remains somewhat broad and limited to traditional serialism, making Pärt’s use of serial techniques a current gap in the literature of music education. While gaps in the literature still exist, and this research aims to help fill those gaps, the gap is shrinking with significant works having been published as recently as 2017.
Chapter Three: Methods

Introduction

Historically, scholarship has been skeptical or sensational to that which is popular. As the most performed living composer in the world,\(^\text{47}\) the reception of Arvo Pärt’s music has been no different. However, as musicologists, performers, composers, and listeners experience the power and mystery of Pärt’s music while uncovering its artistic integrity, it seems certain that due scholarship will confirm the what many have already experienced in the richness of Pärt’s music. This analysis is an opportunity to understand Pärt’s work, “Berliner Messe” and determine its value as an educational tool for analysis and in tonal (or modal) serialism, a combination not often explored or offered to students at any level.

Research Methodology

A fundamental goal of this qualitative research project is to add to the cumulative body of knowledge on Arvo Pärt, specifically his major work, “Berliner Messe.” To that end, the research design will take the form of a descriptive case study.

Analytical Methods

The methods of assessment will vary for nearly each of these questions. For much of the contextual information a selective and historical literature review will be conducted on the significant formative factors of “Berliner Messe.” In tracing the usage and development of his tintinnabuli technique, hands-on analysis will be necessary. Due to Pärt’s unique system, conventional systems of analysis such as Roman Numeral and Schenkerian analysis may be helpful in an analogous capacity but not in a primary one. Instead, the methods of analysis laid out in the literature review will primarily be employed here as well as with the textual and

\(^{47}\) Division, 152.
metrical considerations. These unique methods of assessment are largely derived from Pärt’s unique techniques, pioneered by scholars such as Paul Hillier, a frequent scholar and performer of Pärt’s works.

The crux of the analysis is musical, and the project will include information on existing musical techniques and terms such as tonality, modes, key relationship, thematic material, texture, and timbral techniques and features. However, because Pärt’s music is uniquely constructed, much of the analysis has to be on Pärt’s own terms. Thus, following an explanation of Pärt’s *tintinnabuli* technique, the analysis in this thesis will be adapted from Paul Hillier’s careful analysis and determination of melodic and tintinnabuli voices and their respective species and will be employed throughout each movement.

Additionally, there are other methods of inquiry and analysis that will need to be employed in determining the organizing links between text and music. The link between text and music is vital since Pärt’s processes typically place great importance and emphasis on text, often organizing the whole piece around it. One of the ways Pärt does this is through metrical devices. Pärt will often use mixed meters to a great extent, putting the emphasis of each new word on the next measure’s downbeat, avoiding predictability while also establishing an feeling of timelessness and antiquity akin to Gregorian chant. These are a few of the characteristics that are anticipated and will be looked for. However, text setting and metrical devices are some of the most consistently varied aspects of Pärt’s music, so determination of those formal devices may be wholly unique.

**Design**

The structure of the report will first establish the context and necessary background information. This includes both information on the composer as well as his original *tintinnabuli*
technique. Following this, the analysis will progress movement by movement, covering traditional musical analysis as well as tintinnabuli, textual, and metrical analysis. The final portion will then explore applications of “Berliner Messe” in music instruction.
Chapter Four: Findings

Section I

Biography and Contextual Information

This deficit in musicological methodology [of Pärt’s music] is always smoothed over by biographical or personal information which cannot necessarily be linked to Arvo’s music directly. Naturally, you can always connect ideas—biographical or not—with Arvo’s music. Yet the meaning of the music is purely musical. Arvo is predominantly concerned with musical forms and structure.48 – Nora Pärt

The problem at the heart of Nora Pärt’s words has changed little since she first uttered them decades ago. And, at first glance, the inclusion of biographical information on Pärt presented here seems to only contribute to the problem. However, the inclusion of such information is not wrought in an effort to directly link the events of Pärt’s life to his music, nor is it to escape thorough musical analysis. Rather, it is pursued primarily to inform musical analysis. No music, nor composer, exists in a vacuum and knowing the influences and context of Pärt’s music gives direction to analysis. Such biographical information alone gives credence to viewing Pärt’s tintinnabuli as a form of serialism. So, while biographical information may be of limited value when discussing Pärt’s music, it is, at least, of some value, and it is presented here for all it is worth.

Arvo Pärt was born on September 11, 1935 in the small village of Paide, Estonia, now a part of Estonia’s capital, Tallinn. He was an only child and at the age of three, his parents divorced and young Arvo stayed with his mother in Rakvere.49 Pärt’s father had been Orthodox,

48 Maler, 6.

but in the absence of his father he was raised in the Lutheranism of his mother. While born under an independent Estonia, by the time Pärt attended elementary school Estonia came under German occupation and following the World War Two, Estonia was annexed into the Union of Soviet Socialist Republic (USSR) in 1944, when Pärt was just nine.\textsuperscript{50} By this time, Pärt was attending Children’s Music School where he studied piano under instructors who carried on the pre-occupation ethos and as Pärt grew his social status in school became increasingly connected to music.

At age 19, Pärt was accepted into the Tallinn School of Music which, under the Soviet education structure, was the intermediary level in between the Children’s Music School and the highest level of study at the Conservatory. Pärt was there only weeks before he was drafted into the army and stationed outside of Tallinn, where his time in the army orchestra and attendance of concerts in Tallinn made the years more bearable. Pärt contracted a kidney ailment\textsuperscript{51} (that would persist for nearly a decade) and was subsequently released after two years of service, a full year earlier than his conscripted term.\textsuperscript{52} He then matriculated again at the Tallinn School of Music and began studying composition among other musical subjects. During this time, Pärt’s compositions took on a neoclassical style, influenced by composers such as Béla Bartók, Sergei Prokofiev, and Dmitri Shostakovich, not abandoning tonality but increasingly discovering exploring limits.\textsuperscript{53}

Pärt was only at the Tallinn School of Music for a single year before being granted a rare exception and admitted into the Conservatory, studying composition under Heino Eller. Eller, then 70 years old, “was as notable a composition professor in his arena as Nadia Boulanger was

\textsuperscript{50} Misiunas, 43.

\textsuperscript{51} Hillier, 27.

\textsuperscript{52} Mihkelson, 12.

\textsuperscript{53} Forrestal, 2011, 1.
in Europe,” and seemed to take interest in Pärt, forcefully defending him from expulsion after skipping a polyphony exam. Eller himself had studied under Russian composer Alexander Glazunov, who Pärt considered his “musical grandfather.” Pärt excelled at the Conservatory, absorbing new ideas and techniques quickly, and was the only student to make the annual report of the ten most gifted students for consecutive years (1958 and 1959).

During his time at the Conservatory there were several important developments in Pärt’s life. One such development was that Pärt secured work as a sound engineer at Estonian Radio. Pärt was allowed to work full-time while pursuing his studies and though he did not particularly enjoy the job nor the music he recorded, it was indeed formative in perhaps a negative way. Pärt seemed to view music from a different perspective for perhaps the first, as if from a distance, becoming less concerned about cosmetics of music and more about substance. It also allowed him access to the best musicians in Estonia that he would not had as just a student, but more importantly, access to the sound archives, including recordings of western music that was now prohibited by the Soviets. It was likely the best collection in Estonia, and if a travelling musician had obtained western music while abroad, it was not uncommon to make copies at the radio station. Pärt would continue working at the radio station until 1968, five years after graduating from the Conservatory.

Perhaps the most important development for Pärt while studying at the conservatory was his introduction and adoption of dodecaphonic music. Fearful of the Soviet Union, the Estonian

---

54 Mihkelson, 12.
55 Susan Bradshaw, “Arvo Paart” [sic], Contact, 26 (Spring 1983): 25.
56 Mihkelson, 13.
57 Ibid, 14.
58 Schmelz, 81.
music community had adhered strictly to Soviet models, which were “socialist by content, national by form.” This meant that ‘formalist’ styles of the West (atonal music, serialist music, and aleatoric music) were essentially prohibited to be composed. This provided very little access to twelve-tone music at the Conservatory (just two exercise books provided by Eller), with only a few contemporary recordings of Pierre Boulez, Anton Webern, and Luigi Nono having ever been heard in Estonia. Pärt likened it to musical starvation:

When people are hungry they are sensitive to every hint of food. It’s the same with ideas, particularly at that time in the Soviet Union. The hunger for information was so great that at times it was enough to hear just one or two chords and a whole new world was opened up.

This new world was too much for Pärt to pass up. Shedding his neoclassical idioms, Pärt composed the orchestral piece, *Nekrolog* (1960), considered the first serial music known to be composed in Estonia and possibly throughout the entire Soviet Union. For Pärt, this was just the beginning of a spiritual journey that would profoundly influence his music:

This piece was the starting point of my explorations. Searching for truth. Searching for purity. It is searching for God, in fact. What is really going on? What does have a meaning after all? It is like the end and the beginning all in one.

Strongly criticized by critics and authorities alike for being formalist and easily influenced by foreign music, *Nekrolog* touched off a poor relationship with Soviet authorities as Pärt refused to waver from his ideals, even if they transgressed against the Soviet Union models. Even the

——

59 Mihkelson, 22.

60 Hillier, 29.

61 Kongwattananon, 4-5.

62 Hillier, 30.


64 Restagno, 38.
Conservatory began distancing itself from Pärt. This seriously threatened his career as a composer, so during this time Pärt composed music for film. Film music had to be completed so quickly and seemed of such little importance to the Soviet regime that Pärt’s serialist works escaped the attention of authorities. Unfortunately, it also escaped the attention of most everyone outside of Tallinn and today no known recordings or manuscripts of Pärt’s many film scores are available.65

Two principle factors, however, mitigated the threat to Pärt’s composing career. The first is the widespread inconsistency and confusion within the Soviet authorities and their models about what was permissible. As an example, nine months after being strongly criticized for Nekrolog, Pärt won first prize in the all-Union Society of Composers out of more than a thousand submissions.66 Later, it was seriously considered for a festival of war and patriotic music. The second factor was that sometime in 1963-1964, due to changes in Moscow, dodecaphonic music was quietly no longer prohibited (although discouraged), prompting others in Estonia to quickly follow in Pärt’s footsteps.67

Though Pärt would compose music that was more agreeable at times with the Soviet authorities, the next years after Nekrolog saw Pärt introduce “most of the then current Western avant-garde idioms (including collage, aleatoricism and extended instrumental techniques) into his works, while retaining serialism as a basis for his compositions.”68 Even at this stage, Pärt’s views of music were evolving. Pärt progressively began seeing music as necessarily dealing with eternal

---

65 Mihkelson, 20.
66 Misiunas, 119.
67 Mihkelson, 23.
68 Wright, 1992, 1.
issues, viewing wisdom as residing in reduction, and became increasingly vocal about the impact Jesus Christ had on his music.\textsuperscript{69} Both Pärt’s techniques and tensions with authorities culminated with \textit{Credo} (1968). This work for orchestra, chorus, and piano combined tonal, atonal, and collage techniques within a serial context, but most disturbing to the Soviet regime was the Christian subject matter. As Yuri Kholopov, a Russian music theorist, stated, “God and Jesus Christ were bigger enemies to the Soviet regime than Boulez or Webern.”\textsuperscript{70}

The fallout of \textit{Credo} (1968) was unlike that of \textit{Nekrolog}. The condemnation was unified, and all record of \textit{Credo} (1968) was eliminated from all official reports and records. Pärt was pressed to denounce his standpoints and purpose but did not waver where many others had and was consequently punished. He was pushed aside, having his music refused in the concert halls, avoided on the radio, criticized in the newspapers, and sales of his music were soon banned. For Pärt, it became a time of crisis in musical creativity, financial stability, physical health, and spirituality.\textsuperscript{71}

Pärt receded into a self-imposed silence that lasted from 1968 to 1976, during which he only composed two works, \textit{Symphony No. 3} and \textit{Laule Armastatule}, the latter of which was later withdrawn from his official works. During this period, Pärt also met his second wife, Nora, a musicologist and conductor, who encouraged and supported Arvo when he needed precisely that, and her, the most.\textsuperscript{72} For it is out of this silent period that Pärt would emerge with renewed vigor and a new musical expression named tintinnabulation.

\begin{flushright}
\textsuperscript{69} Mihkelson, 25-26.
\textsuperscript{70} Ibid.
\textsuperscript{71} Hillier, 32.
\textsuperscript{72} Restagno, 14.
\end{flushright}
As one of the principle seeds of tintinnabulation, Pärt first heard Gregorian chant on the radio before *Credo* (1968), and the experience overwhelmed him. Seeking out all of the examples of this religious music that could be found in Soviet-occupied Estonia and Moscow, Pärt’s initiated an intensive study of plainchant and monody.73 His study then expanded, as Nora Pärt explains, “in the end he recognized that he could not go on, because one line was not enough. It’s the same as flying: you need a pair of wings.”74 Pärt then began studying medieval and renaissance polyphonic music of the Notre Dame school, including works by composers such as Guillaume de Machaut, Jacob Obrecht, Jan van Ockeghem, Josquin des Prez, Giovanni Pierluigi da Palestrina, and Tomás Luis de Victoria.75

In combination with his contact with other works, such as masses, requiems, passions by the aforementioned composers, a sacred text of the Eastern Orthodox Church, named *Philokalia*, and a series of personal encounters with monks, began a transformative experience in Pärt that resulted in being accepted into the Russian Orthodox Church in 1972. Although Pärt’s father had been Orthodox, he had been raised in the Lutheranism of his mother, so this was more of a discovery for Pärt than a return. For Pärt, he considered this turn to the Orthodox Church as his genuine entrance into the faith and church and never intended it as a political statement or spurning of the west.76 This is consistent with the fact that the sacred music that influenced and inspired Pärt’s music has always been western in origin. Though Pärt’s music would be profoundly affected

73 Mihkelson, 27.

74 Restagno, 30-31.


76 Bouteneff, 33.
by his turn to orthodoxy, the influence was in his way of thinking of music and the substance and
text thereof rather the actual music of the Eastern Orthodox Church.

Then, on a sunny morning in February of 1976, Pärt’s compositional silence ended. Pärt
sat down at his piano, wrote the piano piece *Fur Alina*, and tintinnabuli was born. For Pärt,
tintinnabuli is simultaneously a style, personal philosophy, and musical technique. (For more on
this, see section two where it is discussed at length.) Following *Fur Alina*, Pärt continued
composing regularly in his new tintinnabuli style, of which *Fratres* (1977), *Cantus in Memoriam
for Benjamin Britten* (1977), and *Spiegel im Spiegel* (1978) still remain his most popular
pieces. These pieces represent a pure distillation of Pärt’s technique, which Pärt continued to expand. As
his wife Nora explains, “The first period was very strict ... It was very important for Arvo to give
himself a system, rules and discipline. And over time, Arvo had more and more freedom.”

The state of Estonia that Pärt re-emerged into had drastically changed from when he
withdrew in silence. The environment of Soviet society affected him little, partially because Pärt
was not expected to contribute to the planned economy and, like the rest of the world, serious art
music was being pushed to the side, although Pärt’s music was drawing above-average crowds.
Pärt also seemed less interested in challenging the Soviet regime and more on a personal spiritual
journey. He ostensibly attempts to avoid unnecessary scrutiny in certain instances, most notably
in composing a choral setting of the Credo and naming it *Summa* (1977). His later tendency to
name even instrumental works with spiritual subject matter (e.g., *Trisagion, Orient & Occident,
Silouan’s Song*, etc.) was also notably absent in this period.

---

77 Mihkelson, 27.
78 Shenton, 2012, 121.
79 Mihkelson, 28.
Pärt’s relief from the Soviet regime did not last. However, even as response hardened to Pärt’s tintinnabuli music, opportunity arose for Pärt to leave Estonia. In the 1970’s, the Soviet Union lifted the ban on Jewish emigration leading to a mass exodus of Soviet Jews who were mostly emigrating to Israel and the United States. Pärt’s wife, Nora, was Jewish and though Pärt did not wish to leave Estonia, he felt compelled to leave. Thus, in January of 1980, the Pärts and their two sons left Estonia. Temporarily staying in Vienna, Pärt eventually settled in West Berlin where they would remain for two decades, after which Pärt returned to Estonia.

In Berlin, Pärt enjoyed not only more artistic freedom, but a more vibrant arts culture, one that increasingly knew his name. The 1980’s offered Pärt the opportunity to enlist important collaborators (such as Paul Hillier) in the performance and recordings of many major works including De Profundis, Passio, Stabat Mater, and Miserere, to name but a few. Pärt’s international fame and recognition began to spread and stemmed from an unusual source for modern composers: recordings. First dubbed ‘holy minimalism’ by record labels, it was recordings rather than concert performances that first brought a new and wider audience to Pärt’s work from across the world.

Shortly after the fall of the Berlin Wall on November 9, 1989, Pärt was commissioned to compose a mass for the 90th Katholikentag [Catholic’s Day], a sort of festival in German-speaking

---

80 Hillier, 32-33.
82 Griffiths, 216.
84 Cizmic, 8.
countries that occurs every two to four years. Conducted by Paul Hillier, Pärt’s “Berliner Messe” premiered on May 24, 1990, during the liturgical Feast of Ascension at St. Hedwig's Cathedral in East Berlin, just over four months before the official reunification of Berlin. Originally scored for and performed by four soloists and organ, Pärt later arranged it for chorus and string orchestra and it is this iteration that is most frequently performed today.  

---

85 Hillier, 187.
86 Dolp, 226.
Section II

Tintinnabuli

Tintinnabulation is an area I sometimes wander into when I am searching for answers – in my life, my music, my work. In my dark hours, I have the certain feeling that everything outside this one thing has no meaning. The complex and many-faceted only confuses me, and I must search for unity. What is it, this one thing, and how do I find my way to it? Traces of this perfect thing appear in many guises – and everything that is unimportant falls away. Tintinnabulation is like this. . . . I work with very few elements – one voice, with two voices. I build with most primitive materials – with the triad, with one specific tonality. The three notes of a triad are like bells. And that is why I call it tintinnabulation. 87

The word ‘tintinnabuli’ has become synonymous with Pärt’s post-1976 music. The term itself carries stylistic, philosophical, and technical implications for Pärt. The core of tintinnabuli is built on the most fundamental musical relationship of one musical line to another, note to note, a component as philosophical to Pärt as it is technical. Pärt often speaks of tintinnabuli in metaphysical or metaphorical terms but has consistently maintained that the two musical lines tintinnabuli is predicated on signify the dualistic nature of body and spirit, heaven and earth, sins and forgiveness. 88 “Religion influences everything. Not just music, but everything.” 89

This is certainly true for Pärt, and the quote above demonstrates that the method of tintinnabuli is itself a process he engages in to isolate a deep and ultimately spiritual truth. For Pärt, then, tintinnabuli music is not simply illustrative of sacred beliefs, it is generated by them.

Pärt’s faith informs his musical attempts to solve what he calls the “principal problem,” which he views in mathematical terms, but refers to Christ as “the one . . . [who] is the correct

87 Hiller, 87.
88 Ibid, 96.
89 Shenton, 2012, 111.
solution to all fractions, epochs, and lives.” In practical terms, Pärt pursues this search for truth and purity in music through reduction, where he believes wisdom resides. As Pärt expresses,

You can drown in the sewage water of our time’s creativity. The capability to select is important, and the urge for it. The reduction to a minimum, the ability to reduce fractions – that was the strength of all great composers.

Thus, at the cornerstone of tintinnabula is the reduction of tonal music into two basic entities: the scale and the triad, horizontal and linear manifestations of a single tonality, where tonality itself can be seen as a “manifestation of God.” Through the use of two voices, Pärt still stresses unity, where the two voices become one, often using his wife’s formula where $1+1=1$. As his wife Nora Pärt elaborates,

The importance and the value of the tintinnabula style actually lies not in the technical aspect so often emphasized…The concept of tintinnabula was born from a deeply rooted desire for an extremely reduced sound world which could not be measured, as it were, in kilometers, or even meters, but only in millimeters. According to my experience, the listener becomes increasingly sensitized in the process once he is drawn into this dimension. By the end the listening attention is utterly focused.

Having established the importance of the philosophical component of tintinnabula, attention is now turned towards the musical system. Much has been made of the name, ‘tintinnabula’, which comes from the Latin ‘tintinnabulum’, a word for a bell, prompting some to even dedicate study to the inspirations, similarities, connections between Pärt’s music and

90 Mihkelson, 26.
91 Shenton, 2012, 111.
92 Hiller, 91-92.
93 Forestal, 32.
95 Kongwattananon, 5.
bells.\textsuperscript{96}\textsuperscript{97} However, such an endeavor here seems unnecessary since the allusion to bells is not to be taken literally, the Pärts warn, for its name was intended to be more poetic, with the word itself seeming musical.\textsuperscript{98}

Most musical definitions of tintinnabuli lean towards the descriptive rather than definitive usually concluding that it is no more than a pair of voices, one outlining a triad and the other moving in primarily step-wise motion. This bald description is not untrue in a musical sense, but often fails to distinguish it from other tonal music. Perhaps a more complete definition is provided by the Arvo Pärt Center in Estonia that defines it as:

\begin{quote}
a technique for the structuring of pitches in which two voices are connected on the basis of a set of strict contrapuntal rules. . . [It] represents a novel unity of counterpoint, harmony, and form. . . in which the simplicity of a sound’s aural parameters as well as the clarity and strictness of sounding music commingle with the numerical programming of musical material.\textsuperscript{99}
\end{quote}

Even this definition seems inadequate in some respects (e.g., the contrapuntal rules) to represent tintinnabuli and distinguish it from other forms of tonal music. However, the musical components covered in most definitions are limited to melody and harmony, yet this definition makes importance inclusions of counterpoint, form, aural simplicity, and numerical programming (essentially, serialism).

\textbf{Tintinnabuli}

Tintinnabuli is probably better demonstrated rather than defined. As previously stated, the musical foundation of tintinnabuli is a two-voice texture, comprised of a melodic voice and a

\textsuperscript{96} Kongwattananon, 13.
\textsuperscript{97} Bostonia, 128.
\textsuperscript{98} Ibid, 130.
tintinnabuli voice, designated as M-voice and T-voice, respectively. The M-voice is constructed first and is characterized by conjunct, step-wise motion towards or away from the pitch center, prompting Hillier’s classification of the four melodic ‘modes’, as displayed in Figure 1.\textsuperscript{100}

**Figure 1**: Hillier’s four melodic modes.

![Figure 1](image)

What Hillier does not indicate is that these modes are essentially serial in construction, resulting in a single five-tone diatonic row, with a prime (mode 1), inversion (mode 2), retrograde (mode 3), and retrograde-inversion (mode 4). Even though these modes remain diatonic almost without exception, they can be varied in a number of ways including repeated notes, octave transpositions, omissions, variations, and displacements. Melodies making use of a combination of modes is also a regular occurrence, with the most common pairings including modes 1 & 2, 1 & 3, 2 & 4, and 3 & 4. Hillier notes that it is unusual to find other combinations, such as 1 & 4 and 2 & 3, but those are precisely the combinations found from which the Kyrie of “Berliner Messe” is constructed.\textsuperscript{101}

The tintinnabuli voice, or T-voice, sounds only the notes of the triad, sequenced in a fixed relationship to the M-line. In determining this relationship, there are two principal factors: position and proximity. When the T-voice is always above the M-line, the position is referred to

\textsuperscript{100} Hiller, 95.

\textsuperscript{101} Ibid.
as ‘superior’, and when it is always below ‘inferior’. Additionally, it can also alternate between the two, creating the third, alternating position.

**Figure 2:** T-voice (represented by stemless quarter notes) positions in relation to M-voice (represented whole notes).

This alternating position then creates the possibility of two mutations of the alternating tintinnabuli line, depending on which position the line began on. Since unisons between voices are not readily found in Pärt’s music, the proximity of the T-voice to the M-voice typically falls into one of two distances, with the T-voice sounding either the closest note of the triad to the M-voice (1\textsuperscript{st} position) or the second closest note (2\textsuperscript{nd} position), as Figure 2 demonstrates.\textsuperscript{102} T-voices most often sound of the notes in the triad of the M-voice’s tonic, but this is a generalization as there are instances

\textsuperscript{102} Kongwattananon, 11.
where T-voices sound the triad of the dominant, perhaps most famously as in *Fratres* (1977).

Similar to the M-line, these T-voices can be varied in a number of ways, most often in octave displacement and with rhythmic staggering with the M-line (as in *Da Pacem Domine* (2004)). Such octave displacement can lead some to believe there is a third proximal position. Hillier notes that the appearance of a third proximal position is, in effect, an octave transposition of first position. Thus, Figure 3 is simply an octave displacement of a first position inferior T-voice regardless, Hillier argues, of how the listener hears it.103

![Figure 3: A possible third proximal position.](image)

More recently, John Roeder applied transformational theory to Pärt’s music in an effort to more systematically view tintinnabuli as a single process rather than two different strands. In the course of his application, Roeder posits that Hillier is “not quite correct,”104 as he mathematically proves this existence of a third position. However, in order to do so he alters the parameters of the proximal positions in order to allow for unisons between the M-voice and T-voice, something that Pärt fundamentally avoids and consequently does not occur in his music.

---

103 Hillier, 94.

104 Roeder, 10.
Disregarding the unisons in Roeder’s 3\textsuperscript{rd} position, the remaining tones in the superior position are simply an inverted 1\textsuperscript{st} position inferior, and his 3\textsuperscript{rd} position inferior becomes an inverted 1\textsuperscript{st} position superior, almost exactly as Hillier concluded. Even if one were to replace those octave unison notes in the T-voice with the next triadic tone below it, one would still end up with mostly an octave displacement of first position alternating (beginning below) (Figure 5).

The lone exception to this is the penultimate note, where the alternating sequence is interrupted by the position, this would also create contrary motion between voices, which is typically non-existent except when voice crossing in the alternating position. Thus, Roeder’s proof of a third position of tintinnabuli can be considered a purely a mathematical abstraction that has no significant value on this analysis as it never occurs in Pärt’s music.
The ramifications of this specific tintinnabuli technique contribute to a base tintinnabuli style with distinct characteristics. The note-to-note relationship between the two voices in time is typically preserved, leading many to ascribe a homophonic texture to most works. However, this suggests a single prevailing melody with harmonic support. While it may be helpful in an analogous capacity to learn tintinnabuli with this mentality, this is not how the composer views or constructs the two lines. As defined, tintinnabuli voices operate off strict contrapuntal rules, so tintinnabuli as a general style is more accurately described as homorhythmic rather than homophonic. (Additionally, not a single movement in “Berliner Messe” is homophonic.)

At its core, tintinnabuli itself can be considered a form of serialized harmony, or perhaps more accurately, serialized counterpoint. This is because the handling of the pitches in T-voice, and thus, the harmony it creates with the M-voice, is governed by the fixed series of notes in the tintinnabulated triad. This fits Griffith’s definition of serialism because “the handling of those elements in the composition is governed, to some extent and in some manner, by the series.” As in many serialist works, this series is not necessarily always sequentially referenced in tintinnabuli, but rather the reference is determined on its relationship to the M-voice. The series itself, the triad, is an obvious reduction, making tintinnabuli something of a perfect marriage of counterpoint, serialism, and minimalism.

Though ultimately tonal, utilization of the described tintinnabuli technique results in several significant departures from traditional tonality. In tintinnabuli, the goal-oriented motion of common-practice tonality is replaced with tonal stasis, where the goal or “end” is often present throughout (perhaps giving credence to the description to Pärt’s music as “timeless” in a hermeneutical sense). The motion between the two tintinnabuli voices are predominantly oblique.

---

and parallel, with the only contrary motion occurring in the alternating position. This position (usually) results in voice crossing, which, unlike common-practice tonality, is completely acceptable in tintinnabuli. This is partially because tintinnabuli does not always operate in directional pitch space, but in pitch-class space. For this same reason, tintinnabuli formations in the T-voice often result in inversions that are, in traditional tonality, considered unstable or even dissonant (such as $\frac{6}{5}$ or $\frac{5}{4}$ chords), but in tintinnabuli are considered as no less stable or consonant than a $\frac{5}{3}$ chord. Thus, while ultimately tonal, Pärt’s tonality carries post-tonal characteristics.

These are the building blocks from which to understand Pärt’s music and “Berliner Messe.” However, as Thomas Robinson notes, “the tintinnabuli technique no more explains how Pärt’s music works than the twelve-tone technique explains how Arnold Schoenberg’s works.”\textsuperscript{106} Of course, without discussing Pärt’s tintinnabuli or Schoenberg’s twelve-tone technique, a thorough understanding of their music would be impossible. They are an essential launching point from which to proceed.

\textsuperscript{106} Robinson, 77.
Section III

Berliner Messe: An Analysis

Overview

Analyzing Pärt’s “Berliner Messe” presents at least one unique challenge among virtually all of his tintinnabuli music. Apart from scalar melodies, Pärt typically employs very little motivic structure in the traditional sense and this is especially true for works set to text. Yet, “Berliner Messe” uses two tetrachords or motifs, one that rises (mode 1) and one that falls (mode 2) from the tonic, in what Hillier identifies as the highly unusual “prevailing motifs”¹⁰⁷ that undergoes significant expansion, contraction, and transposition in accordance with whatever Pärt’s implemented system calls for throughout the entirety of “Berliner Messe.” Although still implemented, the transformations of the prevailing motifs make the clarity of traditional application and designation of Hillier’s modes somewhat inconsistent across movements.

In addition to being an influence to his tintinnabuli technique, Part employs a number of other medieval devices throughout ‘Berliner Messe’. Perhaps most obviously and most frequently in Pärt’s body of work is the use of droning, though its presence here is limited to the strings. Pärt also sets M-voices in two-part parallel organum at the interval of a sixth in multiple movements, most consistently in the alto and bass choral parts. As in medieval music, the upper voice (alto) is the vox principalis or original voice, and the lower voice (bass) is the vox organalis, or supporting voice.¹⁰⁸ While tintinnabuli itself exhibits contrapuntal rules, Pärt makes

¹⁰⁷ Hillier, 187.

use of several other contrapuntal techniques such as imitation and canons. While the medieval devices are not the explicit focus of this analysis, Pärt’s use of established counterpoint in conjunction with his tintinnabuli technique in “Berliner Messe” invites comparison to other serialist composers that used contrapuntal devices to house their techniques, such as the Schoenberg’s use of classical counterpoint in ‘Pierrot Lunaire’ or Anton Webern’s use of contrapuntal techniques from the Renaissance in ‘Symphonie’ (op. 21).\footnote{R. Larry Todd. “Retrograde, Inversion, Retrograde-Inversion, and Related Techniques in the Masses of Jacobus Obrecht.” The Musical Quarterly 64, no. 1 (1978): 50-78, 50.}

**Figure 6:** Overview of ‘Berliner Messe’ movements, key areas, and textures.

<table>
<thead>
<tr>
<th>Movement</th>
<th>Key/Mode</th>
<th>Texture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kyrie</td>
<td>G Aeolian</td>
<td>Heterophonic/Polyphonic</td>
</tr>
<tr>
<td>Gloria</td>
<td>G Aeolian/Harmonic Minor</td>
<td>Polyphonic</td>
</tr>
<tr>
<td>Erster Alleluaiavers*</td>
<td>G Ionan - B Aeolian</td>
<td>Heterophonic/Polyphonic &amp; Monophonic</td>
</tr>
<tr>
<td>Zweiter Alleluaiavers*</td>
<td>E Aeolian</td>
<td>Heterophonic/Polyphonic &amp; Monophonic</td>
</tr>
<tr>
<td>Veni Sancte Spiritus*</td>
<td>E Aeolian</td>
<td>Polyphonic &amp; Bi-phonic</td>
</tr>
<tr>
<td>Credo</td>
<td>E Ionan</td>
<td>Polyphonic</td>
</tr>
<tr>
<td>Sanctus</td>
<td>C-sharp Aeolian</td>
<td>Polyphonic</td>
</tr>
<tr>
<td>Agnus Dei</td>
<td>C-sharp Aeolian</td>
<td>Polyphonic</td>
</tr>
</tbody>
</table>

*Additional movements in consideration for liturgical use during Pentecost.

As Pärt’s second setting of the Mass Ordinary (and third of the Credo), Pärt’s overarching key scheme for “Berliner Messe” is more flexible and tonally varied than Missa Syllabica, (which stayed in D minor and F). Figure 6 also shows how the grouping of key areas coincides with musical breaks in the mass, making it functional for liturgical use even without the optional movements that smooth out the tonal gap.
The Kyrie of the mass is the only movement that retains Greek text, with just three phrases, “Kyrie eleison, Christe eleison, Kyrie eleison” (“Lord save us, Christ save us, Lord save us”). Since the text is so short, most iterations of the Kyrie are melismatic and will feature repetition of the phrases, often expanding the three lines into a nine-fold form. Pärt’s six-fold, more neumatic setting here differs slightly, which seems based on the constraints of the chosen melodic sequence.

Pärt’s Kyrie is built primarily on two factors that determine all others: the prime motifs and text. The prime motifs are presented in the uncommon pairings of Hillier’s mode 2 & 3 and then 1 & 4. Each pairing presents a diatonically complimentary pitch set, utilizing all the notes in the diatonic scale. Using a modified cipher notation to refer to just diatonic pitches, it is first presented as 1-7-6-5-4-3-2-1 (modes 2 & 3) on the first iteration of the phrase (Figure 7) and then retrograded into 1-2-3-4-5-6-7-1 (modes 1 & 4) for the repetition of the phrase, resulting in a symmetrical inversion along a horizontal axis.

Figure 7: mm. 1-3 of “Kyrie,” soprano and alto lines, Universal Edition UE 19 858.

---

110 Dolp, 226.
111 Hiller, 95.
Alternative to modes, these can also be viewed as versions of a single four-note row that sounds at the onset, resulting in pairs of \( P_1 \) & \( P_4 \) followed by \( I_1 \) & \( I_5 \) if the first four pitches are prime. (If Hillier’s mode 1 is considered prime, then the pairing becomes the inverse \( I_1 \) & \( I_5 \), followed by \( P_1 \) and \( P_5 \).) This full seven-note statement and retrograde found in the alto voice accounts for the structural M-line throughout the Kyrie from which every other voice is progressively built off. T-voices are added to it progressively, and the bass’s M-line is constructed a sixth below the alto in parallel organum and also receives an accompanying T-voice above it in the tenor line (Figure 8). The melodic series is completed a total of three times, corresponding to the three sections of text.

**Figure 8**: mm. 5-6 of “Kyrie,” choral section, Universal Edition UE 19 858.

Though the full seven-note melodic sequence never varies from the order of statement and retrograde, the Kyrie is without unvaried repetition. This is especially remarkable since Pärt only uses a single position of the T-voice to serialize the contrapuntal harmony: the first position alternating (T-1A). Pärt makes full use of the two mutations of the position, which are determined by the position the alternation starts on, superior (T-1As) or inferior (T-1Ai).
Figure 9: Charts mapping use of M and T-voices in “Kyrie.”

When one traces the M-voices and T-voices in each measure throughout the movement, as in Figure 9, it reveals that the utilized mutation of the position varies from phrase to phrase, ostensibly prioritizing the avoidance of direct repetition, but typically maintaining a single position per phrase. The exception to this is the tenor’s response to the appearance (or
disappearance) of the bass’s M-line. While an exception, this still operates within set parameters. The only anomaly, then, is the soprano’s abrupt switching between mutations in measures 14-15. Though it generally coincides with the golden mean, the shift seems primarily motivated by avoiding the direct repetition of measure 3 while maintaining the integrity of all other processes.

Consequently, and in addition to the regularity of the melodic sequence, it is this consistency and clarity of the tintinnabuli technique that implies the structural presence of the melodic sequence even when it does not audibly sound in mm. 12-14 (Figure 10). These measures then challenge the notion that tintinnabuli is inherently homophonic in texture. By definition, homophony requires a single melody and a supportive harmony. However, in the absence of any M-voices, the T-voices in these measures sound independently, serving no subservient harmonic function, and are perceived as melody. Additionally, outside these measures the melodic line is audibly obscured by the alternating T-voice in the soprano that is constantly voice crossing with the alto (see first measure in Figure 10).

**Figure 10:** Structural M-line in alto is implied (green) by T-1As voice in soprano, mm. 11-12.

The other method that Pärt uses to avoid direct repetition is actually a result of the more minimalist framework. Of all the movements in *Berliner Messe*, the opening Kyrie most resembles the typical conventions of minimalism in terms of form. There are characteristics of both Robinson’s “machine set in motion” and “rules of the game” that process-oriented music
tends to operate off.\footnote{Robinson, 101} As part of the “machine in motion” characteristics, minimalism will often introduce different strata of activity progressively at a fixed rate, as is indeed the case here. The process is additive, adding (or subtracting) a chorus voice for every new word of a phrase. The palindromic sequence of active chorus voices is then 1-2, 3-4, 4-3, 2-1 and then repeating the first half of the sequence. And since the string movement is closely related, the number of voices follows a set pattern of 2-4-3-1, also repeating the first half (Figure 11). The strings never play with the chorus, but echo in retrograde the chorus’ second measure, almost antiphonally, with the same number of voices, and the relationship of two choral measures to one string measure is maintained throughout the movement.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Active_Voices_Kyrie.png}
\caption{Number of active voices in the “Kyrie.”}
\end{figure}

As previously evidenced in Figure 10, when used in conjunction with the mutations of the T-1A position, this process results in a constantly shifting texture that bypasses direct repetition. The
closest occurrence is between measures 9 & 15, where the same M-voice and same T-voice occur in the alto and soprano on the same word, “eleison,” but the addition of the tenor’s T-voice changes the texture. Pärt completes a cycle and half of this additive process and does not end where he began, but rather leaves all voices active and primed to seamlessly proceed in the Gloria.

While many serialists, like Elliot Carter or Pierre Boulez, turned to outside processes and sequences such as durational rows in order to govern such factors as duration, Pärt turns inward to the metrics of the text as his fixed series in order to drive rhythmic durations, time signatures, and number of pitches per syllable. For number of pitches, Pärt gives each word one more note than syllables in the word. For example, “Kyrie” has three syllables, so Pärt will give it (the first) four notes from the melodic sequence 1-7-6-5-4-3-2-1 or its retrograde 1-2-3-4-5-6-7-1. Likewise, “Christe” will receive three, and “eleison” will receive (the final) five. This extra note is placed wherever the natural accent of the syllable falls. This accented syllable is also underscored by rhythmically augmenting the extra note given to the syllable to be three times the length of all the other syllables (Figures 3.7, 3.8, and 3.10). The other elongation is found in the final note of every word receiving an extra eighth note in value. Pärt also gives attention to the smallest of details of the text, such as representing the space between words with eighth rests.

This metrical device ensures unique arrangement for nearly every new text and form the basis for constructing meter. In this period of Pärt’s career, it is rather common for Pärt to give each word its own measure, regardless of its length or how frequently it results in changing meter. In this Kyrie, based on the factors discussed such as the rhythmically elongated second note,

---

114 Hillier, 127.

115 Dolp, 226.
measures end up being a total of four more beats than the number of syllables in the word. For example, “eleison” has four syllables in the word, so the measure will be in 8/4. The only exception and additional rule Pärt places is that the beginning word of a phrase is preceded by a quarter note rest. So, to include this rest, a measure with the beginning word “Kyrie” is not 7/4 but 8/4.

**Figure 12:** Operations conducted on text to extract values.

<table>
<thead>
<tr>
<th>Formulas Applied to Text of &quot;Kyrie&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of pitches:</td>
</tr>
<tr>
<td>Total Duration of word</td>
</tr>
<tr>
<td>Meter for ordinary/&quot;eleison&quot; measure:</td>
</tr>
<tr>
<td>Meter for beginning-word measure:</td>
</tr>
</tbody>
</table>

\*\( s = \) syllables

**Gloria**

The Kyrie flows seamlessly into the Gloria, with the latter inheriting many of the Kyrie’s characteristics. The key remains the same, the roles of the chorus are preserved in the M-voices (alto and bass in parallel organum, a 6th apart) and T-voices (soprano and tenor), the number of active voices is where the process of the Kyrie left off, the T-voices are limited to the same two mutations of the T-1A position, the strings will offer inverted responses to the end of sentences, and the metrics of the text continue to determine the number of notes and their duration. There are, of course, many differences. The Gloria uses the natural minor scale but also introduces the leading tone (F-sharp) in measure 10, as though already seguing into the key of the next movement. The use of the leading tone is used almost exclusively as a lower neighbor figure and is never used
cadentially, which maintains the modal quality of the music.\textsuperscript{116} Though dynamics and tempo are sparsely notated, the enlivened pace and immediate forte on the onset contrasts with the overall slow and piano Kyrie. This same contrast is made in terms of texture, where the Kyrie used strings and chorus separately, the Gloria begins with both sounding together.

While technically present in the Kyrie, the Gloria makes an even clearer and systematic use of multiple pitch axes. The primary pitch axis is G,\textsuperscript{117} and the melodic lines are constructed as either starting from or arriving on this axis. So, in the primary M-voice, the alto line, every measure either starts or ends with a G.

**Figure 13:** mm. 1-4 of Gloria, Universal Edition UE 19 858.

\textsuperscript{116} Forrestal, 2011, 28.

\textsuperscript{117} Ibid.
The Gloria begins with the alto descending to and arriving at the pitch axis and every subsequent measure in the phrase then approaches and ends on this axis, but the direction of the approach varies. Disregarding one-note measures (which have no contour or direction), the direction of each measure’s approach to the axis alternates every measure. Thus, in Figure 13, the alto descends in mm.1, ascends in mm. 3, and descends in mm 4, to the pitch axis. The inverse is equally present in the Gloria, where the pitch axis is the starting point of the measure and the melodic lines ascend and descend away from the axis in like alternating order. The measures that are a single beat sound only this pitch axis (measure 2) and, along with the quicker tempo, produces a chant-like reciting tone effect.

While this pitch axis is fixed and does not change throughout the movement, there is something of a secondary, more temporary, and fluid pitch axis in the strings that more closely resembles typical post-tonal pitch axes. The lower voices of the homorhythmic strings simply double the alto’s M-voice, but the first violin will start on the same pitch as the alto and treat that first note as an axis, moving in a diatonically symmetrical contrary motion (Figure 14). This axis exists uniquely from measure to measure, depending on the beginning note of the both the alto and when the strings join, which is not always at the beginning of the measure (as in measure 36). 

**Figure 14:** M-voices in axial movement: alto (red) and first violin (blue), mm. 1-4.

The construction is a true mirror of the chorus as the viola also moves in parallel organum a sixth below the first violin, putting it in contrary axial movement with the bass. Each of these four
lines (and doubled elsewhere) receive a T-voice in first position alternating, producing several layers of contrary motion and colorful diatonic clusters.

Pärt once again uses the metrics imbedded in the text to guide the activity along these axes as well as many of the same parameters as the Kyrie. The text still determines durations of words, the meter of measures, musical phrases, and number of notes, but since the text of the Gloria is substantially longer, the relationships differ. For example, Hillier notes that, here, only the first and last words of a phrase will receive one more pitch than syllable.\(^1\) (Technically, this is also true for the Kyrie, since each phrase is only two words.) The accented syllable in a word is again elongated, maintaining the natural accent of the text agogically, with every non-accented syllable getting a single beat, and each word still dictates the meter of the measure. Lastly, the musical phrases match the phrases of the text.

The text also determines new parameters, including the distance of pitches along the axes, and direction these lines move in relation to the primary axis. As stated previously, the beginning and ending words of a phrase receive one extra note, but otherwise the setting of the text is syllabic. Thus, the number of syllables in a word determines how far along the axis the M-voice will travel in a given measure. The direction that the M-voices travel in relation to the axis, towards or away from, is also determined by text, alternating directions in every phrase. Thus, one of the most important compositional features is essentially ruled by punctuation of the text.

Pärt interrupts his processes as he concludes the movement in a more tonal manner. The chorus actually continues along the same parameters, but the rhythms are now augmented to twice their original values. The strings break from any axis, M-voice, and T-voice to provide a dominant function. The lower strings carry a dominant pedal tone while the upper strings carry D and A, the

\(^{1}\) Hiller, 185.
root and fifth of the dominant, but Pärt avoids using the leading tone in any cadential or progressive manner, maintaining the modal quality. For the final “Amen,” the strings revert to their original role, joining in the chorus’ rhythmically augmented (but otherwise same) processes as before.

Alleluia Verses I & II

The two optional Alleluia verses are two short movements that are mostly solos, first by tenor in the Erster Alleluiavers [First Alleluia Verse] and then by the bass in the Zweiter Alleluiavers [Second Alleluia Verse] and are bookended by full choral statements of the words “Alleluia.” They do not factor greatly in this analysis in part due to their brevity and inheritance of several aspects from the Gloria. However, they do introduce a few new things to the Berliner Messe.

In the opening of the Erster Alleluiavers, situated in G major, the word “Alleluia” is repeated, and the M-voices repeat the same material. However, Pärt avoids the direct repetition by varying the position of the T-voices. For the first time in the Berliner Messe, Pärt uses a position other than first position alternating (T-1A) and uses the first position superior (T-1s). The tenor then sings a chant-like solo, centered firmly on B, already preparing for the coming E minor. Similar to the parameters of the Gloria’s G-axis, each of the tenor’s words begins on B, and either ascends or descends from it based on the syllables of the text and its natural accent. Following the solo, Pärt then paints the text of ‘creation and renewal’ by reassigning the roles of the M-voices and T-voices for the bookending statement of “Alleluia.” The soprano and tenor now carry the M-voices in parallel organum while the bass and alto carry the M-voices in another new position, first position inferior (T-1i). This position is carefully selected since it allows for the final notes to make up a B-minor chord while still operating within the tintinnabulated triad of G. It effectually sounds as an antecedent that flows seamlessly into the
consequent found in the *Zweiter Alleluiavers*’ first measures in E minor, modulating the
tintinnabulated triad without any noticeable disturbance. The change is so tonally smooth that
any break would seem artificial. As a result, many recordings combine the verses into a single
track.

The *Zweiter Alleluiavers* is similar in form and construction, except the soprano and tenor
initially carry the M-voices. Like the previous verse, the roles of M-voice and T-voice in the
chorus are reassigned at the ending measure once again, now returning to the original roles found
in the Kyrie and Gloria. The chant-like solo is now in the bass and this time the pitch center is G,
with every word beginning with this pitch. The pitches in the top choral M-voice start with the
ascending 1-2-3-4 and conclude with 1-7-6-5, which not only make them like diatonically
complimentary pitch sets centering on the tonic, but also directly relates them to the prevailing
motif of the Kyrie. (The *Erster Alleluiavers* is similar, with the descending 3-2-1-7 and
ascending 3-4-5-6.) The T-voices operate in like manner with the first Alleluia, changing
position with every measure, first T-1a, then T-1i, and to conclude, T-1s.

Veni Sancte Spiritus

The Veni Sancte Spiritus is the last of the optional movements and is a sequence for
liturgical use during Pentecost. The texture is much thinner than the Gloria, with the strings
providing an E drone and two-note T-voice responses for the text’s punctuation, and the choral
voices only ever sounding solo or in pairs until the final “Amen, Alleluia.” Even though it only
occurs with every other phrase of text (until the penultimate verse), the pairing of choral voices
is thinned even further, with the T-voice only sounding every other word. Some have suggested
this is for textual emphasis, but the regularity of the alternation seems more likely the result of metrical process rather than emphasizing every other word. Instead, for textual emphasis, Pärt alters the predominantly triple meter most often to 7/4.

Although somewhat texturally sparse, Pärt continues to lean further into his serialist roots with the use of a tone row. Pärt builds his row in regards to the text, and since each verse of the text is 21 syllables in Latin, Pärt constructs a row that is 22 notes long (The extra pitch to be discussed shortly). The row is first presented in the bass as the row 5-3-5-3-2-5-3-1-5-3-7-3-1-3-4-1-3-5-1-3-(6) (Figure 15). At first look one may be tempted to describe this as revolving around two pitch axes, B for the first half and E for the second. However, the true technique is not so apparent because Pärt does not begin with the prime row.

**Figure 15:** Extracted tone row in bass part, Veni Sancte Spiritus, mm. 1-14.

**Figure 16:** Construction of the prime row with the M-voice in red, T-voice in blue.

---

119 Forrestal, 2011, 36.

120 Ibid.
The prime row, as seen in Figure 16, is not heard until the concluding “Amen.” Instead, Pärt begins at the exact middle (marked by the asterisk), with ten pitches on each side.¹²¹

Though a single line, Pärt uses tintinnabuli the way Johann Sebastian Bach uses traditional tonality to imply harmony: linearly. That is, a single, linear musical line will contain enough elements to create a sense of harmony, or in this case, a sense of tintinnabuli. This row then consists of both a M-voice and a T-voice in a technique that some have codified as compound tintinnabuli.¹²² The T-voice operates in two positions, alternating first between the pitches 1-3 for the first half and 5-3 for the second, creating mostly T-1&2i and T1&2s positions, respectively. These stationary positions allow for the M-voice to consistently be the highest voice in the first half and lowest voice in the second half.

The M-voice presents a few fascinating possibilities. Disregarding the single repeated note, these two halves present another diatonically complimentary pitch set. This repeated note is, strikingly, the mediant and both halves of the row’s M-voice emanate from this note. While the mediant has served as a sort of pitch axis in the Alleluia verses, the use of the mediant here is more structural, resembling the tonic in Hillier’s four M-voice modes¹²³ and the four-note prevailing motif. There are at least four distinct possibilities: The first is that this is simply motivic development of the four-note prevailing motif in a very tonal manner, albeit unusual for Pärt. The second possibility is that the M-voice never truly left G major, in which case the M-voice, in cipher notation, is adjusted to 1-2-3-4 and 1-7-6-5, modes 1 and 2. This would be consistent with the second Alleluia’s use of G as its pitch axis and would resemble the Gloria’s

¹²¹ Hillier, 185.
¹²² Maler, 23.
¹²³ See p. 48 and Hillier, 95.
use of a tonic pitch axis. This then suggests that the M-voice and T-voice have, at times, operated in different (but related) key areas simultaneously which seems highly unlikely. A third possibility is that the underlying M-voice indicates as-of-yet additional and unclassified M-voice modes. If these comprise a fifth and sixth mode, and following Hillier’s model of modes one through four, then the seventh and eighth modes would be their retrograde, both ascending and descending into the mediant. A fourth possibility, and perhaps most convincing, is to view these in terms of traditional serial development, as (diatonic) transpositions of Hillier’s modes 1 and 2, which produce P₃ and RI₃ permutations of Pärt’s mode 1 in E-minor. This would indicate that there are in fact layers of rows, the 22-note row and the underlying M-voice’s row embedded within and each row is subject to different forms of development.

Unlike the underlying M-voice row, Pärt’s larger 22-pitch row in Veni Sancte Spiritus is not subjected to transpositions or retrogrades as in the twelve-tone manner of Webern, rather Pärt uses a different form of permutational serialism not unlike Karlheinz Stockhausen used in Kruzpiel.¹²⁴ More specifically, Pärt uses a technique known as cyclical permutation, popularized by serialist Ernst Krenek,¹²⁵ where the original row is maintained except the initializing pitch, but afterwards is followed by the original order of the row.¹²⁶ This is not an uncommon serial technique, having been adapted and used early on by Berg in his Lyric Suite¹²⁷ and later by

---


Stravinsky, beginning with *Movements* (1960). Thus, in Figure 17, the 21 syllables of each of the text’s verse is covered by the first 21 pitches, and the parenthetical last note of the row actually belongs to the first word of the next verse.

**Figure 17:** Cyclical permutations of the 22-pitch row, with prime row in bold.

<table>
<thead>
<tr>
<th>Verse</th>
<th>Row</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5 3 5 3 2 5 3 1 5 3 7 3 1 3 4 1 3 5 1 3 (6)</td>
</tr>
<tr>
<td>2</td>
<td>6 5 3 5 3 2 5 3 1 5 3 7 3 1 3 4 1 3 5 1 (3)</td>
</tr>
<tr>
<td>3</td>
<td>3 6 5 3 5 3 2 5 3 1 5 3 7 3 1 3 4 1 3 5 (1)</td>
</tr>
<tr>
<td>4</td>
<td>1 3 6 5 3 5 3 2 5 3 1 5 3 7 3 1 3 4 1 3 (5)</td>
</tr>
<tr>
<td>5</td>
<td>5 1 3 6 5 3 5 3 2 5 3 1 5 3 7 3 1 3 4 1 (3)</td>
</tr>
<tr>
<td>6</td>
<td>3 5 1 3 6 5 3 5 3 2 5 3 1 5 3 7 3 1 3 4 (1)</td>
</tr>
<tr>
<td>7</td>
<td>1 3 5 1 3 6 5 3 5 3 2 5 3 1 5 3 7 3 1 3 (4)</td>
</tr>
<tr>
<td>8</td>
<td>4 1 3 5 1 3 6 5 3 5 3 2 5 3 1 5 3 7 3 1 (3)</td>
</tr>
<tr>
<td>9</td>
<td>3 4 1 3 5 1 3 6 5 3 5 3 2 5 3 1 5 3 7 3 (1)</td>
</tr>
<tr>
<td>10</td>
<td>1 3 4 1 3 5 1 3 6 5 3 5 3 2 5 3 1 5 3 7 (3)</td>
</tr>
<tr>
<td>11</td>
<td>3 1 3 4 1 3 5 1 3 6 5 3 5 3 2 5 3 1 5 3 (7)</td>
</tr>
</tbody>
</table>

This keeps the row in continual cyclical permutation, with a row beginning on each of the notes before the central and asterisked B in Figure 15 until it reaches the prime form at the conclusion of the movement.

Things change a bit in the ninth verse where the texture is all four choral voices. The alto carries the cyclically permutated version of the row as an M-voice while the bass carries the same row inverted on a G pitch axis serving as another M-voice. Each of these have a T-1s position T-voice in the above choral part. The biggest departure is the 11th verse, which is not truly a verse at all but simply “Amen Alleluia.” The text obviously does not contain 21 syllables,

---

so Pärt gives seven of the row’s pitches to the chorus singing “Amen” in octaves followed by a seven-note interjection by the violins who now participate in the row, followed by the final seven notes in the “Alleluia,” once again sung in octaves by the chorus and completing the prime row.

Credo

The Credo of the mass contains by far the longest text of any movement, reciting the Nicene Creed in its entirety. For Pärt, it is a familiar text that he has set twice before in Missa Syllabica and Summa. The Credo in “Berliner Messe” shares a few striking similarities to Summa but is in a major key and far more buoyant.\textsuperscript{129} It is difficult to ignore the context with regards to this difference since Summa was composed while under the Soviet Union, is in E-minor, is more somber, and titled as if to avoid unwanted scrutiny of the text. Meanwhile, the Credo in “Berliner Messe” is in E-major and is far more joyous, having been commissioned shortly after the fall of the Berlin Wall and the collapse of Soviet communism. There is no concrete evidence this was an intentional connection, and Pärt often asks more eternal questions, but Pärt is also remarkably open to the audience’s perception of meaning in his music.\textsuperscript{130}

The Credo inherits many aspects discussed in earlier movements, including using metrical lengths of words, emphasized syllables, and punctuation to determine values. The chorus voices are again paired and are mostly in full homorhythm, with M-voices in the bass and alto in parallel organum, T-voices in soprano and tenor, and the strings moving in contrary motion to the chorus via a tonic pitch axis. Indeed, the opening M-voice states a 1-2-3-4-3-2-1, the prevailing motif, or modes 1 and 2. However, Pärt treats this familiar material in new ways,

\textsuperscript{129} Hillier, 189.

\textsuperscript{130} Bouteneff, 45.
both texturally and serially.

The voices of the chorus are paired, starting first with the bass and tenor before adding the alto and soprano (the exact opposite order as Summa) in T-2s. While maintaining overall homorhythm, Pärt constructs the texture contrapuntally, putting these choral pairs in canon at the octave, as Figure 18 shows. The pitches are mostly in direct canon, but this canon is strictly musical, maintaining the homorhythmic declamation of the text and even altering rhythmic values, such as the third note of the alto in measure six, to ensure it.

**Figure 18:** Mm. 1-6 of Credo, “Berliner Messe,” Universal Edition UE 19 858.

Pärt’s canon is also a leap-frog canon, where the trailing voice will become the leading voice on the next iteration.\(^\text{131}\) Due to the strictly musical nature of the canon, the listener may not aurally recognize the presence of canon since it lacks conventional textual and rhythmic independence. Accordingly, and the resulting and unusual dropping out of choral voices, even in the middle of a word, may seem random, but are a direct result of the completion of the musical canon.

Most interestingly for the purposes of this paper, is the new serial aspects and their development. As in Veni Sancte Spiritus, Pärt uses a tone row for the pitches in his leap-frog

\(^{131}\) Hiller, 190.
canon. Hillier’s proposed 23-note row is shown in Figure 19, with repeated, passing, and tintinnabuli notes intentionally omitted to display the foundational row. Pärt will regularly interfere with the strict process in reiterations of the row, dropping a note or adding a tintinnabuli note in order to accomplish another purpose.

**Figure 19:** Prime form of the 23-note tone row in “Credo.”

![Prime form of the 23-note tone row in “Credo.”](image)

The row itself can be analyzed as a combination of Hillier’s modes or combination of the prime, retrograde, inversion, and retrograded inverted forms of Pärt’s five-note master row found in mode 1.

This row is used 12 times, with a small restatement of the initial 1-2-3-4-3-2-1 on the final “Amen.” The first and last statements of the row are essentially prime with some alterations such as a repeated phrase 4-5-6-7-1 or added notes from tintinnabuli pitches. For the other ten permutations, Pärt does not use cyclical permutation as in Veni Sancte Spiritus but opts rather for a method than can be described as extraction. Using this method, Pärt will extract two pitches from the row and place them at the end of the row. On the next iteration, they return to their place and the next two pitches are extracted and placed at the end of the row, as demonstrated in Figure 20. At times there are anomalies in the row, as in iterations seven and nine, where an extracted pitch is discarded and substituted, respectively, and tintinnabuli pitches may occasionally be dropped or extra tintinnabuli pitches may briefly interrupt the series of the row.

---

132 Hillier, 190.
The row breaks down into phrases of seven and nine pitches, another similarity this movement shares with *Summa*. The lines of text and the iterations of the row also do not correspond as neatly as in the *Veni Sancte Spiritus*, with multiple rows overlapping phrases and vice versa.

**Sanctus**

In the Sanctus, Pärt’s continued use of several consistent techniques maintains compositional coherence and unity. Thus, the metrics of the text still dictate the meter, the rests and strings interjections mark the punctuation, the alto carries the primary M-voice with the bass in parallel organum a sixth below, and the temporary and moving pitch axis exists between the alto and contrabass. However, the sopranos are wholly absent from the movement and Pärt has now moved to E-major’s relative minor, C-sharp minor. The strings now carry a most classical arpeggiation\(^{133}\) of T-voices to the bass and contrabass that greatly varies the texture. These T-

\(^{133}\) Goldberg, 427.
voice pitches are displaced at the octave, further evidence of Pärt’s post-tonal approach to pitch class space.

The alto’s M-voice in the Sanctus presents the most shortened versions of the prevailing motif. The opening measures, pictured in Figure 21, descend to and then away from the tonic with a 3-2-1-7-6. These two measures can be looked at as developed three-note contractions of the four-note prime motif. However, the number of pitches also directly matches the number in Hiller’s mode 1, his master five-tone row, presenting a diatonic $I_3$ version of that row.

**Figure 21:** mm. 1-2 of Sacntus, Berliner Messe, Universal Edition UE 19 858.

![Figure 21: mm. 1-2 of Sacntus, Berliner Messe, Universal Edition UE 19 858.](image)

Additionally, the line is also a diatonic $P_3$ of the Kyrie’s opening notes and shares the same first four pitches as the second half of Veni Sancte Spiritus’ underlying row (3-2-1-7). The fixed position of the bass a sixth below the alto creates the appearance of bitonality, since the bass line appears to operate in E-major while the alto operates in C-sharp minor.

**Agnus Dei**

The Agnus Dei concludes the mass, and Pärt’s final movement features an assortment of both new and previously used techniques. Pärt once again uses canonic devices, compound tintinnabuli, and determines a sense of meter based on the text, however each of these are used in new ways. As in the Veni Spiritus Sancte, Pärt combines both the M and T-voices of
tintinnabuli into a single line, which some have codified as compound tintinnabuli. The usage here, however, is even more apparent than before since the T-voice operates within its usual parameters. As Figure 22 displays, the second and every other note in the soprano is from the T-voice and moves with the M-voice in the T-1i position. The first note of the soprano is then from the M-voice and every other note continues a descending scale.

Figure 22: Compound tintinnabuli in canon at the fourth in second system of “Agnus Dei,” Universal Edition UE 19 858.

Thus, Pärt constructs the musical line by referencing two different series. The first section of the soprano’s M-voice starts with 3-2-1-7-6-5 before the alto later continues where the soprano left off with 4-3-2. The female voices then complete a full diatonic scale plus one, which allows for a naturally occurring cyclical permutation. As a testament to compositional unity, the soprano’s opening 3-2-1-7-6 is the same as the opening to the Sanctus, and 3-2-1-7 is the second half of the underlying row in the Veni Spiritus Sancte.

Pärt then adds the tenor in like manner, who’s M-voice is in canon at the interval of a

---

134 Maler, 23.

135 Hillier, 190.
fourth below soprano’s M-voice, trailing by four quarter-note values. The tenor’s T-voice differs, however, situated in the T-2s position, and is consequently not a part of the canon. As the altos complete the soprano line, the basses complete the tenor line and their M-voice sequence is then 7-6-5-4-3-2 in the tenor and 1-7-6 in the bass. During the second part of the piece, Pärt swaps the material between the soprano (and later altos) with the tenors (and later basses), as seen in Figures 3.23 and 3.24. Now trailing only two quarter-note values, this exchange both inverts the counterpoint (now at the fifth) and continues the descent of the soprano line. Despite the interlude and inversion of material, the soprano line picks up where the alto last left off (4-3-2-1) with a 7-6-5-4-3-2 and the alto continues with 1-7-6.

**Figure 23:** Opening of the initial canon round in “Agnus Dei,” Rehearsal A, Universal Edition UE 19 858.

**Figure 24:** Opening of second canon round in Agnus Dei, with exchanged material, Universal Edition UE 19 858.

---

136 Ibid.
Unlike Pärt’s previous usage of canonical devices in the Credo, this canon is also textual. Given Pärt’s metrical emphasis on text, this creates an immediately noticeable aspect on the meter; namely, that there is no written meter. As Figure 22 shows, each word in each voice is still separated by bar lines, making it similar to Pärt’s practice in other movements where each word gets its own measure and dictates the meter. However, unlike other movements, there is no unified meter and the emphasis of the initial round is preserved, creating overlapping time signatures and staggering bar lines.

The third and last section differs from the first two in several ways. The movement begins in C-sharp minor, and the strings start high with displaced tonic tintinnabuli pitches moving progressively lower until arriving at open fifths of the relative major, E-major, which is sustained in a full range of strings, becoming the new pitch center. Though the pitch center has changed, the tintinnabulated triad in the chorus has not. Instead, both the M-voices and T-voices seem carefully selected in order to maximize the common tones of E and G-sharp while avoiding C-sharps. Figure 25 shows each chorus line still in compounded tintinnabuli, with the M-voices oscillating one note above and below the new dominant, B. The contour of the M-voice oscillation is inverted so that each pair of voices move in consistent contrary motion to each other for the first time in “Berliner Messe.” This also allows for every sounding C-sharp to be paired with an A, giving the perception of a predominant role in E major rather than a tonic function in C-sharp minor. With the chorus still in canon, this time at the octave and now including the T-voice, the distance has once again been reduced by half, now trailing just one quarter-note. This creates a fascinating instance where the T-voice notes (of the T-2i position) within each pair of chorus voices line up vertically together and against the other pairing’s M-voice. The result is that the T-voice pitches correspond to both its own and other chorus lines,
operating in both traditional and compound tintinnabuli simultaneously. The penultimate notes form the equivalent of a predominant with a major seventh ($Iv^{\text{Maj7}}$), closing “Berliner Messe” with a fitting plagal cadence.

**Figure 25:** Conclusion of “Agnus Dei,” seven beats after Rehearsal B, Universal Edition UE 19 858.

In conclusion of this analysis, Pärt’s combination of various techniques in “Berliner Messe” such as canonic counterpoint, pitch axis inversion, and serialist tone rows in combination with his own tintinnabuli technique is a great example of Pärt’s unique presentation of the old, new, and the original. While many see Pärt’s tintinnabuli works as a rejection of his earlier serial
works, it seems rather to have grown out of them instead since “Berliner Messe,” and even tintinnabuli itself, has numerous serial features. Further, and perhaps to the detriment of Pärt’s academic regard, these features do not necessarily draw attention to themselves. To put it simply, the music stands on its own. And it is perhaps this feature that will make “Berliner Messe” a potent educational tool for introducing serial techniques to students.

---

Section IV

Applications for Classroom Instruction

Nothing about serialism is easy. It is challenging to listen to, to appreciate, to perform, to understand, and yes, difficult to instruct. To many listeners, serialism is inaccessible, incoherent, random, and few would dispute its demonstrable unpopularity. Research on cognition has shed light on why serialism elicits this common response, indicating that twelve-tone serialism lacks comprehensiveness due to several characteristics that actively work against human cognition. The first of these characteristics is not just atonality, but contratonality, that is, traditional serialism actively works against any resemblance of tonality. Schoenberg’s twelve-tone rows avoid grouping pitches that create a tonal hierarchy, even if only momentary, more often than even a randomly generated row would.138 Without a tonal hierarchy the length of rows, twelve notes, becomes quite challenging for the listener to remember, similar to trying to remember a twelve-digit phone number given just once before it is jumbled. And since the human brain does not encode information in permutational form, it is difficult to recognize the retrogrades, inversions, retrograde-inversions, or repetition of these rows. Instead, the human brain uses hierarchal aides to remember a collection of notes,139 such as contour, which is obliterated in serialism’s octave equivalent pitch classes. (Even nursery music such as “Mary Had a Little Lamb” become unrecognizable when displaced among multiple octaves.) To further exacerbate the problem, twelve-tone rows lack continuity beyond the piece (or section of a piece) that they inhabit, requiring the learning of multiple rows for a single piece. Additionally, total serialism


139 Ibid.
rejects even rhythmic regularity, providing no perceptible rhythmic continuity for human
cognition to latch onto. Lastly, serialism generally lacks the grammatical and syntactic structure,
making any intended structure perceptually fragile and unrecognizable even to highly trained
musicians.\(^{140}\)

This makes teaching serialism a substantial pedagogical challenge. In Music Education,
there are generally two approaches to teaching serialism: avoiding serialism altogether or
teaching (dissonant/non-tonal/early) serialism in the hopes that education leads to appreciation.
Research, however, indicates that the latter is a failed strategy since, beginning in kindergarten,
students progressively dislike serialism, and even among graduate students, where a course in
20\(^{th}\) century music literature did not make any significant difference in students who took the
course from those who did not.\(^{141}\) Thus, the solution to the inherent cognitive challenges of
serialism is not in teaching more serialism, but in changing how serialism is taught.

To that end, Arvo Pärt’s music, specifically “Berliner Messe,” is here proposed as a
pedagogical avenue from which to instruct students in serialism. Pärt’s music addresses each
point of serialism’s inherent challenges, providing the necessary hierarchal aides (tonal
hierarchy, contour lines, rhythmic regularity, grammatical and syntactic structure, etc.) necessary
to avoid cognitively alienating students while still using serial conventions. Even serialism’s
unpopularity is countered by Pärt’s phenomenal popularity. However, to be clear, the proposed
approach is not necessarily suggesting a complete replacement of instructing serialism in the
tradition of Schoenberg, Webern, or Boulez, but rather as an alternative to how these concepts

\(^{140}\) Ball, 35-40.

\(^{141}\) Clifford K. Madsen and John M. Geringer. "Responses of Multi-Aged Music Students to Mid-20th-
are first introduced. Virtually no other music is taught first from complexity to simplicity and so neither should serialism.

What follows are recommendations for instructing “Berliner Messe” in both performance and theoretical contexts.

Performance Instruction

Performers of Pärt’s tintinnabuli works stand a good chance of experiencing something not so very common these days, but which used to be an essential ingredient of musical life in earlier times: the excitement of presenting new music to a wide audience and discovering that the lines of communication are completely and appreciatively open. ¹⁴²

There is a myriad of reasons to recommend “Berliner Messe” as an appropriate piece for pedagogical performance, not the least of which is the incredible connection Pärt’s music has made with audiences. According to the largest performance databases, Pärt is the most performed living composer in the world, outpacing even John Williams and John Adams. ¹⁴³ This alone satisfies two of Charles Hoffer’s criterial characteristics that subject matter be valid and relevant, that is, recognized by professionals and has value to students, educators, and audiences. However, popularity may not be a sufficient reason for performance, so it is important to note that performing “Berliner Messe” satisfies Hoffer’s other criteria, that it is educational, representative, fundamental, contemporary, and learnable. The combination of contemporary techniques while remaining learnable is something that is difficult to find in twentieth-century music in general and is what makes “Berliner Messe” such a valuable educational tool. As Hoffer states, “The main problem for teachers in this matter is the technical difficulty of many twentieth-century works. They would like to have students sing or play them, but many times the

¹⁴² Hillier, 206.

¹⁴³ Division, 152.
music is too hard.” In “Berliner Messe,” this is, of course, offset by the minimalist framework that houses the serialist techniques and thereby makes it accessible not only to audiences but to learners as well.

The minimalist framework can also help bridge students to the upper levels of state required standards, including identifying various compositional procedures and techniques to demonstrating conducting patterns for compound meters, singing all diatonic intervals, singing songs nontraditional harmonies, applying various tempos while singing, singing acapella, interpreting and applying expressive phrasing, and responding to advanced conducting patterns and interpretive gestures, to name just a few. Listing the full benefits of instructing a performance of “Berliner Messe” could consume far more space, but it suffices to say that performing this work is an educational reward in and of itself while simultaneously serving as a bridge for further learning.

As attention is turned to the practical performance instruction of “Berliner Messe,” it is worth noting that there is both a beauty and a danger in performing this work. This danger stems from the fact that Pärt’s processes (serial or otherwise) are not necessarily perceived by the listener. The danger is then to perform the piece and remain oblivious to the artistry of its construction. However, the beauty of Pärt’s music is that it does not require perception of process to have a meaningful and rich aesthetic experience. As Nick Strimple puts it,

Pärt’s compositional procedures are similar, in fact, to Stravinsky’s, but the aesthetics and results are polls [sic] apart…In Stravinsky’s music the process is everything, but Pärt delights in the effect created by the process. Hence, while serial structures in Stravinsky’s...

---


later sacred works issue a challenge to the listener, serial structures in Pärt’s works offer an invitation to lose oneself in the music.”

The primacy of serial processes then lies in the construction of Pärt’s music, not in the experience of it. It is doubtless, then, that there have been many meaningful performances of “Berliner Messe” where the performers were not aware of all the serial techniques present, just as choral students may be unaware of the nationality of an augmented sixth chord or the precise section of sonata form when performing a work by Mozart. Simply put, Pärt’s music stands on its own as an aesthetic experience.

However, while a performance of “Berliner Messe” does not necessarily require extensive and total comprehension of serial processes by performers and listeners, the piece is likely to benefit if at least the instructing conductor is aware of them. It is then the instructing conductor’s discretion to balance the theoretical informing of the ensemble in eliciting the performance, just as it is when instructionally conducting a Beethoven symphony. Many educators have their own preferred methods for instruction (especially tonal music) and the recommendations here are not intended to replace those, but simply highlight unique features, techniques, and challenges in performing Pärt’s “Berliner Messe” as well as the benefit of teaching a recent work to supplement the curriculum with the integration of a late 20th Century piece.

Of first concern is selecting the ensemble and score version to perform “Berliner Messe.” All scores are through Universal Edition, who has the exclusive rights to score publications of “Berliner Messe.” There are a number of arrangements of “Berliner Messe,” (no less than

---

146 Strimple, 165.

seven)\textsuperscript{148} and it is ultimately up to the educator and institution as to what is possible and preferred. The version for mixed choir and string orchestra would likely be the highest preference. If strings are difficult to acquire it would likely be helpful to acquire the version with organ accompaniment, even if just for rehearsal use. It is also possible to perform “Berliner Messe” with four soloists, as it was when it first premiered in Berlin, although this will be far more demanding for the soloists. Alternatively, in 2009 Pärt marked the twentieth anniversary of the fall of the Berlin Wall by arranging the Kyrie and Agnus Dei for twelve cellos and pairing them with the Sanctus from “Missa Syllabica” (1977) to form a “Missa Brevis” (2009). The notes are largely the same, but there are metrical differences since the text is now absent. For instance, the Kyrie in this version is in triple meter, which demonstrates how the textual declamation in choral versions subverts the underlying pulse.\textsuperscript{149} (For the purposes of this section, a choral version will be assumed based on three factors: the greater number of student choirs as opposed to student cello ensembles and because the choral version includes more movements and is more well-known by far). The last of these considerations will be to determine how many movements will be performed. The \textit{Erster Alleluiavers}, \textit{Zweiter Alleluiavers}, and \textit{Veni Sancte Spiritus} are marked as optional sequences and consideration of the chorus’ skill level, rehearsal time, and desired running time for the program.

Next is the question of how to introduce “Berliner Messe” to the ensemble. Some educators object to playing any kind of recording of the piece as the students will be influenced by the recording’s interpretation. (Their alternative is often to have the accompanist play through

\textsuperscript{148} Shenton, 2017, 151.

\textsuperscript{149} Shenton, 2017, 232-233.
it.) There is certainly some truth to this, however, there are a couple of unique features to
“Berliner Messe” that may outweigh such concerns.

The first is the popularity of Pärt’s music, including “Berliner Messe,” and its usage in
movies and television. For example, any student who has seen “Marvel’s Avengers: Age of
Ultron” (2015) has already heard the Kyrie. The recommendation here is to leverage this
familiarity and not squander it. Research indicates that feelings develop before concepts, so the
idea is to use familiar positive associations to provide an affective (and effective) foundation for
the rational process of conveying new concepts. By incorporating the subject matter into a
narrative, students are more likely to develop stronger emotions and memories of the subject
matter. Thus, it is recommended to begin with this common-ground approach that connects the
classroom material with what students are experiencing in entertainment. As a result, they will
likely never experience that scene the same way ever again. As the instructor wishes to distance
the class from the film, the discussion can naturally open up to the aesthetic and meaning of
Pärt’s music, for which the interpretation among over 100 movies and television programs is
remarkably consistent.

The second unique feature that may warrant the introducing “Berliner Messe” with a
recording or movie clip is the sparse nature of the score. Pärt’s score is bereft of many score
markings such as expressions, crescendos, and even tempo markings. Pärt empowers the

---

Disney Studios Motion Pictures, 2015.

151 Pablo Gonzalez Blasco, Mariluz González Blasco, Marcelo R. Levites, Graziela Moreto, James W.
Tysinger, “Education through Movies: Improving teaching skills and fostering reflection among students and

152 Kaire Maimets-Volt, "Arvo Pärt's Tintinnabuli Music in Film." *Music and the Moving Image* 6, no. 1
performer (or conductor) to fill in these gaps, often relying on their experience of early music, such as plainchant or Renaissance polyphony. The problem is that students likely lack the necessary experience and knowledge from which to inform their interpretation. And while many of these undetermined features can be chosen and communicated by the instructing conductor, Pärt’s music is most effective when experienced rather than explained.

This brings us to the constant importance of the experience in Pärt’s music. It is wise to orient students at the onset to Pärt’s intention in composing this piece, as an expression of solemn and (in the case of the Credo, jubilant) worship pleasing to God.153 After time, however, there lies the risk of going about rehearsal as simply a technical exercise. It is then good and necessary to remind students not infrequently of the significance of the words such as “Lord, have mercy,” and “Behold the Lamb of God who takes away the sin of the world,” and how Pärt girds the meaning of these words with music. Let students sing the meaning of the words, not just the words themselves.

Before the piece is audibly rehearsed, there are additional ways to intentionally orient the students during warm-ups. Warming up with scales not only exercises vocal chords but these same notes make up the M-voices in Pärt’s music. So, one might consider warming up with both major and natural minor scales, perhaps even both at the same time in parallel motion (a sixth apart) or in contrary motion. The educator might also focus the students’ tuning by having the chorus sing a single chord and then moving each voice by step individually to create nontraditional harmonies, such as modal pentachords.

Whenever a piece is first rehearsed, the starting point is strategically selected. Often, the chosen starting point is not the beginning of the piece, but for “Berliner Messe” that is precisely

the recommended starting point. The Kyrie is perhaps the simplest, relates directly to the introductory movie clip, is acapella, includes all voices additively, and the text is short and not overly difficult. Whenever possible, an effort to stress the musical line as opposed to homophonic blocks should be made, starting with the altos’ M-voice but then giving equal weight to the line of the soprano’s T-voice. The difficulty in this movement is the constant voice crossing of the T-1a position in the tenor and soprano. Emphasizing their own individual lines and rehearsing the chorus in pairs will likely help.

The notes can relatively easy to accomplish, making the Kyrie an ideal candidate for sight-singing and memorization (in both long and short term), however, tuning, balance, and blend are of prime importance. All music benefits from proper tuning, but the diatonic dissonances of “Berliner Messe” absolutely relies on proper tuning due to its nontraditional harmony. Balance and blend can also be challenge, especially since choral voices are often in mixed tessituras but in the same basic pitch space. The effort in direction exercised here in the Kyrie lays the groundwork from which to build on in other movements. So, while perfection is not necessary in order to move on to another movement, students should gather an idea of what the conductor is looking for as they move on.

It is here considered important not to bore the students with just a single piece of music for the period and to introduce them to some of the more demanding music. Thus, the next recommended piece would be either the Credo or Gloria, since they are the longest, most difficult movements, will likely require lots of rehearsal, and nicely contrast the Kyrie’s slower tempo, quieter demeanor, and thinner texture. If the chorus sight read the Kyrie to a satisfactory level, they may enjoy the challenge of trying to sight read portions of these movements. These

---

154 Hillier, 204.
two movements are long, so tackling them in sections by rehearsal marks is highly recommended. It should go without saying that these movements should be introduced and rehearsed well under tempo. Hillier, who conducted the premiere of “Berliner Messe” recalls that when Pärt would assist with rehearsal, that no matter how slow the tempo he chose, Pärt would slow the tempo further. He remarks:

I have found it beneficial to rehearse other Pärt works at an exaggeratedly slow tempo, partly to infuse into the singers an understanding of the music’s inner nature, partly to bring out an awareness of pitch and harmony and the constant local readjustments which singer must make.  

Much of the approach to the Kyrie can be replicated here including working with pairings of the chorus and emphasizing the individual M-voices and T-voices as musical lines. The exception to the latter is found in the bass part of the Gloria, where the upper notes reach F and G. These notes lie outside the range for most basses, so the most practical solution would be to switch the notes for this section with the tenor’s, which are lower than the basses. Though this may destroy the purity of the two separate lines, this is occasionally necessary in “Berliner Messe” for reasons of both range and timbre.  

As students become more comfortable with the material, it becomes most appropriate to increasingly demonstrate the construction of “Berliner Messe” and the process of tintinnabuli. The breadth of techniques that Pärt’s techniques almost certainly cannot be covered, but it would be instructive for students to at least be made aware of the T-voice positions and randomly be asked what position their T-voice is in. At first this may require prompting with simple

155 Hillier, 205.

156 Ibid, 204.
questions, such as “Is the T-voice above, below, or both?” and “How many notes in the triad is it away from the M-voice note?”

In terms of assessing students, there are numerous ways to do so, and different contexts will make certain methods more appropriate. In order to succeed, it should be obvious that in-class participation and appropriate attitudes are necessary, but the ensemble’s overall performance is a strong indicator to a perceptive instructor. Additionally, holding sectional rehearsals would aid the educator in giving personalized feedback to each individual while not embarrassing the student in front of the entire ensemble. Another method of assessment would be recording a rehearsal and having students conduct a sort of self-assessment of the ensemble. Viewing oneself in a recording can be a challenging experience, but it provides the student with an objective perspective and forces the student into the higher end of Bloom’s taxonomy by evaluating their performance. In assessing students’ progress in understanding compositional processes (such as serialism), the educator may find oral question-and-answer assessment the most convenient, although encouraging students to compose with these techniques and even sight-singing them in class (if appropriate and time allows) would demonstrate the highest levels of critical thinking.

Theoretical Instruction

Serialism was born of music theory and it is from this lens from which serialism is most often studied in music education. Thus, theoretical instruction is likely both the most suitable and easily implemented avenue for instruction and stands to benefit most from teaching the serialist techniques within “Berliner Messe.” To be sure, “Berliner Messe” cannot teach students

---

everything about traditional serialism. However, it does provide the opportunity to introduce numerous essential theoretical concepts of serialism in a far more accessible capacity, presenting the possibility for a much earlier introduction in a student’s educational journey. Unless instructing music history in a chronological fashion, introducing serialism with Pärt’s music should not be an object of concern, even though it is chronologically placed at the end of serialism’s prevalent period, for the same reason the music theory behind Common Practice Tonality is generally taught before fugal counterpoint. It is more fundamental, simpler to grasp, and easier to build upon.

As mentioned in the discussion of ensemble instruction, it is highly recommended to begin with experiencing the music itself, including using the clip from “Marvel’s Avengers: Age of Ultron” if appropriate. This aesthetic experience of “Berliner Messe” is especially vital in this context since serialist music theory is often divorced from the auditory experience, with substantially more consideration given to the written score. This tradition of the all-important process in the score is somewhat at odds with Pärt’s approach, who relishes in the results of the process as enacted by performers. As Leech-Wilkinson contends, “Music doesn’t exist in works, works don’t exist in scores, and neither does music.”

One of the most fundamental serial concepts that Pärt’s music can instruct in, and a great place to start with students, is introducing pitches as numeric integers. The recommendation is that the integers of 1-7 be used in lieu of atonal theory’s 0-11 in order to avoid unnecessary complication. Pärt’s music is mostly diatonic and seldom modulatory, so 1-7 is not only appropriate, but it will likely be easier for students to grasp since the integers correspond to the scale degree each pitch is. From there, covering the basics of the tintinnabuli process using this

---

modified cipher notation is recommended. Approaching tintinnabuli from this angle, as opposed to musical notation, will not only accustom the student to dealing with pitches as integers, but provides a natural bridge to introducing the concept of pitch class equivalence since integers do not specify pitch space the way traditional music notation does. Demonstrating pitch class equivalence and other concepts with specific examples from “Berliner Messe” is always beneficial, and the choral parts are often simple enough to be sight-sung in class. When using just these integers, explaining T-voice positions may actually be simpler than traditional musical notation since it illustrates concepts like how a third T-voice position does not really exist, rather, it is the equivalent of a displaced first position.

As students delve into the aspects of tintinnabuli, the M-voice provides the next step in instructing serial techniques. As displayed earlier in Figure 1, Hillier’s four modes of the M-voice are actually serial in formation, with mode 1 as prime, mode 2 as the inversion, mode 3 as the retrograde, and mode 4 as the retrograde-inversion. The treatment here is still diatonic, so unlike traditional serialism, the intervals are not preserved but adjusted to fit tonally, not unlike the difference between a tonal and real answer in a fugue. Thus, using Hillier’s four modes as a basis, a matrix can be formed. This matrix is obviously not a twelve-tone matrix, given the exclusively diatonic pitches, but constructing it with students lays the groundwork for future matrices. Hillier’s modes are five pitches long and using them in pairs will often result in a full scale with some overlap. For instance, the opening of the Kyrie, 1-7-6-5-4-3-2-1, would be a combination of I₁ and I₅ in Figure 26, with the overlapping notes generally not being repeated. While the combination of five-note rows makes it possible to achieve diatonically complimentary pitch sets, it may be helpful to extend the four rows to encompass the full scale.
Figure 26: Hillier’s four modes presented in a matrix. Asterisks denote extensions of the modes.

The result is a matrix with two fascinating and distinct features from twelve-tone matrices. The first is that the prime column now lists the cyclical permutations of the row instead of preserved interval transpositions. Accounting for key changes will then require acknowledging the new key area and applying the integers within the matrix to the new key. This is also a strength, though, as it leads to the second distinguishing feature. Since both the matrix and essentially all Pärt’s tintinnabuli music is diatonic with the M-voice characterized by these modes (or rather, these developments of a single row), it can be said that all of Pärt’s M-voices are an elaboration of the single row in Figure 26. Therefore, unlike twelve-tone serialism matrices that are valid for a single piece or section, this matrix actually spans across Pärt’s works, comprising something of a “master matrix” for the M-voice in Pärt’s tintinnabuli works.

Viewing Hillier’s four modes as developments of a single row is far more advantageous than simply identifying which of Hiller’s four modes each measure most closely resembles. Having students identify the developed versions of the row in the M-voice in “Berliner Messe” gets them into the habit of recognizing different versions of the same row but with easier material and less variations than in twelve-tone serialism. It also accounts for what is otherwise anomalies, such as the underlying row in the *Veni Sancte Spiritus.*
The Kyrie makes a great starting point as examples to many of these concepts because of its clear structure and thin texture. Therefore, this movement is recommended for teaching new concepts to the class and perhaps assigning analysis of portions of other movements for homework or assessments. The concepts should be instructed progressively, always with concrete examples, and as the students’ age, knowledge, and comprehension allows. A possible order of concepts could be: integer notation, pitch class equivalence, tintinnabuli, combinatoriality, tone rows, tone row development, row matrix, cyclical permutation, parametrization, pitch-axis movement, combination with contrapuntal techniques, and on as time allows.

Assessing students’ theoretical understanding of these serialist concepts in “Berliner Messe” can likely take the same forms that most assessments of serialist instruction currently take. Score analysis, test or quiz questions, and matrix construction are likely necessary, but perhaps low-hanging fruit. Ideally, having students improvise and compose with these serialist concepts in a minimalist framework will push students to the highest end of Bloom’s taxonomy and will most clearly indicate their grasp of these concepts. Of course, this is not always practical for reasons of time. Perhaps a middle ground can be pursued. It is possible to create scenarios for students to complete processes already begun, not unlike the instance in the Kyrie where the T-voice in the soprano implies the exact pitches of the alto’s M-voice in mm. 12 and 14 as in Figure 2. Having students recognize and discover the process already in place and then contribute to it may be adequately less demanding.

Once students have adequately demonstrated a solid understanding of these serial concepts in a tonal context instruction in chromatic contexts can be pursued. However, “Berliner Messe” is rich for theoretical exploration at any level and given Pärt’s prominence and
popularity, any such theoretical exploration is a reward of itself. However, as Pärt’s compositional process demonstrates, it need not be an end to itself.
Chapter Five: Conclusion

Summary of Study

This study began with the basic question of what techniques (both serial and minimalist) Arvo Pärt employed in “Berliner Messe.” Existing literature was examined to uncover previous findings, gather analytical tools for Pärt’s original technique, and discuss its appropriateness as an educational tool. Thus, this study contained a basic three-fold structure that included contextual information on the composer and his technique, an analysis of “Berliner Messe,” and then recommendations for classroom application. The contextual information revealed Pärt’s lineage as a serialist and the analysis examined the serial structures of Pärt’s technique and other serial techniques in “Berliner Messe” that included parametrization, tone rows, cyclical permutation, and more. The recommended approach was to utilize “Berliner Messe” as an introduction to serialism since it lacks the inherent characteristics of serialism that actively work against human cognition while simultaneously maintaining a clear usage of serial structures and rare accessibility for modern composers.

Summary of Purpose

The purpose of this study was to first to determine the techniques used in Arvo Pärt’s “Berliner Messe” and then determining what instructional value, if any, existed in Pärt’s usage of serial techniques in “Berliner Messe.” Of particular interest was the fusion of tonality and serialism within a minimalist framework that is unique to Pärt’s music and offers new learning opportunities for students than current instruction of serialism employs. The post-tonal techniques in serialism also became a focus because those aspects are often difficult to instruct or even abandoned in music education.
Summary of Findings and Prior Research

Research on the essential contextual information revealed that the composer Arvo Pärt has a more direct lineage with serialism than with American minimalism. His original tintinnabuli technique features serial characteristics, particularly the M-voice modes that resemble the permutations of a single five-note row. Likewise, the T-voices themselves have a triadic fixed series based on a predetermined proximal relationship to the M-voice.

The analysis on “Berliner Messe” found that several additional post-tonal and serial techniques were used, including additional usages of tone rows, cyclical permutation, parametrization of text and punctuation, pitch-axis orientation, as well as concepts such as pitch-class equivalence. Like many other serialist works, Pärt uses these techniques in conjunction with forms of counterpoint such as canons or heterophonic parallel organum.

Unlike most serialism, however, Pärt’s music is not oriented exclusively towards its own processes but rather the audible result. Thus, as attention turned to classroom application, previous research confirmed inherent difficulties to traditional serialism and those difficulties are often presented to students all at once with no auditory or theoretical anchor to cling to. However, Pärt’s music, such as “Berliner Messe,” mitigates virtually all of those obstacles to human cognition and can then act as a viable resource in introducing students to serial processes. “Berliner Messe” can then be utilized as far more accessible introduction to serialism in both ensemble and theoretical contexts.

Limitations

The limitations of the study were many. The analysis was of a single work of a single composer in a specific period of composition. Further, the study was primarily concerned with highlighting the post-tonal techniques of serialism rather taking into account all the techniques
from early music or elsewhere that Pärt uses in conjunction with his other processes. The recommended educational approach itself is limited to the introduction of serialism because, most fundamentally, no single piece can teach serialism in its totality.

Recommendation for Future Study

Since scholarship is only gradually observing the phenomenon of Pärt’s music the possibilities of future research are boundless. From a theoretical standpoint, more research on the serial aspects to both Pärt’s tintinnabuli technique and his other works is highly recommended. Pärt’s M-voices have often been overlooked in this kind of analysis and verifying this analysis’ suggestion of a diatonic “master row” across the M-voices in Pärt’s warrants additional research. This thesis focused on serial and minimalist techniques but there is also a rich use of medieval and early music techniques which is equally valuable for analysis and determination of educational value.

Educational research is also rich with possibilities. Perhaps most pertinent to this thesis is quantitative research determining the effects of introducing serialism with Pärt’s music compared to traditional serialism. Do students comprehend more when introduced with Pärt’s music than when introduced with Schoenberg? Can serial concepts be introduced earlier with Pärt’s music? Are students more likely to ‘like’ serialism (traditional or otherwise) if introduced this way? On the other side of the music theory spectrum is the education of early music. Can “Berliner Messe,” or Pärt’s music in general, be approached in like manner to introduce early music or be used in conjunction with early music instruction? If scholarship is still catching up in examining Pärt’s music, then it certainly has yet to fully consider the value of Pärt’s music in music education.
REFERENCES


Bradshaw, Susan. “Arvo Paart” [sic], *Contact*, 26 (Spring 1983), 25.


## Gagne’s Nine Events of Instruction for “Berliner Messe” in a Music Theory Context.

<table>
<thead>
<tr>
<th>Instruction Event</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gain attention</td>
<td>At the beginning of the class, draw students’ attention to their previous (perhaps unknowing) exposure to “Berliner Messe” music, previewing it via “Avengers: Age of Ultron” in order to “hype” the lesson.¹⁵⁹</td>
</tr>
<tr>
<td>2. Inform learners of objectives</td>
<td>The instructor will introduce the unit on Pärt, stimulating interest in the tintinnabuli technique that uses numbers to make aesthetically pleasing music. Additionally, the instructor forecasts the composition assignment that will be due from this unit.¹⁶⁰</td>
</tr>
<tr>
<td>3. Stimulate recall of prior learning</td>
<td>The instructor will first demonstrate how diatonic cipher notation corresponds directly to scale degrees that students have previously learned as well as other familiar tonal concepts such as key areas.¹⁶¹</td>
</tr>
<tr>
<td>4. Present the content</td>
<td>The lesson weaves in and out of lecture, demonstration, and student participation. Students are asked to participate in the performing of basic tintinnabuli, identification of the elements, verbalize open-ended associations, and construct the Pärt M-voice matrix as the instructor introduces them to the four basic permutations of serialism.¹⁶²</td>
</tr>
<tr>
<td>5. Guide learning</td>
<td>Students are broken into small groups to identify M-voice rows and T-voices in selected and different portions of “Berliner Messe.” The instructor reminds students of concepts like octave equivalence, complimentary sets, octave equivalence, and how a single voice may contain more than one musical line (compound tintinnabuli). The groups are reconvened and asked to share their findings.¹⁶³</td>
</tr>
<tr>
<td>6. Elicit performance (practice)</td>
<td>Students will improvise with tintinnabuli, perhaps given a M-voice row and then will need to supply an appropriate T-voice (in cipher notation) on their own. If time allows, have students choose a permutation of their row to write</td>
</tr>
</tbody>
</table>


¹⁶⁰ Ibid, 27.

¹⁶¹ Ibid, 25, 170-172.

¹⁶² Ibid, 68.

¹⁶³ Ibid, 4, 80, 110.
| 7. Provide feedback | During both events #5 and #6, the instructor floats from group to group to ensure comprehension and addresses the whole class if there is uncertainty in more than a few students. As they share their analysis/composition with the class, offer feedback and elaborate, exploring deeper concepts (embedded rows, compound tintinnabuli, etc.) for advanced students to look for. |
| 8. Assess performance | As much as time allows, students will be asked to perform (by piano, voice, etc.) their short compositions. Otherwise, the analyses, compositions, and matrices can be collected for grading according to how well they grasped the concepts. |
| 9. Enhance retention and transfer | At the conclusion of the lesson, the students will have all the necessary information to complete a composition project in the tintinnabuli style, or be given analysis assignments, or to identify M-voice rows and T-voice positions on score identification sections of a test or quiz. |

---

164 Regelski, 179-180.
165 Ibid, 58, 179-180.
166 Ibid, 179-180, 186.
### Gagne’s Nine Events of Instruction for “Berliner Messe” in a Performative Context.

<table>
<thead>
<tr>
<th>Instruction Event</th>
<th>Application</th>
</tr>
</thead>
</table>
| 1. Gain attention          | At the beginning of the class, draw students’ attention to their previous (perhaps unknowing) exposure to “Berliner Messe” music, previewing it via “Avengers: Age of Ultron” in order to “hype” the lesson.  
\[168\]                                                                                                                                                                         |
| 2. Inform learners of objectives | The instructor will introduce the unit on Pärt’s “Berliner Messe,” stimulating interest in the tintinnabuli technique that uses numbers to make aesthetically pleasing music. Students are informed that the Kyrie (and possibly more) will be memorized.  
\[169\]                                                                                                                                                                          |
| 3. Stimulate recall of prior learning | The instructor will connect scales and triadic exercises of the warm-up time to the M-voice and T-voices in “Berliner Messe.” Have students identify tonal concepts from the score that students have previously learned (key signatures, diatonicism, etc.).  
\[170\]                                                                                                                                                                         |
| 4. Present the content     | As the students answer the questions in #3, the instructor follows up with asking about things that do not conform to tonality (voice leading, lack of progression/goal-oriented music). In the aim of an authentic performance, students are informed, to some degree, of the context, that this music is intended as an expression of worship.  |
| 5. Guide learning          | The instructor leads the students as they audiate and then sight-read the Kyrie together, focusing on initial exposure and shape of music rather than perfection. Periodically, the instructor asks them orally who has the M-voice and who as the T-voice. As always, and as much as possible, the instructor connects the theory with action.  |
| 6. Elicit performance (practice) | The chorus work in pairs of M-voices and T-voices, such as tenor and bass, soprano and alto, which helps students since voices cross so often in the Kyrie and it effectively demonstrates the fundamental and serial two-voice nature of tintinnabuli. The chorus also works on memorizing the Kyrie.  |
| 7. Provide feedback        | Feedback from the instructor always connects how adjustments like minimal vibrato accurate tuning affect the big picture. Student section leaders work with their section so not all the feedback comes from the instructor but also peers. Meanwhile, the instructor floats from group to group giving more personalized feedback.  |

\[168\] Regelski, 56, 180.  
\[169\] Ibid, 27.  
\[170\] Ibid, 25, 170-172.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>8. Assess performance</strong></td>
<td>During steps #3-7, the instructor is constantly evaluating students’ performance as well as how much theory students are understanding. Their performance is an assessment in itself (such as memorizing the Kyrie). Additionally, the instructor has students conduct self-assessments and sectional assessments with recordings.</td>
</tr>
<tr>
<td><strong>9. Enhance retention and transfer</strong></td>
<td>At the conclusion of the lesson, the students will have all the necessary information to continue to rehearse, memorize, assess, and learn other movements in “Berliner Messe.”</td>
</tr>
</tbody>
</table>