

ARVO PÄRT AND THREE TYPES OF HIS TINTINNABULI TECHNIQUE

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Arvo Pärt, an Estonian composer, was born in 1935. Most of the works at the beginning of his career were for piano in the neo-classical style. After that, he turned his interest to serial music and continued creating works with serial techniques throughout the 1960s. After his “self-imposed silence” period (during the years 1968-1976), Pärt emerged with a new musical style, which he called tintinnabuli. Although, this technique was influenced by music from the medieval period, the texture and function of its musical style cannot be described easily in terms of any single musical technique of the past.

This study explores the evolution of Arvo Pärt’s tintinnabuli technique in its first decade 1976-1985, which is divided into three different types. It provides musical examples from the scores of selected works, *Für Alina*, *Cantus in Memory of Benjamin Britten*, *Cantate Domino canticum novum*, *Missa Sillabica*, *Stabat Mater* and *Es sang vor langen Jahren*, and their analyses with supporting interpretative sketches. The goal of this thesis is to provide the reader a basis for understanding and recognizing the different types of Pärt’s tintinnabuli technique.

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS.....	iii
LIST OF MUSICAL EXAMPLES.....	v
Chapters	
1. INTRODUCTION	1
Biography.....	2
Tintinnabuli Technique.....	8
Bell Acoustics and Tintinnabuli Music.....	13
2. TYPE 1.....	19
Analysis of <i>Für Alina</i>	24
Analysis of <i>Cantus in Memory of Benjamin Britten</i>	30
3. TYPE 2.....	37
Analysis of <i>Missa Sillabica</i>	39
Analysis of <i>Cantate Domino canticum novum</i>	45
4. TYPE 3.....	51
Analysis of <i>Stabat Mater</i>	53
Analysis of <i>Es sang vor langen Jahren</i>	65
5. CONCLUSION.....	74
BIBLIOGRAPHY.....	76

LIST OF MUSICAL EXAMPLES

	Page
Example 1: Members of the M-voice and T-voice	10
Example 2: Members of the M-voice and T-voice	11
Example 3: Members of the M-voice and T-voice	12
Example 4: The M-voice and T-voice	12
Example 5: M-voice modes	13
Example 6a: Harmonic series of a well-tuned bell	15
Example 6b: Harmonic series of a string	15
Example 7: Excerpt from Pärt's <i>Für Alina</i> for piano, mm. 1-2	17
Example 8: Excerpt from Pärt's <i>Für Alina</i> for piano, m. 4	18
Example 9: Excerpt from Pärt's <i>Für Alina</i> for piano, m. 6	20
Example 10: Excerpt from the manual part of Pärt's <i>Trivium für Orgel</i> , movement 1, mm. 4-5	20
Example 11: Interpretation of the M-voice from Pärt's <i>Trivium für Orgel</i> , movement 1, mm. 4-5	21
Example 12: Excerpt from Pärt's <i>Modus</i> , movement 2, m. 1	22
Example 13: Excerpt from Pärt's <i>Für Alina</i> for piano, mm. 10-11	23
Example 14: Excerpt from Pärt's <i>Trivium</i> for organ, movement 1, mm. 1-7	23
Example 15: Excerpt from Pärt's <i>Für Alina</i> for piano, mm. 2-5	25
Example 16: A graph showing the relationship between the measure numbers and the number of notes from Pärt's <i>Für Alina</i>	25
Example 17: Excerpt from Pärt's <i>Für Alina</i> for piano, m. 4	26
Example 18: Excerpt from Pärt's <i>Für Alina</i> for piano, m. 6	27
Example 19: Excerpt from Pärt's <i>Für Alina</i> for piano, m. 7	27
Example 20: Excerpt from Pärt's <i>Für Alina</i> for piano, m. 7	28

Example 21: Excerpt from Pärt's <i>Für Alina</i> for piano, mm. 10-11	29
Example 22: Excerpt from Pärt's <i>Für Alina</i> for piano, mm. 10-11	29
Example 23: Rhythmic pattern of mm. 1-9 and mm. 9-88 in the bell part of Pärt's <i>Cantus in Memory of Benjamin Britten</i>	31
Example 24: Excerpt from the soprano part of Pärt's <i>Cantus in memory of Benjamin Britten</i> for string orchestra and bell, mm. 1-7	31
Example 25: Rhythmic pattern of the string instruments in Pärt's <i>Cantus in memory of Benjamin Britten</i> for string orchestra and bell	32
Example 26: Excerpt from the violin I part of <i>Cantus in Memory of Benjamin Britten</i> mm. 7-9	33
Example 27: Excerpt from the soprano part of Pärt's <i>Cantus in memory of Benjamin Britten</i> for string orchestra and bell, mm. 30-33	34
Example 28: Excerpt from the violin I part of <i>Cantus in Memory of Benjamin Britten</i> mm. 7-12	35
Example 29: Excerpt from Pärt's <i>An den Wassern zu Babel sassen wir und weinten</i> for S.A.T.B. and organ m. 6.....	37
Example 30: Excerpt from the soprano and alto part of Pärt's <i>An den Wassern zu Babel sassen wir und weinten</i> , m. 6.....	38
Example 31: Interpretation of T-voice and M-voice from the soprano and alto part of Pärt's <i>An den Wassern zu Babel sassen wir und weinte</i> , m. 6.....	39
Example 32a: A rest notation in <i>Missa Sillabica</i>	40
Example 32b: Excerpt from Pärt's <i>Missa Sillabica</i> for choir and organ, <i>I. Kyrie</i> , mm. 3-4	40
Example 33: The tenor part from Pärt's <i>Missa Sillabica</i> , <i>I. Kyrie</i> , mm. 1-2	41
Example 34: Excerpt from Pärt's <i>Missa Sillabica</i> for choir and organ, <i>I. Kyrie</i> , mm. 7-12	41
Example 35: Excerpt from Pärt's <i>Missa Sillabica</i> for choir and organ, <i>IV. Sanctus</i> , mm. 7-13 ...	42
Example 36: Interpretation of <i>Missa sillabica</i> , for choir and organ, <i>IV. Sanctus</i> , mm. 7-13	43
Example 37: Excerpt from Pärt's <i>Missa Sillabica</i> for choir and organ, <i>II. Gloria</i> , mm. 20-26	44
Example 38: Excerpt from the soprano part of Pärt's <i>Cantate Domino canticum novum</i> for choir and organ, mm. 1-4	45

Example 39: Excerpt from Pärt's <i>Cantate Domino canticum novum</i> for choir and organ, mm. 22-26.....	46
Example 40: Interpretation of the soprano, tenor, and organ right hand part of <i>Cantate Domino canticum novum</i> , mm. 22-26.....	46
Example 41: Interpretation of the alto, bass and organ left hand part of <i>Cantate Domino canticum novum</i> , mm. 22-26	47
Example 42: Excerpt from the soprano and alto part of Pärt's <i>Cantate Domino canticum novum</i> for choir and organ, mm. 9-14	47
Example 43: Excerpt from Pärt's <i>Cantate Domino canticum novum</i> for choir and organ, mm. 9-14.....	48
Example 44: Interpretation of <i>Cantate Domino canticum novum</i> , mm. 9-14.....	49
Example 45: Excerpt from Pärt's <i>Cantate Domino canticum novum</i> for choir and organ, mm. 32-42.....	49
Example 46: The order of the choir parts from Pärt's <i>Cantate Domino canticum novum</i> for choir and organ.....	50
Example 47: Excerpt from the violin I and II part of Pärt's <i>Ein Wallfahrtslied</i> , mm. 1-2	51
Example 48: Interpretation from M-voice and T-voice from the violin I and II of Pärt's <i>Ein Wallfahrtslied</i> , mm. 1-4	52
Example 49: Excerpt from Pärt's <i>Stabat Mater</i> for S.A.T. soli; violin, viola, and cello, mm. 109-113.....	52
Example 50: Interpretation of Pärt's <i>Stabat Mater</i> , mm. 109-117	53
Example 51: Text from <i>Stabat Mater Dolorosa</i> , verses 1-2 (lines 1-6)	54
Example 52: Excerpt from Pärt's <i>Stabat Mater</i> for solo voices and string trio, mm. 273-276 (section 3).....	55
Example 53: Excerpt from Pärt's <i>Stabat Mater</i> for solo voices and string trio, mm. 223-224	56
Example 54: Excerpt from Pärt's <i>Stabat Mater</i> for solo voices and string trio, mm. 233-244	57
Example 55: Excerpt from Pärt's <i>Stabat Mater</i> for solo voices and string trio, mm. 133-140	58
Example 56: Interpretation of Pärt's <i>Stabat Mater</i> for solo voices and string trio, mm. 133-140	58
Example 57: Excerpt from Pärt's <i>Stabat Mater</i> for solo voices and string trio, mm. 109-119	60

Example 58: Interpretation of Pärt's <i>Stabat Mater</i> for solo voices and string trio, mm. 109-119	61
Example 59a: Text from <i>Stabat Mater Dolorosa</i> , verses 1 (lines 1-3)	62
Example 59b: Excerpt from the tenor part of Pärt's <i>Stabat Mater</i> for solo voices and string trio, mm. 109-119	62
Example 60a: Text from <i>Stabat Mater Dolorosa</i> , verses 2 (lines 1-3)	63
Example 60b: Excerpt from the contratenor part of Pärt's <i>Stabat Mater</i> for solo voices and string trio, mm. 120-127	63
Example 61a: Text from <i>Stabat Mater Dolorosa</i> , verses 5 (lines 1-3)	64
Example 61b: Excerpt from the soprano part of Pärt's <i>Stabat Mater</i> for solo voices and string trio, mm. 179-191	64
Example 62: Bar numbers and sections in <i>Stabat Mater</i>	65
Example 63: Excerpt from the alto part of Pärt's <i>Es sang vor langen Jahren</i> for alto, violin and viola, mm. 8-16	66
Example 64a: Stanza 2 (lines 5-8) from <i>Es sang vor langen Jahren</i> by Clemens Brentano (1778-1842)	67
Example 64b: Excerpt from the alto part of Pärt's <i>Es sang vor langen Jahren</i> for alto, violin and viola, mm. 27-44	67
Example 65: Hypothetical of the M-voice and T-voice	68
Example 66: Excerpt from Pärt's <i>Es sang vor langen Jahren</i> for alto, violin and viola, mm. 21-35	69
Example 67: Interpretation of T-voice Pärt's <i>Es sang vor langen Jahren</i> for alto, violin and viola, mm. 34-35	70
Example 68: Excerpt from Pärt's <i>Es sang vor langen Jahren</i> for alto, violin and viola, mm. 35-46	70
Example 69: Excerpt from Pärt's <i>Es sang vor langen Jahren</i> for alto, violin and viola, mm. 46-55	71
Example 70: Excerpt from Pärt's <i>Es sang vor langen Jahren</i> for alto, violin and viola, mm. 136-140	72
Example 71: Excerpt from Pärt's <i>Für Alina</i> for piano, mm. 10-11	73

CHAPTER 1

INTRODUCTION

The purpose of this study is to explore the evolution of Arvo Pärt's tintinnabuli technique in its first decade 1976-1985. After a brief discussion of Pärt's biography, I show that Arvo Pärt uses three types of his tintinnabuli compositional technique concerning the relationship between the melodic voice and the tintinnabuli voice (to be described below). I argue that the second and third type are derived from Pärt's first type of the tintinnabuli. I provide musical examples from the scores of selected works and interpretative sketches in support of the analysis. My intention is to provide the reader a basis for understanding and recognizing the different types of Pärt's tintinnabuli technique. This explanation will enable the reader to identify additional types of the tintinnabuli style.

The study is divided into four chapters; Chapter 1 describes Pärt's biographical background from birth to his emigration to Germany and includes his educational background, his career in music, and some of his early works. This chapter also explores the tintinnabuli technique, its texture and how the technique is utilized in Pärt's compositions. Since Pärt created the technique based on the acoustic properties of bells, Chapter 1 also provides general information about the harmonic series of the bell and illustrates its relationship to tintinnabuli technique.

Chapters 2, 3, and 4 concentrate on the three types of the tintinnabuli technique Pärt used through the years 1976-1985. Each chapter provides an explanation of the type and shows examples from his works. Chapter 2 demonstrates the first type of tintinnabuli style and presents detailed analyses of two works, *Für Alina* and *Cantus in Memory of Benjamin Britten*. Chapters 3 and 4 explain the other two types of the technique, and also provide sample analyses. *Cantate*

Domino canticum novum and *Missa Sillabica* provide evidence for the second type in chapter 3, and *Stabat Mater* and *Es sang vor langen Jahren* provide evidence for the third type in chapter 4. Each of the discussions of the tintinnabuli types touches upon the techniques of producing symmetry.

Biography

Arvo Pärt, an Estonian composer, was born September 11, 1935 in Paide, the capital city of Järva County, Estonia. He was an only child. Since his parents were divorced when he was three years old, he was raised by his mother and his stepfather in Rakvere, a small town about sixty miles east of Tallinn. Pärt studied piano, music theory, and literature at a music school for children.¹ Stephen Wright, an Arvo Pärt scholar, notes that this music program consisted of an evening class that was offered outside of regular school hours. The program was seven years in length and spanned throughout the ten regular school grades, and the students were approximately ten to seventeen years old.² At home, Pärt had a grand piano, which he could practice and compose his piano music. According to Pärt:

As a little boy I sang around the house. We had a huge concert grand, but it was in such poor condition that we almost disposed of it. When I was seven or eight, I started taking piano lessons. It wasn't very satisfying as the middle register of the grand was broken. So I played the notes of the low and high registers only. I combined reality with phantasy this way. When I grew up, I exchanged the hammers in order to tackle the middle register, but the action didn't work as evenly as it should have because the hammers didn't fit properly at every point. At that time I composed a lot for the piano.³

This experience of not playing the middle register of a piano could be another factor which influenced his compositions later on in the late 1970s. The wide range between the drone and

¹ Paul Hillier, *Arvo Pärt* (New York: Oxford University Press, 1997), 26. (hereafter as Hillier AP).

² Stephen Wright, "Stylistic Development in the Works of Arvo Pärt, 1958-1985" (Unpublished M.M. thesis, University of Western Ontario, 1992), 10. (hereafter as Wright Thesis).

³ Martin Elste, "An Interview with Arvo Pärt," *Fanfare* 11(4) (April 1988): 338.

the pair of T-voice and M-voice in some tintinnabuli works, such as *Für Alina* and *Spiegle im Spiegle*, can be interpreted as heavily influenced by his childhood experience.

At school, Pärt also played oboe, percussion, and sang in his school choir. Since his principal instrument was piano, he performed in many concerts, especially as an accompanist. His compositional skill developed from improvisation on the piano to more serious compositions when he was around fourteen or fifteen years old.⁴ Pärt presented his first composition at a competition for young artists. He was seventeen years old when he performed a piece titled—*Meloodia* for piano. However, he did not win in this competition.⁵ In 1953, Pärt finished his general school and went to study at the Tallinn music *uchilishche*—a three to five year advance study program that prepared for study at a conservatory. After Pärt graduated *uchilishche* in 1957,⁶ he enrolled at the Tallinn Conservatory in autumn of the same year.⁷

At the Tallinn conservatory, he studied composition under Heino Eller from 1958-1963. Since Eller had studied with Alexander Glazunov, Susan Bradshaw notes “Pärt acknowledges the Russian composer as his ‘musical father.’”⁸ Paul Hillier states that Pärt was an outstanding and talented student. It was apparently easy for him to absorb new ideas and techniques from his teacher.⁹ As a result, his compositional skill developed, and it helped

⁴ Hillier AP, 26.

⁵ Ibid.

⁶ Wright Thesis, 11.

⁷ Hillier AP, 26.

⁸ Susan Bradshaw, “Arvo Paart [sic],” *Contact* 26 (Spring 1983): 25.

⁹ Hillier AP, 27.

him learn avant-garde techniques that he would adopt later in his career.¹⁰ Pärt not only gained traditional musical experience from the conservatory, but he also learned sound engineering. Concurrent with his studies at Tallinn, Pärt worked as a sound engineer at the Estonian Radio, a local radio station, continuing to work there until 1968. Pärt then became a freelance composer mainly writing film music.

His compositions emerged publicly beginning in the late 1950s and included various musical styles and techniques such as tonal, “Socialist Realism,” and serialism. Most of the works at the beginning of his career as a composer were for piano in a neo-classical style.¹¹ He won the first prize of the All-Union Young Composers’ Competition in Moscow in 1962 with his cantata work *Meie Aed (Our Garden)*, composed in 1959, while he had already turned his attention to serial music. He studied from books and scores, which were difficult to obtain in the Soviet Union. According to Bradshaw, there was no opportunity for Pärt to hear a live orchestra when he was small. During his teenage years, he discovered that there were some classical music recordings that were transmitted through a loudspeaker in the town square.¹² Because only a limited number of musical works were available for him in the Soviet Union, Pärt explained that the only contemporary works he had heard from the composers from “the West” were written by Pierre Boulez, Anton Webern, and Luigi

¹⁰ Ibid.

¹¹ Marguerite Bostonia, “Musical, Cultural, and Performance Structures in the Organ Works of Arvo Pärt” (Unpublished PhD diss., West Virginia University, 2009), 6.

¹² Bradshaw, 25.

Nono.¹³ Pärt characterized this dearth of music as comparable to starvation. He explained

how his music in the 1960s was affected by the Western composers :

Yes, it [his music] was influenced by such things as twelve-tone, serial and aleatoric music; all that came to us from the West. Perhaps some had also done it in Russia but we didn't know about it. For example, when I was studying we had two books of exercises by Eimert and Krenek and that was all, apart from a few odd examples or illegal cassettes. But one doesn't need to know that much—if someone says that there's a country where people dance on only one leg and you've never seen it, then you can try it yourself if you want: you might do it better than the people who did it in the first place...! 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.¹⁴

The first work to which he applied serial techniques, *Nekrolog*, was composed in 1960.

Wright noted that he was also known as the first composer from the Soviet Union who used dodecaphonic techniques.¹⁵ Although he was panned by the critics for this work, he nevertheless continued creating his works with serial techniques throughout the 1960s.

Throughout his works, Pärt extended serialism and other modern techniques with new musical idioms. Wright notes, “within the next eight years (after composing his first serial work) Pärt introduced most of the then current Western avant-garde idioms (including collage, aleatoricism and extended instrumental techniques) into his works, while retaining serialism as a basic for his compositions.”¹⁶ One well-known piece called *Credo*, composed in 1968, was the last work combining tonal and atonal techniques within a serial context.¹⁷

¹³ Jamie McCarthy, “An Interview with Arvo Pärt,” *Musical Times* 130 (March 1989): 130.

¹⁴ *Ibid.*

¹⁵ Wright Thesis, 1.

¹⁶ *Ibid.*

¹⁷ Hillier AP, 58.

For several years afterwards, Pärt turned his attention to studying tonal monody and two-part counterpoint exercises.¹⁸ Between 1968-1976 Pärt initiated a “self-imposed silence” during which he published, *Symphony no. 3*,¹⁹ while studying early music:

At the beginning of this period, Pärt heard Gregorian chant for the first time in his life and was completely overwhelmed by what he heard: he immediately sought out other examples, and went on to make an intensive study of early music, including not only Gregorian chant, but also the music of the Notre Dame school, Gillaume de Machaut, Jacob Obrecht, Jan van Ockeghem, Josquin des Prez, Giovanni Palestrina, and Tomás Luis de Victoria.²⁰

In addition to studying early music, Pärt was also interested in the “old music” practice.²¹ He recalled his past experience around 1969-1976 during which time he was trying to break himself from the serialism by studying medieval music. In the time before his mature musical style was invented, Pärt was tied very closely with the Estonian Ensemble of Old Music Hortus Musicus. He concentrated on the performances and rehearsals of that ensemble which opened up his world to old music.²²

After Pärt’s period of silence, he conceived a new idea about the relationship of sounds and silence in his music. In an interview between Pärt and Jamie McCathy, Pärt explains that through silence, the composer can contemplate whether or not he has anything important to

¹⁸ Paul D. Hillier, "Pärt, Arvo," In *Grove Music Online, Oxford Music Online*, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/20964> (accessed February 15, 2012). (hereafter as Hillier NG).

¹⁹ Cargile notes that Pärt emerged only one work, *Symphony no. 3* (1971), during this silent period. Kimberly Anne Cargile, “An Analytical Conductor’s Guide to the SATB a Cappella Works of Arvo Part” (PhD diss., University of Southern Mississippi, 2008), 5.

²⁰ Stephen Wright, “Arvo Pärt (1935-),” in *Music of the Twentieth-Century Avant-Garde: a Biocritical Sourcebook*, ed. Larry Sitsky (London: Greenwood Press, 2002), 358. (hereafter as Wright AP).

²¹ In various sources, such as the interview between Pärt and Elste and Wright’s article, “old music” and “early music” are most likely used to refer to pre-Baroque music.

²² Elste, 339.

write; therefore, only meaningful ideas will appear in the work.²³ Pärt emerged from his self-imposed silence with a new musical style, which he called tintinnabuli. Tintinnabuli, which in Latin means a small bell, is a musical technique that Pärt created from his inspiration of the early music he studied during his silent period between 1969-1976.²⁴ The main idea of the technique is a two-voice musical texture, comprised of the “Melodic voice” (M-voice) and the “Tintinnabuli voice” (T-voice) (will be described below). Although this new technique was influenced by music from the medieval period he had studied, the texture and function of its musical style cannot be described easily in terms of any single musical technique of the past. When people experience Pärt’s tintinnabuli works, they usually refer to the word *silence*, which applies to his music and to some abstract concept.²⁵ Pärt thinks that it is important that music starts from silence as mentioned earlier. He also explains that:

The more important things happen between two people—for example, two people who are very close to each other—are not stated, are not even that possible to express. One doesn’t need to say anything and shouldn’t say anything. Yet these things are very important. There is a sort of barrier, and when someone feels this barrier and the strength of such things I believe they must pause often. These persons mean a great deal. They follow on from what has been said before, or are preparation for what is to come.²⁶

In an anthropomorphic way, Pärt compares rests and silences to the human body, whereas “the beating of the heart or the taking of a breath” is the musical equivalent to the rest and silence in Pärt’s music.²⁷

At the beginning of 1980, Arvo Pärt and his family emigrated to Austria where he received Austrian citizenship. Afterwards, he received a scholarship from Der Deutsche

²³ McCathy, 132.

²⁴ Hillier AP, 74.

²⁵ McCathy, 132.

²⁶ Ibid.

²⁷ Ibid.

Akademische Austauschdienst (German Academic Exchange Service) in 1981-1982; as a result, he and his family moved to Berlin where he remained active as a composer.²⁸ He currently lives in Estonia, his homeland, where he has established his foundation.

Tintinnabuli

Tintinnabuli is a musical technique that Arvo Pärt created around 1976 as mentioned above. The word *tintinnabuli* comes from the word *tintinnabulum*, the Latin term for a small bell. Pärt named this style after he had been practicing the technique.²⁹ Hillier understands Pärt's compositional technique in relation to medieval and Renaissance music. For him, tintinnabuli is a simple structure that is based on a unique relationship between melody and harmony. The harmony does not move, but it leans "sideways" in order to create a musical line:

In medieval and early Renaissance polyphony, the harmony is formed by the confluence of the constituent voices to such an extent that harmonic analysis becomes at best secondary. Similarly, in tintinnabuli music, where the harmony does not 'move' [*sic*], the harmonic framework has been tilted sideways to form a musical line, and the relationship between two different kinds of melodic movement creates a harmonic resonance which is essentially the triad and the fluctuating attendance of diatonic dissonances. What we hear might be described as a single moment spread out in time.³⁰

There are two parts in the tintinnabuli texture, which are the Melodic voice (M-voice) and the Tintinnabuli voice (T-voice) as suggested above. Hillier provides theological terms for the M-voice and T-voice in tintinnabuli technique as, "sin" and "forgiveness" respectively. In their discussions, Pärt described to him that the M-voice represents the subjective world and everyday sin, whereas the T-voice signifies forgiveness. He explained further that the M-voice can appear freely; however, the T-voice always holds tightly to its M-voice. This idea can be related to the "eternal dualism," such as the "body and spirit," or "earth and heaven." Abstractly, Pärt

²⁸ Wright AP, 358.

²⁹ Hillier AP, 97.

³⁰ Hillier AP, 90.

illustrated this “eternal dualism” mathematically “ $1+1 = 1$ ” because the M-voice and T-voice are in reality one voice.³¹

The Tintinnabuli voice is comprised of notes from the tonic triad.³² The Melodic voice, which is similar to a melodic line, can comprise any pitch (including the notes from the T-triad),³³ usually moving by step around the centric pitch, frequently the tonic note.³⁴ According to Hillier, the relationship between the M-voice and T-voice is predetermined for every piece; moreover, some works are based on “some numerical pattern or by the syntax and prosody of a chosen text. Very often these two ideals are combined.”³⁵

In some ways similar to Schenker and other theorists, Pärt takes the triad and musical tonality from the overtone series, and views them as a natural occurrence. Since each of Pärt’s tintinnabuli works is based solely on one triad, the music loses its harmonic tension and release, which are the basic dynamics of harmony in the common-practice music.³⁶ However, Wright claims that there is another perspective from which Pärt views his music; and harmony in the tintinnabuli technique is related to the natural sound of a tuned bell (to be described later).³⁷

³¹ Hillier AP, 96.

³² Tintinnabuli technique is influenced by acoustics of small bells. It is a result of heterophony. Hillier explains that when we strike a bell, it rings. The sound will resonate indefinitely; however, human’s ears can not perceive the point at which it stops vibrating. This sound-image is compared to Pärt’s tintinnabuli concept. He controls the expression of the triad in music so that it includes overtones and undertones (Hillier AP, 86), which I believe is an equivalent to the hum tone in the bell’s acoustic (to be discussed in later detail). This explains why Pärt uses triads in his tintinnabuli music, although the style was influenced by medieval music, at which time harmony had not yet become a basic structure of music.

³³ There are some terms that I use in this study.

M-voice and T-voice: Hillier uses them to call part of the tintinnabuli texture.

T-triad note: Any note from the tonic triad.

³⁴ Most of Arvo Pärt’s tintinnabuli works are in the Aeolian mode, but we can infrequently find some works in the Ionian mode. For this reason, the tonic note of tintinnabuli music depends on the mode of the music.

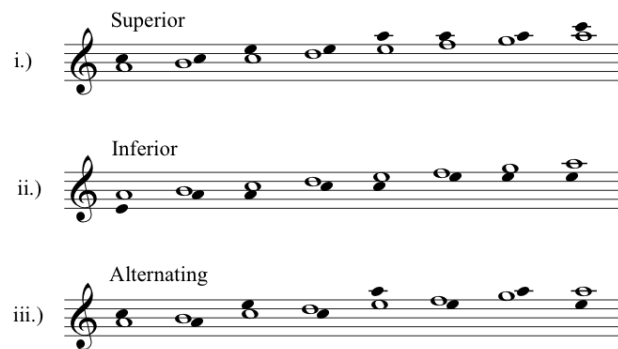
³⁵ Hillier NG

³⁶ Wright Thesis, 72.

³⁷ Wright Thesis, 73.

Pärt's T-voice and M-voice not only concern themselves with holy words as in Gregorian chant, but they are also rational and systematic because each word and punctuation mark affects the melody. Leopold Brauneiss remarks that the fact that all notes from tintinnabuli works come from the melodic line is similar to the polyphony up to the 1700s, which involved decoration of a "cantus firmus." He explains that the second voice of Organa, one of the earliest forms of polyphony, also appears in parallel motion and in the perfect intervals with the plain song,³⁸ which is similar to the texture of the tintinnabuli music. Marguerite Bostonia further mentions that the usage of M-voice and T-voice according to Hillier is specific and concise, and not to be confused with functional harmony.³⁹

Hillier demonstrates through the use of an A minor scale how the M-voice and T-voice are related to each other;⁴⁰ the T-voice also can remain above, or below the M-voice, or can alternate between above and below the M-voice (see Example 1):



Example 1: Whole notes represent members of the M-voice, and quarter notes represent members of the T-voice

- i.) The T-voice that is located above the M-voice is called "superior."
- ii.) The T-voice that that is located below the M-voice is called "inferior."
- iii.) The T-voice that alternates between above and below M-voice is called "alternating."

³⁸ Leopold Brauneiss. "Arvo Pärt's Tintinnabuli Style: Contemporary Music Toward a New Middle Ages?." In *Postmodern Medievalisms, Studies in Medievalism XIII 2004*, ed. Richard Utz and Jesse G. Swan (Cambridge: D.S.Brewer, 2005), 32.

³⁹ Marguerite Bostonia, "Musical, Cultural, and Performance Structures in the Organ Works of Arvo Pärt." (Unpublished PhD diss., West Virginia University, 2009), 43.

⁴⁰ Hillier AP, 93.

With one of the locations above, the T-voice also has to follow one of two positions, which is determined by the distance between the M-voice and the T-voice pairs (see Example 2):

The image displays six musical staves, each representing a different configuration of M-voice and T-voice parts. The staves are labeled as follows:

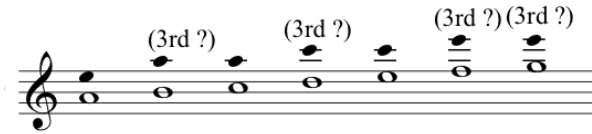
- A.) + i.) Superior at 1st position: The T-voice (quarter notes) is positioned above the M-voice (whole notes) and is in the first position.
- A.) + ii.) Inferior at 1st position: The T-voice (quarter notes) is positioned below the M-voice (whole notes) and is in the first position.
- A.) + iii.) Alternating at 1st position: The T-voice (quarter notes) alternates between being above and below the M-voice (whole notes) and is in the first position.
- B.) + i.) Superior at 2nd position: The T-voice (quarter notes) is positioned above the M-voice (whole notes) and is in the second position.
- B.) + ii.) Inferior at 2nd position: The T-voice (quarter notes) is positioned below the M-voice (whole notes) and is in the second position.
- B.) + iii.) Alternating at 2nd position: The T-voice (quarter notes) alternates between being above and below the M-voice (whole notes) and is in the second position.

Example 2: Whole notes represent members of the M-voice, and quarter notes represent members of the T-voice (the locations of the T-voice are described in Example 1)

- A.) The M-voice with the nearest T-triad is called “first position.”
- B.) The M-voice with the second nearest T-triad is called “second position.”

Hillier also explains that the T-voice can be transposed occasionally to a different octave.

This may suggest that there may be a third position; as it does not resemble first or second position (see Examples 3 and 4):



Example 3: Whole notes represent members of the M-voice, and quarter notes represent members of the T-voice

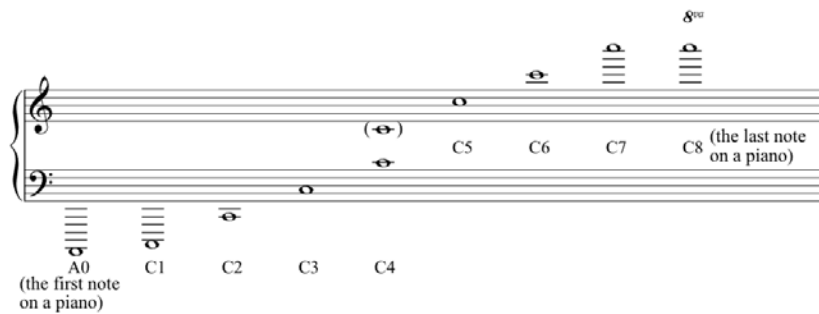
From Example 3, the T-voice is superior, and it presents the furthestmost triadic note in the same octave from the M-voice—which are the following notes respectively: E5, A5, A5, C6, C6, E6, E6, and E6.⁴¹ As a result, the T-voice notes, A5, C6, E6, and E6, that hold the M-voice notes B4, D5, F5, and G5, seem to create a third position (as shown (3rd ?) in Example 3). However, Hillier claims that this T-voice line is only an inferior T-voice at the first position as shown in Example 4.⁴²



Example 4: The whole notes represent the M-voice, and the quarter note heads represent T-voice

From Example 4, the T-voice notes are transposed down from the T-voice in Example 3 by an octave. Therefore, the T-voice in Example 3, which may look like it is in superior with indefinite positions, really is in inferior at the first position in Example 4.

⁴¹ This register system is used throughout the study.



⁴² Hillier AP, 93-94.

According to Paul Hillier, there are four different modes of melodic voice in tintinnabuli style. When the M-voice ascends by step up from the T-triad note, he calls it the first mode. The second mode is similar to the first mode, but instead of ascending by step from the T-triad note, it descends by step from the T-triad note. The third mode involves the M-voice descending by step toward the T-triad note, and when the M-voice ascends by step toward the T-triad note, the fourth mode is created (see Example 5):⁴³



Example 5: M-voice modes

As mentioned earlier there are three different styles of T-voice and M-voice that appear in the first decade of Arvo Pärt's usage of tintinnabuli. Pärt creates new styles of his technique, and uses them differently, but the nature of his composition does not totally discard previous techniques. Instead, Pärt sometimes combines different techniques and materials in a single work. Three types of his usage of the tintinnabuli technique in music can be heard throughout the works during year 1976-1985. This thesis defines the three types of Pärt's tintinnabuli works in the following chapters.

Bell Acoustics and Tintinnabuli Music

According to Percival Price, bells have been part of humanity for centuries. They have shown up in almost every society since Neolithic times when they have been made and used. Therefore, bells cover a very large field, and they are deeply part of mankind's societies according to Price.⁴⁴ Arvo Pärt and his music are inescapably influenced from the sound of bells. Bostonia claims in her study that Pärt is like other Russian composers that have had the bell's

⁴³ Hillier AP, 95-96.

⁴⁴ Percival Price, *Bells and Man* (New York: Oxford University Press, 1983), iv.

overtones as inspiration.⁴⁵ For this reason, it is important to study some characteristics of the bell and its overtone series in general in order to approach Pärt's music with respect to his tintinnabuli style.

The casting and tuning of bells have only become perfected in recent years, and very few have reached a "pinnacle of perfection."⁴⁶ This is true despite advances in technology, and also the founders have a greater understanding of principles in bell engineering. Founding a bell is still more an art than science. Wendell Westcott gives a definition of bells from dictionaries in *Bells and Their Music*:

Most dictionaries define "bell" as a hollow cup-shaped instrument, usually metallic, which vibrates or gives forth a ringing sound when struck. Although most bells through the ages have indeed been made of metals-of [sic] which bronze alloys are foremost-other [sic] hard substances have also been found to ring and therefore have been fashioned into bells: glass, clay, wood, and porcelain. In fact, any hard material capable of sustaining vibration and of being formed into a hollow shape can become a bell.⁴⁷

The ring of the bell always comes from the blow of an object striking it; therefore, bells are classified as percussion instruments, similar to gongs. Bells produce the widest amplitude of vibration when they are struck at or near the rim of the bell.⁴⁸ Bostonia explains in the study, *Musical, Cultural, and Performance Structures in the Organ Works of Arvo Pärt*, that whenever the bell is struck, it does not produce just one note, but it creates a chord.⁴⁹ Because of the unique shape of the bell, the overtone of the bell is different from the overtone of string and wind instruments. In addition, the partials on the harmonic series of a string do not change, but a bell's

⁴⁵ Bostonia, 30.

⁴⁶ Wendell Westcott, *Bells and Their Music: With a Recording of Bell Sounds* (New York: G.P. Putnam's Sons, 1970), 39.

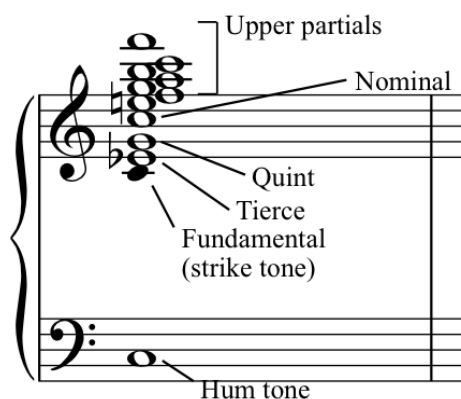
⁴⁷ Westcott, 41.

⁴⁸ Ibid, 42.

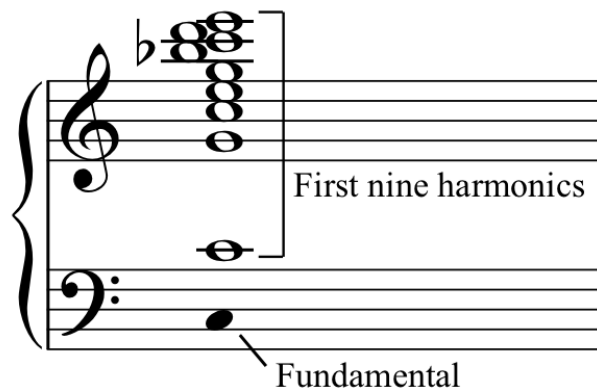
⁴⁹ Bostonia, 30.

partials depend on its shape, and how it is founded.⁵⁰ Therefore, partials of a bell always differ from the fundamental tone.

Every strike of a tuned bell creates many partials which are described by Westcott as “frequencies of specific pitches,” and every partial has a different dynamic and duration.⁵¹ The significant partials of a well-tuned bell that can be heard when struck are the prime, hum tone, tierce, quint, and nominal, as shown in Example 6a.⁵²



Example 6a: Harmonic series of a well-tuned bell



Example 6b: Harmonic series of a string

When a bell is struck, the strike-tone is called the prime or fundamental tone. It has the loudest dynamic, but a short duration.⁵³ Because of its loudest dynamic, it is the first pitch that is recognized when striking a bell. The hum tone is approximately one octave lower than the prime tone. It has the longest vibration of all partials, but the lowest dynamic.⁵⁴ According to Westcott, the hum tone should correctly be called the bell’s first partial.⁵⁵ The next upper tone is the tierce,

⁵⁰ Westcott, 43.

⁵¹ Westcott, 42.

⁵² Example 6a, harmonic series of a well-tuned bell, is my attempt to digitally reproduce the example from Westcott, p. 42.

⁵³ Bostonia, 31.

⁵⁴ Ibid.

⁵⁵ Westcott, 42.

which has a frequency approximately a minor third above the prime tone. Continuing upward, the quint and the nominal are a fifth and octave above the prime tone. The upper partials shown in Example 6a are approximate pitches of an ideal bell profile, which has also been ground for exact pitch.⁵⁶

Bostonia points out that the minor third that is formed by the prime tone and the tierce creates a great difference between harmonic series of bell and the standard string.⁵⁷ The minor third appears on the second and third partial on the bell's harmonic (C and E flat in Example 6a), but it appears between the fifth and sixth partial on the harmonic series of the string, which are the note E5 and G5 on the Example 6b.⁵⁸ The partials of a bell create a stronger relationship to the fundamental than the vibrating of a string because upper partials are closer to the fundamental than the partials of string.

Hillier explains that England is a country renowned for bells because they have over five thousand churches in the country, each having at least five bells for centuries. All bells are normally tuned in a diatonic major scale.⁵⁹ Moreover, Pärt has spent some time of every year in England; for this reason, Hillier believes the sound of the bells in England has to be a vivid experience for Pärt himself.⁶⁰ As described earlier, Pärt invented his tintinnabuli technique after his "self-imposed silence" period. Each part of the structure of tintinnabuli music is related to the

⁵⁶ Ibid.

⁵⁷ Bostonia, 31.

⁵⁸ Example 6b, harmonics of a vibrating string, is my attempt to digitally reproduce the example from Westcott, p. 43.

⁵⁹ Hillier AP, 18.

⁶⁰ Ibid, 19.

bell's harmonic series. I believe that the hum tone of a bell's acoustic is like a drone, which is often the centric pitch of a piece by Arvo Pärt. Drones occur in many Pärt's tintinnabuli works such as *Cantus in Memory of Benjamin Britten*, *Cantate Domino canticum novum*, *Trivium*, and *Für Alina*. In Example 7,⁶¹ there some drones that give a great effect of the hum tone in the bell acoustic.

---> **Ruhig, erhaben, in sich hineinhorchend**

The image shows a musical score for piano, Example 7, from Arvo Pärt's *Für Alina*. The score is in G major (one sharp) and 4/4 time. It consists of three staves: two treble clefs and one bass clef. The tempo/mood is indicated as 'Ruhig, erhaben, in sich hineinhorchend'. The first measure (m. 1) has rests in the treble clefs and a whole note G2 in the bass clef. The second measure (m. 2) has a piano (*p*) chord of G4 and B4 in the treble clefs and a whole note G2 in the bass clef. A 'Ped.' (pedal) symbol is placed below the bass clef staff, with a slur indicating the sustained drone. A measure number '8' is written above the first measure.

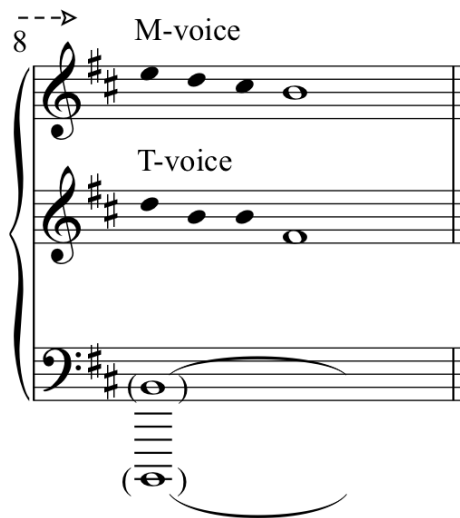
Example 7: Excerpt from Pärt's *Für Alina* for piano, mm. 1-2

From Example 7, the drones low B0 and B2 are similar to the hum tone effect of a bell. Because the work was composed for a piano, the sound that these drones produce sounds like the harmonics of a vibrating string. The T-voice notes in most of the tintinnabuli works come from the minor triad of the centric pitch, and they also have a similar characteristic to the minor chord produced by the fundamental, tierce, and quint, the main partials of the bell's harmonic series (see Example 8):⁶²

⁶¹ Example 7 from the original score *Für Alina*, published by Universal Edition A.G., Wien 1990, is my attempt to digitally reproduce the work via Sibelius ver.6, a computer program. Sibelius is used for all musical examples.

⁶² The original score *Für Alina* was published by Universal Edition A.G., Wien 1990. Example 8 is my reproduction with some text notes and B0, and B2 added.

Note: On the lowest staff of m. 1, there are B0 and B2 that are sustained until m. 11 in the original score. I show only slurs, which are indicated in the original score in the next examples from *Für Alina*.



Example 8: Excerpt from Pärt's *Für Alina* for piano, m. 4

Since the T-voice is homologous to the upper harmonics of bell, the M-voice, as it is called the Melodic voice, has a higher probability to act like the strike-tone in the sound of bell. The tintinnabuli musical structure generally resembles the overall characteristic of the bell's harmonics; however, the positions (1st, 2nd, and 3rd) and relative positions (superior and inferior) of the tintinnabuli music may make them sound slightly different. These are only some of the interpretations of the harmonic series of a bell and the tintinnabuli music; however, there are some further relationships between them that will be further explored.

CHAPTER 2

TYPE 1

The three following chapters describe each type of the tintinnabuli music in greater detail, and each chapter provides musical analyses of two of Pärt's tintinnabuli works that are consistent with the usage of the technique. *Für Alina* for piano, and *Cantus in Memory of Benjamin Britten* for string orchestra and bell are the works explored for the first type in Chapter 2. Chapter 3 illustrates the second type of tintinnabuli technique, and provides musical analysis of two works that have the same instrumentation, *Missa Sillabica* and *Cantate Domino canticum novum* for choir SATB or soloists and organ. The third type of the technique, which is derived from the first two types, is explained in Chapter 4. The musical analysis of *Stabat Mater* for string trio and solo voices (Soprano, Contratenor, and Tenor) and *Es sang vor langen Jahren* for solo alto, violin, and viola are the corresponding examples to the third type in this chapter.

The first several works that emerged after Pärt had turned to “self-imposed silence” and invented his Tintinnabuli in 1976 are *Modus* (1976), *Für Alina* (1976), and *Trivium* (1976). In *Modus*, the earliest of these works, the tintinnabuli technique is not obvious; rather, this work contains some melodic lines that show the basic structural style of tintinnabuli, as will be shown in later examples. However, the first public appearance of a tintinnabuli, *Für Alina*, shows a clearer version of Pärt's technique. The melodic voice note (M-voice), which does not belong to the T-triad, moves mostly in stepwise manner. Leaps occur between two notes of the tintinnabuli triad (T-triad). Example 9 from *Für Alina* shows the leaps between T-triad notes and stepwise motion connecting T-triad notes.⁶³

⁶³ The original score *Für Alina* was published by Universal Edition A.G., Wien 1990. Example 9 is my reproduction with some text notes added.

The image shows a musical score for piano, m. 6, from Pärt's *Für Alina*. It consists of three staves. The top staff is labeled 'M-voice' and contains a sequence of notes: D5 (quarter), F#5 (quarter), B5 (quarter), C#6 (quarter), and B5 (half). Above this staff, five arrows point to the notes D5, F#5, B5, C#6, and B5, with the label 'T-triad notes' above them. The middle staff is labeled 'T-voice: Inferior at 1st position' and contains notes: D5 (quarter), F#5 (quarter), B5 (quarter), C#6 (quarter), and B5 (half). The bottom staff is a bass clef staff with a whole note chord consisting of D5, F#5, and B5. A '8 ->' symbol is at the top left of the first staff.

Example 9: Excerpt from Pärt's *Für Alina* for piano, m. 6

Für Alina (see Example 9) is composed in the Aeolian mode. The T-triad notes are B, D, and F sharp. The right hand part that takes the M-voice role shows leaps only between D5-F sharp 5, F sharp 5-B5, and B5-D5, which are all of T-triad notes. However, steps occur between B5-C sharp 6 and C sharp 6-B5 because C sharp 6 is not a T-triad note.

Alternatively, the M-voice can follow voice leading. Example 10 shows the line of M-voice that moves around the half note F that belongs to the T-triad notes, D, F, and A.⁶⁴

The image shows a musical score for Example 10, consisting of two staves. The top staff is labeled 'T-voice' and contains a half note F. The bottom staff is labeled 'M-voice' and contains a sequence of notes: D5 (quarter), F#5 (quarter), B5 (quarter), C#6 (quarter), and B5 (half). A dynamic marking 'p' is present at the beginning of the M-voice line.

Example 10: Excerpt from the manual part of Pärt's *Trivium für Orgel*, movement 1, mm. 4-5

Example 11 is an interpretation that describes the relationship between M-voice notes of Example 10 with a Schenkerian notation.⁶⁵ The whole note represents the T-triad note, and it

⁶⁴ The original score *Trivium für Orgel* was published by Musikverlag Hans Sikorski, Hamburg 1988. Example 10 is my reproduction with some text notes added.

shows that pitch G4 leaps while E4 moves by a step to F4 (the T-triad note). From this example, it seems like G4 only leaps to E4, but the slur shows that G4 connects by a step to F4. Both G4 and E4 are non-T-triad notes that move centricity around F4 in the M-voice line.



Example 11: Interpretation of the M-voice from Pärt's *Trivium für Orgel*, movement 1, mm. 4-5 showing how the M-voice moves around the T-triad note.

From Example 11, I can hear the voice leading from G4-F4-E4 in a Schenkerian perspective; however, there are only some of the Schenkerian concepts that can be applied properly to Pärt's music, such as voice leading without tonic-dominant polarity. Also, some significant materials of Schenkerian theory, such as the fundamental line and fundamental structure (*Urlinie* and *Ursatz*) may be inappropriate for tintinnabuli music.

As mentioned earlier, *Modus* appears to be one of the earliest tintinnabuli works. The music exhibits the techniques that are similar to tintinnabuli technique; however, the technique was not fully formed. Therefore, I would like to explain the shadow of tintinnabuli in *Modus* after describing the nature of M-voice in the first type. The short passage from *Modus* (see Example 12) shows that the melody tends to move in a manner similar to the M-voice of tintinnabuli technique, although there is no appearance of a tintinnabuli voice (T-voice).⁶⁵ All the notes move by step, except the T-triad note that leaps to another T-triad note. The note E5 at the second quarter note of the upper voice leaps up to A5, then leaps back to E5. Similarly, A4 at the third dotted eighth note of the lower voice leaps down to E4, and then back up to A4.

⁶⁵ Stem and slur are significant notations in Schenkerian analysis; they show a relationship of subordination among pitches in a tonal configuration and melodic line. Allan Forte and Steven E. Gilbert, *Introduction to Schenkerian Analysis* (New York: WW Norton and Company, 1982), 10.

⁶⁶ The original score *Modus* was published by NSVL Muusikafondi EV osakond in Tallinn 1977. Example 12 is my reproduction. The example reflects the spareness of the original score.



Example 12: Excerpt from Pärt's *Modus*, movement 2, m. 1

I believe that the early piece, *Modus*, can neither be interpreted as other tintinnabuli works, nor fall into any of the tintinnabuli types. In my opinion, this is because *Modus* has only some traces of the M-voice line, and does not include any T-voice line. All the tintinnabuli types, on the other hand, are considered mainly by the presence of a T-voice. In this first type, the T-voice continues in the same line and instrument, in the same T-voice position, either superior or inferior. In *Für Alina für Klavier*, all notes in the T-voice are inferior at the first position (see Example 13), except the last note of the T-voice at m. 11. The C-sharp is the only note, that is not in the T-triad; and it is also a second scale degree of the scale. Pärt marks an asterisk sign underneath the note in order to show what I consider to be a kind of non-functional interruption⁶⁷ (see Example 13).⁶⁸ Although some explanation from the Schenkerian theory can be applied to Pärt's music, some terms may have slightly different meanings. *Interruption* (*Unterbrechung*) in a Schenkerian analysis appears in the *fundamental line*, and it appears when there is a repetition of the *primary tones* ($\hat{3}-\hat{2} // \hat{3}-\hat{2}-\hat{1}$).⁶⁹ The interruption in *Für Alina* appears at the same place as C sharp 5, the second scale and the only non-T-triad note in the T-voice line. However, there

⁶⁷ The term *non-functional interruption* in this study is not used to refer to functional harmony (tonic, subdominant, and dominant), nor to the step theory of Schenker.

⁶⁸ The original score *Für Alina* was published by Universal Edition A.G., Wien 1990. Example 13 is my reproduction with some text notes added.

⁶⁹ Forte, 168.

is no *fundamental structure* and repetition of the *fundamental line* in the piece. For this reason, the end of m. 11 is better identified as a non-functional interruption.

Example 13: Excerpt from Pärt’s *Für Alina* for piano, mm. 10-11

In the manual part of *Trivium für Orgel* movement 1 (Example 14),⁷⁰ Pärt divides the M-voice and T-voice into two different pairs, one in the right hand part and other in the left hand part. The upper voice of the right hand part takes the T-voice part, and the lower voice of the left hand is the M-voice. The T-voice remains superior at the second position. On the other hand, the T-voice on the left hand part remains inferior at the second position.

Example 14: Excerpt from Pärt’s *Trivium* for organ, movement 1, mm. 1-5

⁷⁰ The original score *Trivium für Orgel* was published by Musikverlag Hans Sikorski, Hamburg 1988. Example 14 is my reproduction with some text notes and bracket signs added.

Analysis of *Für Alina*

In 1976 Pärt composed *Für Alina* a short piano solo work for a twelve-year-old Estonian girl who had immigrated to London.⁷¹ This is the first piece by Pärt that demonstrated a significant character of tintinnabuli technique; therefore, this work suggests the beginning of tintinnabuli compositional period of Arvo Pärt. Although this piece does not require advanced piano skills; it is full of beauty, purity, and simplicity. Pärt explains that it sounds neutral when only the right hand or left hand part is played alone, but when both parts are played together, it sounds more complex.⁷² In a DVD documentary, Pärt compares the beauty of the piece to a blade of grass or flower:

A need to concentrate on each sound, so that every blade of grass would be as important as a flower... It could be like a break on the radio. Such signals sometimes sound as if he lasted on entire life, or future, or past, outside time. Like I said a blade of grass has the status of a flower... It's not the tune that matters so much here. It's the combination with this triad. It makes such a heart-rending unison. The soul yearns to sing it endlessly.⁷³

Because there are not many notes in this piece, Pärt places greater emphasis on each sound. So it is important for the performer and listener to focus on every single pitch when the piece is played. In the other words, the concentration of the performer (and listener) is more important than the pianist's technical skills in order to appreciate *Für Alina* musically.

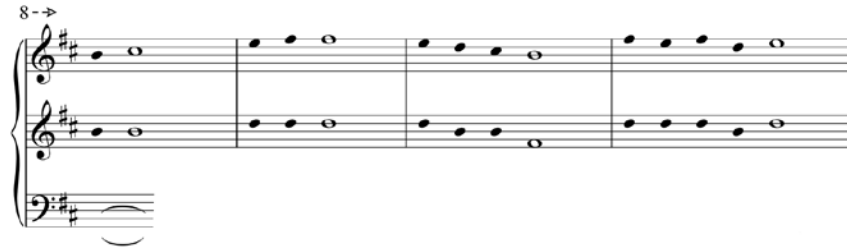
The piece starts with the note B0 and B2 that are droned by the pedal until m. 11. There is only one dynamic sign (*p*) which appears throughout the whole piece, with no time signature indicated. Each note does not have a specific rhythm; however, Pärt uses quarter note heads to signify a shorter rhythm, and whole notes for a longer rhythm. Both hands play together in rhythmic unison, but the value of quarter note heads and whole notes represent the rhythmic

⁷¹ Wright Thesis, 64.

⁷² *Arvo Pärt: 24 Preludes for a Fugue*, DVD, directed by Dorian Supin (2002; Paris, France: Idéale Audience International, 2005), track 7.

⁷³ *Ibid*, transcription of translation from DVD.

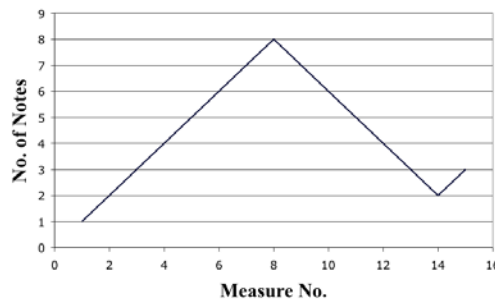
values that correspond with the end of every phrase. Pärt sets up this piece in fifteen measures long, and adds one more note in every measure up to eight notes in m. 8 (see Example 15):⁷⁴



Example 15: Excerpt from Pärt's *Für Alina* for piano, mm. 2-5

After reaching m. 8, the amount of notes reduces at the second half of the piece, except in the last measure that has three notes.

Symmetry is one of Pärt's most common formal characteristics. We can find symmetrical melody, harmony, and length in many of his tintinnabuli works. *Für Alina* is one of his tintinnabuli works that has a symmetrical length. The length itself can be compared with a pyramid shape, with m. 8 on the tip. However, the climax of the piece is not at m. 8 which contains the most notes, but rather m. 11 that has a release pedal sign, breath mark; in addition the T-voice line contains one C sharp, on the last note of the left hand part at m. 11, which is not a T-triad note (see Example 16).



Example 16: A graph showing the relationship between the measure numbers and the number of notes from Pärt's *Für Alina*.

⁷⁴ The original score *Für Alina* was published by Universal Edition A.G., Wien 1990. Example 15 is my reproduction.

Example 16 shows that the amount of notes in each measure creates a pyramid shape. I find it hard not to believe that Pärt had not planned the symmetrical form, and he added one note to every measure in the first half of the piece and reduced the number of notes in the second half. Although the last measure does not have one note to complete the right edge of the pyramid; there are three notes ending at m. 15, which is analogous to a cadence in tonal music. In addition, the over all shape of the musical is still symmetrical.

The T-voice and M-voice lines are separated perceptibly. The right hand part takes the M-voice line, and T-voice stays on the left hand part. The T-voice remains inferior at the first position throughout the piece. Pärt puts a release pedal sign in the Universal edition (1990) score; moreover, he has drawn a picture of a flower in the right hand margin of the score.⁷⁵ I believe it is a reflection of Pärt's concern about every sound and his comparison of the music and flower as mentioned earlier.

The M-voice in *Für Alina* does not strictly follow the mode in every single note. It moves mostly in stepwise fashion. Leaps occur between two T-triad notes, or non-T-triad notes that move around T-triad notes. Example 17 shows the stepwise movement of the M-voice.⁷⁶

Example 17: Excerpt from Pärt's *Für Alina* for piano, m. 4

⁷⁵ Hillier AP, 88-89.

⁷⁶ The original score *Für Alina* was published by Universal Edition A.G., Wien 1990. Example 17 is my reproduction with some text notes added.

Also, Example 18 shows the leaps that occur between T-triad notes.⁷⁷ Only the C sharp 6 note in the M-voice line moves by step between the two notes, B5, while other notes, which are T-triad notes, contain the leaps.

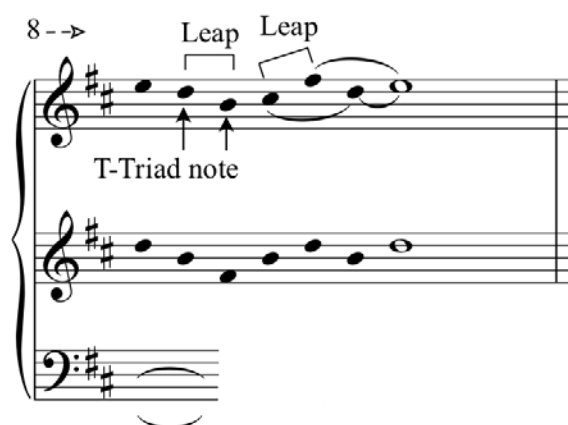
Example 18: Excerpt from Pärt's *Für Alina* for piano, m. 6

There are some phrases that contain leaps to T-triad notes and non-T-triad notes; however, these notes are related to each other by subordinating to the similar melodic goal.

Example 19: Excerpt from Pärt's *Für Alina* for piano, m. 7

⁷⁷ The original score *Für Alina* was published by Universal Edition A.G., Wien 1990. Example 18 is my attempt to reproduce it in my computer program with some text notes, arrow signs added.

In Example 19, there is one leap between note D5 and B4, and another leap between note C5 sharp and F sharp 5.⁷⁸ The first leap is usual for the M-voice because both D5 and B4 are T-triad notes. The second leap is between one non-T-triad note, C sharp 5, and one T-triad note, F sharp 5, but they are dependently connected to the note D5 and E5 at the end of the phrase. Example 20 is an excerpt and interpretation that describes the relationship between M-voice notes of Example 19 with a modified Schenkerian notation. Using the slurs in the Schenkerian style is a way to indicate the melodic direction. The M-voice in Example 20, instead of leaping from C sharp 5 to the F sharp 5, implies a scalar motion from the note C sharp 5 toward F sharp 5 through the notes D5 and E5 at the end of the phrase (see Example 20):⁷⁹



Example 20: Excerpt from Pärt's *Für Alina* for piano, m. 7

When the T-triad note in this work does not move stepwise to the non-T-triad note, or the other way around, these leaps have a scalar relationship with other insubordinating notes in the same

⁷⁸ The original score *Für Alina* was published by Universal Edition A.G., Wien 1990. Example 19 is my reproduction with some text notes, arrow signs, and bracket added.

⁷⁹ The original score *Für Alina* was published by Universal Edition A.G., Wien 1990. Example 20 is my reproduction with some text notes, arrow signs, bracket, and my interpretation added. On the bass clef, the slurs are from the original score, but the slurs on the top treble clef are from my interpretation.

phrase. Before the M-voice drives to the climax of the piece at the end of m. 11, there are many leaps which occur between T-triad and non-T-triad notes as shown in Example 21:⁸⁰

The image shows a musical score for two staves (treble and bass clefs) in a key signature of two sharps (F# and C#). The treble staff contains a melodic line with several notes. Annotations include:

- '8-->' at the beginning of the treble staff.
- 'Non-T-Triad note' with an arrow pointing to a note in the treble staff.
- 'Leap' with arrows pointing to intervals between notes in the treble staff.
- 'M-voice' with an arrow pointing to a note in the treble staff.
- 'T-Triad note' with an arrow pointing to a note in the treble staff.
- Another 'Leap' annotation with an arrow pointing to an interval in the treble staff.
- A '*' symbol is located below the right-hand staff.

Example 21: Excerpt from Pärt's *Für Alina* for piano, mm. 10-11

Example 22 is another graph that illustrates the subordinating to the similar melodic goal of the M-voice between two measures that move forward to the climax of the piece.⁸¹

The image shows a musical score for two staves (treble and bass clefs) in a key signature of two sharps (F# and C#). The treble staff contains a melodic line. Annotations include:

- '8-->' at the beginning of the treble staff.
- A large bracket or slur spanning across two measures in the treble staff, indicating a melodic goal.
- A '*' symbol is located below the right-hand staff.

Example 22: Excerpt from Pärt's *Für Alina* for piano, mm. 10-11

⁸⁰ The original score *Für Alina* was published by Universal Edition A.G., Wien 1990. Example 21 is my reproduction with some text notes, arrow signs, and bracket added.

⁸¹ The original score *Für Alina* was published by Universal Edition A.G., Wien 1990. Example 22 is my reproduction with some text notes, arrow signs, bracket, and my interpretation added. The slurs on the bass clef are from the original score, but the slurs on the top treble clef are from my interpretation.

In Example 22, the large leap occurs between A5 and B4 on the top treble clef. The slurs illustrate the subordinating relationship among the M-voice notes. As a result, the interpretation shows that B4 only moves stepwise to A5 before reaching the non-functional interruption in m. 11, as explained earlier in Chapter 2. The next work to be analyzed is *Cantus in Memory of Benjamin Britten*. It is a larger piece which is categorized in the first type of Arvo Pärt's tintinnabuli music.

Analysis of Cantus in Memory of Benjamin Britten

Cantus in Memory of Benjamin Britten was composed for string orchestra and bell in 1977. As was the case in his other important works, *Fratres*, *Summa*, *Tabula Rasa*, and *Passio*, Pärt wrote it after he had used his medieval music experience to develop a monodic style; afterwards Pärt continued to find additional ways to combine two voices, and to create new forms.⁸² The piece shows Pärt's inspiration of bells not only through the tintinnabuli technique, but also the combination of the string instrument and bell. This work is titled to reflect Pärt's response to the death of Benjamin Britten:

In the past years we have had many losses in the world of music to mourn. Why did the date of Benjamin Britten's death – December 4, 1976 – touch such a chord in me? During this time I was obviously at the point where I could recognize the magnitude of such a loss. Inexplicable feelings of guilt, more than that even, arose in me. I had just discovered Britten for myself. Just before his death I began to appreciate the unusual purity of his music – I had had the impression of the same kind of purity in the ballads of Guillaume de Machaut. And besides, for a long time I had wanted to meet Britten personally – and now it would not come to that.⁸³

Pärt's usage of the bell in *Cantus in Memory of Benjamin Britten* also suggests Britten's death because bells are used as part of funeral rituals in some cultures. For example, when a "passing

⁸² Hillier AP, 74-75.

⁸³ Wolfgang Sandner, Program notes to *Arvo Pärt: Tabula rasa*, Various performers. Compact Disc ECM 1275, 1984.

bell” was rung, people that heard the bell would stop doing their activities or works and pray for the soul in early Christianity.⁸⁴

The piece starts *ppp* with a bell, which repeats with the same eight-measure rhythmic pattern starting at m. 9 (see Example 23):

The image shows two staves of musical notation for Campana. The top staff is labeled 'Rhythmic pattern at mm. 1-8' and the bottom staff is labeled 'Rhythmic pattern at mm. 9-88'. Both staves show a sequence of notes: a dotted half note, a quarter note, a quarter note, a quarter note, a quarter note, a quarter note, a quarter note, and a quarter note. The notes are connected by a slur.

Example 23: Rhythmic pattern of mm. 1-9 and mm. 9-88 in the bell part of Pärt’s *Cantus in Memory of Benjamin Britten*.

In Example 23, the rhythm of the first eight measures is slightly different from the rhythmic pattern of m. 9 to the end of the piece by one measure. Pärt adds an extra dotted half note to m. 6 instead of a bar rest. In my opinion, it is because the bell is assigned to play with *ppp*, and the violin I starts at the second half of m. 7 (see Example 24):⁸⁵

The image shows two staves of musical notation. The top staff is for Campana, starting with a tempo marking '(♩ 112-120)'. It contains a sequence of notes: a dotted half note, a quarter note, a quarter note, a quarter note, a quarter note, a quarter note, a quarter note, and a quarter note. The notes are connected by a slur. The bottom staff is for Violin I, divided into two parts. The first part is silent. The second part starts at the second half of m. 7 with a dotted half note, a quarter note, a quarter note, a quarter note, a quarter note, a quarter note, a quarter note, and a quarter note. The notes are connected by a slur. The Campana part has a *ppp* dynamic marking. The Violin I part has a *ppp* dynamic marking and a 'con sord.' marking. There are also some markings for 'V' and 'V' above the notes.

Example 24: Excerpt from the soprano part of Pärt’s *Cantus in memory of Benjamin Britten* for string orchestra and bell, mm. 1-7

There might have been enough silence for listeners to lose their focus if Pärt did not add that extra dotted half note at m. 6. In addition, it is the only note in the bell part that does not have a slur.

⁸⁴ Price, 112.

⁸⁵ The original score *Cantus in memory of Benjamin Britten* was published by Universal Edition A.G., Wien 1990. Example 24 is my reproduction.

The rhythmic pattern at mm. 9-88 gives a characteristic of early music. According to Wright, this repetition of the bell is similar to a *talea* in medieval music.⁸⁶ Ernest H. Sanders explains the definition of *Talea* in Grove Music online:

[Talea is] a medieval term usually understood to denote a freely invented rhythmic configuration, several statements of which constitute the note values of the tenor of an isorhythmic motet (or of its first section, if diminution is later applied to the tenor). While medieval writers were far from unanimous in their use of ‘talea’ and ‘color’, modern musicology has been influenced by the definitions that Johannes de Muris, the first to mention talea (c1340), ascribed to ‘some musicians’: ‘A configuration of pitches and its repetitions are called “color”; a rhythmic configuration and its repetitions are called “talea.”’⁸⁷

There are also five rhythmic layers in the work that function in a canonic style, and each layer is divided and assigned to each instrument in the string orchestra, which are violin I, violin II, viola, cello, and double bass. The higher register instrument of each pair plays a rhythmic pattern that is twice as fast as the lower register instrument (see Example 25):⁸⁸

The image shows a musical score for five string instruments: Violin I, Violin II, Viola, Cello, and Double bass. The time signature is 6/4. The score illustrates a canonic structure where the rhythmic pattern of the higher register instrument in each pair is twice as fast as the lower register instrument. Violin I has the fastest pattern (two notes per measure), followed by Violin II (one note per measure), Viola (two notes per measure), Cello (one note per measure), and Double bass (one note per measure).

Example 25: Rhythmic pattern of the string instruments in Pärt’s *Cantus in memory of Benjamin Britten* for string orchestra and bell

Example 25 shows that the rhythm of the higher register instruments are two times faster than the lower register instruments. All of the string instruments alternate long - short note values every

⁸⁶ Wright Thesis, 82.

⁸⁷ Ernest H. Sanders, "Talea" In *Grove Music Online*. *Oxford Music Online*, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/27414> (accessed May 2, 2012).

⁸⁸ Example 25 does not mean that all the instruments start at the same time in the music; however, it only shows the relative rhythmic duration.

note from the beginning to the end of the piece. Also, a long-short rhythm like this is called rhythmic mode one in the Notre Dame School; however, Wright explains that it is different from most of the melodies in medieval music because the melody in Pärt's music does not include rests.⁸⁹ In addition, Pärt signifies the long-short pattern on the violin I by using the down-bow on the longer note value and up-bow for the shorter note value (see Example 26).⁹⁰

The image shows a musical score for Violin I, divided into two parts: Violin I and div. (divisi). Both parts are marked 'con sord.' and 'ppp'. The Violin I part has a 'sim.' marking above the final measure. The div. part has a 'sim.' marking above the final measure. The music features a long-short rhythmic pattern with down-bow and up-bow markings.

Example 26: Excerpt from the violin I part of *Cantus in Memory of Benjamin Britten* mm. 7-9

This piece is in A Aeolian mode; as a result, the T-triad notes are A, C, and E. The string orchestra part takes all the T-voice and M-voice lines. Every part in the string orchestra, except the viola, plays divisi; therefore, each part contains the M-voice and the T-voice individually. The viola part that does not play divisi takes only the M-voice line. All the T-voice lines in this work remain inferior at the first position constantly to their M-voice lines in the same instrumental part. These relationships of the T-voice and M-voice are shown in following example (see Example 27):⁹¹

⁸⁹ Wright Thesis, 83.

⁹⁰ The original score *Cantus in memory of Benjamin Britten* was published by Universal Edition A.G., Wien 1990. Example 26 is my reproduction.

⁹¹ The original score *Cantus in memory of Benjamin Britten* was published by Universal Edition A.G., Wien 1990. Example 27 is my reproduction with some text notes and bracket signs added.

The image shows a musical score excerpt for Example 27. It consists of seven staves. The top staff is for 'Camp' and is empty. The next two staves are for 'VI. I div.' and 'VI. II div.', each with an 'M-voice' line and a 'T-voice' line. The 'T-voice' lines are marked 'Inferior at 1st position' and 'mf'. The 'M-voice' lines are marked 'mp'. The next staff is for 'Violo' with an 'M-voice' line. The next two staves are for 'Vc. div.' and 'Cb. div.', each with an 'M-voice' line and a 'T-voice' line. The 'T-voice' lines are marked 'Inferior at 1st position' and 'mf'. The 'M-voice' lines are marked 'mf'.

Example 27: Excerpt from the soprano part of Pärt's *Cantus in memory of Benjamin Britten* for string orchestra and bell, mm. 30-33

Example 27 shows that the T-voice lines accompany their M-voice lines at the first position on their instrumental part. Only the viola part, which is in the middle register, does not play divisi and has only the M-voice line without T-voice accompanying as will be described below.

All the M-voice lines move downward by step from the centric pitch, A (A6 on the violin I, A5 in the violin II, A4 on the viola, A3 on the cello, and A2 on the double bass), repeating the beginning of the lines expanding them downward one note at a time (see Example 28):⁹²

⁹² The original score *Cantus in memory of Benjamin Britten* was published by Universal Edition A.G., Wien 1990. Example 28 is my reproduction.



Example 28: Excerpt from the violin I part of *Cantus in Memory of Benjamin Britten* mm. 7-12

Example 28 shows the result of the M-voice that repeats the beginning of the M-voice every time one note is expanded downward. The result of this repetition is an additive sequence, A-AG-AGF-AGFE-AGFED-AGFEDC and so forth.⁹³ In my opinion, this repetition suggests the significance of the centric pitch class A and the concept of minimal music; nevertheless, when interviewed about the subject, Arvo Pärt showed no interest whether or not his music was categorized as minimal.⁹⁴ The M-voice and the T-voice on the violin I at m. 7 also show the rhythmic mode one, which has the half note representing a longer value and quarter note for a shorter value. The violin II begins three beats later with A5, which is one octave below the beginning of the violin I, because its rhythm is twice as long (whole notes and half notes instead of half notes and quarter notes). Similarly, the viola begins with A4 six beats after the violin II begins, A3 on the cello twelve beats after the viola begins, and A2 on the double bass part twenty-four beats after the entry of the cello.

Almost all of the string instruments hold their final note until the end of the piece after reaching it the second time. All the final notes belong to the T-triad, A, C, and E. They are C4 on the violin I, A3 on the violin II, E3 on the viola, A2 on the cello, and A1 on the double bass. There is an exception in the double bass part. Instead of holding the final note at the second time reaching it as other string parts, the double bass holds the final note the first time it is reached. In addition, half of the cello part supports the double bass at mm. 100-102 by playing the second to

⁹³ Wright Thesis, 83.

⁹⁴ McCarthy, 132.

the final note of the double bass part, B, and then playing their own final note at the end. This exception occurs because the double bass takes the longest rhythmic pattern, and the piece might have been unnecessarily too long if Pärt had not made this exception.

The fact that every string instrument but the viola plays *divisi* makes the texture in the string orchestra symmetrical. This is because the register of the viola is in the middle of all the strings, and the two higher and lower register instruments have to play *divisi*. This symmetry is not created from the form as in *Für Alina*, but comes from the instrumental texture of the work.

Other than the bell that suggests the loss of Britten as explained earlier, Stephen Wright compares *Cantus in Memory of Benjamin Britten* to the human life cycle.⁹⁵ He also explains that the lines that are more rhythmically active at the beginning, becoming less active earlier, and they are all static at the end.⁹⁶ I believe that there are many factors that support his analogy. Concerning the range of the M-voice, all M-voice lines repeat their sequence and move stepwise from the very high register to the low, and once when they reach their lowest final pitch, they remain in their pitch until the end of the piece. The dynamic reinforces his comparison. It starts from the softest dynamic, *ppp*, and slowly increases to the loudest dynamic, *fff*. As in human life, it does not remain loudest forever; it gets softer quickly, and dies away at the end.

⁹⁵ Wright Thesis, 86.

⁹⁶ *Ibid.*

CHAPTER 3

TYPE 2

While the T-voice continues either superior or inferior in the same instrument in the first type of tintinnabuli technique, it alternates its pair from the M-voice at the same position in the second type. Moreover, the M-voice in this type follows the M-voice modes (as described in Chapter 1) strictly, whereas the M-voice in the first type sometimes follows its voice leading. This second type appears in many works such as *An den Wassern zu Babel sassen wir und weinten* (1976), *Cantate Domino canticum novum* (1977), *Missa sillabica* (1977), and *Tabula Rasa* (1977).

An den Wassern zu Babel sassen wir und weinten is the first work in which the T-voice appears alternately around its M-voice, and the M-voice moves in order follow the modes (see Example 29):⁹⁷

The image displays a musical score for four voices and organ. The vocal parts are arranged vertically: Soprano (S), Alto (A), Tenor (T), and Bass (B). Each voice part is written on a five-line staff with a treble clef (except for the Bass part which has a bass clef). The Soprano, Alto, and Tenor parts are labeled 'M-voice' and 'T-voice' respectively, and all are marked 'mf'. The organ part is shown in two staves (treble and bass clef) below the vocal parts. The organ part consists of several measures of music, including a long note with a fermata and a shorter note with a fermata.

Example 29: Excerpt from Pärt's *An den Wassern zu Babel sassen wir und weinten* for S.A.T.B. and organ m. 6

⁹⁷ The original score *An den Wassern zu Babel sassen wir und weinten* was published by Universal Edition in Wien 1991. Example 29 my attempt to reproduce them in my computer program with some text added. Example 29 reflects the sparseness of the original score.

In the example below, that offers a close look at Example 29, an excerpt of the soprano and alto part from m. 6 of Pärt's *An den Wassern zu Babel sassen wir und weinten*, shows the direction of the M-voice that follows the modal organization. The soprano, which is the M-voice part, moves in the third and fourth mode from the T-triad note, A. These two modes move in a kind of melodic contrary motion. Pärt adds one note to the beginning and to the end of the modes each time a repetition occurs (see Example 30):⁹⁸

The image shows a musical score for two voices: Soprano (S) and Alto (A). The Soprano part is labeled 'M-voice' and has a dynamic marking of 'mf'. It consists of a series of notes with stems up, grouped into pairs labeled '3rd mode' and '4th mode'. The Alto part is labeled 'T-voice: Alternating at 1st position' and also has a dynamic marking of 'mf'. It consists of a series of notes with stems alternating between up and down. The notes in both parts are whole notes.

Example 30: Excerpt from the soprano and alto part of Pärt's *An den Wassern zu Babel sassen wir und weinten*, m. 6

The character of the T-voice in the second type is also different. In the first type, the T-voice takes one position, either superior or inferior, and remains superior or inferior at the same position throughout the work. However, Pärt combines superior and inferior positions in the second type. One single T-voice line alternates between superior and inferior position around the same M-voice line. Hillier calls this technique “alternating.”⁹⁹

The example below shows the T-voice that alternates superior and inferior position around the M-voice. Whole notes in the example represent the M-voice line. Quarter notes signify the T-voice. The quarter notes with stems up are superior; those with stems down are inferior. Although the T-voice is in alternating technique, it remains in the first position (see Example 31):

⁹⁸ The original score *An den Wassern zu Babel sassen wir und weinten* was published by Universal Edition in Wien 1991. Example 30 is my reproduction with some text notes and bracket signs added.

⁹⁹ Hillier AP, 93.



Example 31: Interpretation of T-voice and M-voice from the soprano and alto part of Pärt's *An den Wassern zu Babel sassen wir und weinte*, m. 6

Analysis of *Missa Sillabica*

Missa Sillabica was composed in 1977. Pärt wrote two versions of this work. One is for choir SATB or soloists and organ, and the other version is for choir a cappella (SATB). For this discussion, the choir and organ version is used. The title of the piece suggests that it is the ordinary of the mass with a syllabic style setting.¹⁰⁰ However, Hillier explains that the relationship between the music and the text is also significant:

As its name suggests, *Missa Sillabica* is an entirely syllabic setting of the ordinary of the mass; but the connection between text and music is even closer. Setting aside the subjective interpretation of the text and even its manner of declamation, it is the structure of the text which Pärt uses to determine the structure of the music. It is not unusual, of course, for the shape of a text (such as, for example, the threefold Kyrie) to be reflected closely in the shape of its musical setting and for its division into smaller units to follow the natural pauses and breaks in the text suggested by both declamation and breathing. But his search for an objective compositional style Pärt goes further, and uses the number of syllables in each word to determine its melodic shape.¹⁰¹

I would also like to add that the M-voice is controlled by the text, and the text is subdivided in syllables; hence, the self explanatory title of *Missa Sillabica*.

There are six movements in this work: *Kyrie*, *Gloria*, *Credo*, *Sanctus*, *Agnus Dei*, and *Ite missa est*. The duration of the whole work is approximately thirteen to sixteen minutes. There is no time signature indicated; however, Pärt creates some unusual notations to represent note values. Kimberly Anne Cargile notes “Visually, this gives the score a medieval aesthetic and perhaps leads the singers/conductor to think about text stress more than actual note values, thus

¹⁰⁰ Hillier AP, 106.

¹⁰¹ Ibid, 106-107.

making the music more speechlike.”¹⁰² A solid note head stands for a quarter note, an open note head for a half note, and a dotted open note head for a dotted half note. Other than the rests that occur within bars, he uses any number over an up-bow sign¹⁰³ to represent an amount of quarter rests (see Example 32a and 32b):¹⁰⁴

Example 32a: A rest notation in *Missa Sillabica*

Example 32b: Excerpt from Pärt’s *Missa Sillabica* for choir and organ, *I. Kyrie*, mm. 3-4

Example 32a shows that the Arabic number six with an up-bow sign above indicates six quarter rests. The number over the up-bow sign can be any number, and the amount of the quarter rests changes according to the number. These rests occur only between measures, and there is a double bar-line separating those measures.

The melodic setting in *Missa Sillabica* and *Cantate Domino canticum novum* involves words that control the shape and length of the melody. The bar lines separate the words, which

¹⁰² Kimberly Anne Cargile, “An Analytical Conductor’s Guide to the SATB a Cappella Works of Arvo Pärt” (PhD diss., University of Southern Mississippi, 2008), 26.

¹⁰³ The upward wedge may appear similar to an up-bow marking, but there is no connection to bowing.

¹⁰⁴ The original score *Missa Sillabica* was published by Universal Edition A.G., Wien 1977. Example 32b is my reproduction.

are set in a syllabic style, one note per syllable (see Example 33):¹⁰⁵



Example 33: The tenor part from Pärt's *Missa Sillabica*, I. *Kyrie*, mm. 1-2

Moreover, the double bar-lines and the rest signs that were explained earlier occur only at the end of a phrase or verse (see Example 34):¹⁰⁶

Example 34: Excerpt from Pärt's *Missa Sillabica* for choir and organ, I. *Kyrie*, mm. 7-12¹⁰⁷

The excerpt in Example 34 shows that the double bar-lines are indicated at every phrase ending.

There are comma signs after the word “Christe eleison”, where the double bar-lines appear.

This piece is in D Aeolian, with the exception of the *Sanctus* which is in F Ionian.

Therefore, the T-triad notes in this work are D, F, and A. *Missa Sillabica* and *Cantate Domino*

¹⁰⁵ The original score *Missa Sillabica* was published by Universal Edition A.G., Wien 1977. Example 33 is my reproduction.

¹⁰⁶ The original score *Missa Sillabica* was published by Universal Edition A.G., Wien 1977. Example 34 is my reproduction.

¹⁰⁷ G.O. as notated in the excerpt means *Grand Orgue*. In the original score, Pärt indicates “R. Gambe 8’ G.O. Bourdon 8’” in the organ part.

canticum novum have the same instrumentation, and Pärt sets up the T-voice and M-voice in the same way. The T-voice lines are placed on the organ part, and the choir takes all the M-voice lines. The function of the M-voice and T-voice are shown in Example 35.¹⁰⁸

The image shows a musical score for a choir and organ. It consists of several staves. At the top, there are four vocal staves labeled S. (Soprano), A. (Alto), T. (Tenor), and B. (Bass). Each vocal staff has the lyrics "Ple - ni sunt cae - li et ter - ra glo - ri - a tu - a." written below it. Below the vocal staves are three organ staves. The first organ staff is the right hand part, which has a treble clef and a key signature of one flat. It contains notes that correspond to the vocal lines, but an octave higher. The second organ staff is the left hand part, which has a bass clef and a key signature of one flat. It contains notes that correspond to the vocal lines, but an octave lower. The third organ staff is another bass clef staff, which also contains notes corresponding to the vocal lines, but an octave lower than the second organ staff. At the end of the organ part, there is a "3" with a "v" underneath it, indicating a triplet.

Example 35: Excerpt from Pärt's *Missa Sillabica* for choir and organ, *IV. Sanctus*, mm. 7-13

As can be seen in Example 35, the T-voice line in the right hand part of the organ accompanies the M-voice line in which the soprano and the tenor double each other at the octave. In the same way, the organ left hand part is a T-voice that pairs with the M-voice in the alto and bass. Again, the alto and the bass double each other by an octave. However, only the movements *Sanctus* and *Ite missa est* are played *tutti* with both manual and pedal part on the organ, which doubles the left hand part at an octave lower. The T-voice lines in this work alternate the M-voice lines at the first position.

¹⁰⁸ The original score *Missa Sillabica* was published by Universal Edition A.G., Wien 1977. Example 35 is my reproduction.

The example below is an interpretation of the excerpt from Example 35. The solid note heads represent the T-voice lines from the organ part, which is transposed to a proper range. The empty note heads stand for the M-voice lines from the choir. The tenor and the bass part are transposed to a proper range; therefore, they are at the same octave with the soprano and the alto. The interpretation shows that the T-voice from the organ alternates around the M-voice in the choir at the first position; these points are indicated in Example 36:

T-voice alternating at 1st position

The musical score consists of two staves. The top staff is a treble clef with a key signature of one flat (B-flat). It contains several measures of music with solid note heads. Annotations include: 'Soprano, Tenor (transposed up by an octave)' pointing to the first measure, 'Organ treble clef (transposed up by an octave)' pointing to the staff, and 'below above' indicating the relative positions of notes in the first measure. The word 'above' is written below the first measure. The bottom staff is a bass clef with a key signature of one flat. It also contains several measures of music with solid note heads. Annotations include: 'below' pointing to the first measure, 'above below' indicating the relative positions of notes in the first measure, and 'Organ bass clef (transposed up by an octave), Peddal part (transposed up by an octave)' and 'Alto, Bass (transposed up by an octave)' pointing to the staff.

Example 36: Interpretation of *Missa sillabica*, for choir and organ, *IV. Sanctus*, mm. 7-13

The M-voice in this work is organized by the text as indicated earlier. It moves strictly according to the M-voice modes. When the two M-voice lines occur together, they move in contrary motion. Because of this, the M-voice modes are either the first mode and third mode, or the second mode and the fourth mode (see Example 37):¹⁰⁹

¹⁰⁹ The original score *Missa Sillabica* was published by Universal Edition A.G., Wien 1977. Example 37 is my reproduction.

The image shows a musical score for a choir and organ. It consists of five staves. The top staff is for Soprano (S.), which is mostly empty. The second staff is for Alto (A.), labeled '4th mode', with the lyrics 'Gra - ti - as a - gi - mus ti - bi pro - pter ma - gnam glo - ri - am tu - am'. The third staff is for Tenor (T.), labeled '2nd mode', with the same lyrics. The fourth staff is for Bass (B.), which is mostly empty. The fifth staff is for Organ (R.), with a melodic line in the right hand and a bass line in the left hand. The organ part starts with a 'R.' marking. The key signature has one flat (B-flat), and the time signature is common time (C).

Example 37: Excerpt from Pärt’s *Missa Sillabica* for choir and organ, *II. Gloria*, mm. 20-26¹¹⁰

Example 37 above shows the contrary motion between two M-voices, alto and tenor. In the second mode, the M-voice line descends by step from the T-triad note as it appears in the tenor part. In the fourth mode, the M-voice line ascends by step toward the T-triad note. The M-voice mode on the alto part at m. 20 can be interpreted as in the fourth or the first mode. This is because the first and last note in that measure are both T-triad notes. However, the alto part at m. 22 is in the fourth mode, and the alto part in m. 20 is also in the fourth mode. The following piece to be analyzed is *Cantate Domino canticum novum*. This work has the same instrumentation as *Missa Sillabica*; it is another work that is also categorized in the second type of tintinnabuli technique.

¹¹⁰ R. as notated in the excerpt means *Récit*. In the original score, Pärt indicates “R. Gambe 8’ G.O. Bourdon 8’” in the organ part.

Analysis of *Cantate Domino canticum novum*

Cantate Domino canticum novum was written in 1977 for choir (SATB), or soloists and organ. There are no dynamic markings or time signatures in this piece. There are only quarter note heads and the small lines on top to notate the rhythm. Although Pärt does not indicate the tempo, the duration of the piece should be approximately three minutes as indicated at the end of the work. The bar lines separate each individual word that contains one note per syllable. For example, the word “Cantate” has three syllables; as a result, the amount of notes, which are governed by the word, is three notes. In the same way, the word “novum” has two syllables, so the number of the notes is two (see Example 38):¹¹¹



Example 38: Excerpt from the soprano part of Pärt’s *Cantate Domino canticum novum* for choir and organ, mm. 1-4

From Example 38, we can see that Pärt sets one note for each syllable and each word fits within a measure.

I believe that *Cantate Domino canticum novum* is in B flat Ionian mode; therefore, the T-triad notes that derive from the tonic triad are B flat, D and F. The T-voice and M-voice are paired systematically. The organ plays the T-voice, and the choir sings the M-voice lines. The soprano doubles the tenor at one octave higher every time they sing together; also, the alto doubles the bass in the same way as the soprano and tenor do (see Example 39):¹¹²

¹¹¹ The original score *Cantate Domino canticum novum* was published by Universal Edition A.G., Wien 1990. Example 38 is my reproduction.

¹¹² The original score *Cantate Domino canticum novum* was published by Universal Edition A.G., Wien 1980. Example 39 is my reproduction.

S
An - nun - ti - a - te in - ter gen - tes glo - ri - am e - jus,

A
An - nun - ti - a - te in - ter gen - tes glo - ri - am e - jus,

T
An - nun - ti - a - te in - ter gen - tes glo - ri - am e - jus,

B
An - nun - ti - a - te in - ter gen - tes glo - ri - am e - jus,

R.
R.

Example 39: Excerpt from Pärt’s *Cantate Domino canticum novum* for choir and organ, mm. 22-26¹¹³

The organ is separated into two different parts, treble clef and bass clef. The treble clef of the organ takes the T-voice line that belongs to the M-voice line in the soprano and tenor; on the other hand, the T-voice line on the bass clef pairs with the M-voice line on the alto and the bass part. The T-voice in this piece alternates the M-voice at first position throughout the piece. In the following examples, the whole notes represent the M-voice, and the quarter note heads represent the T-voice (see Example 40):

Example 40: Interpretation of the soprano, tenor, and organ right hand part of *Cantate Domino canticum novum*, mm.22-26.

In reference to Example 39, Example 40 shows that the M-voice from the soprano and tenor, doubles the soprano at an octave lower, and the T-voice from the treble clef of the organ is

¹¹³ R. as notated in the excerpt means *Récit*. In the original score, Pärt indicates “R. Bourdon 8’ Flûte 4’ Octave 2’ G.O. Bourdon Doux 8’ Flûte 4’” in the organ part.

represented as the quarter note heads. The example shows the alternating of the T-voice at the first position. The example below shows another pair of the M-voice and T-voice from Example 39 (see Example 41):



Example 41: Interpretation of the alto, bass and organ left hand part of *Cantate Domino canticum novum*, mm. 22-26

Example 41 also refers to Example 39, but Example 41 represents the T-voice from organ bass clef and the M-voice from the alto, which doubles the bass at an octave higher, and the bass part.

Throughout this work, the two M-voice lines strictly follow the M-voice modes, and the bar lines also separate the M-voice modes. Pärt uses only the first mode, which has the M-voice moving away from the T-triad note by a step, and the third M-voice mode that moves by a step down toward the T-triad note. In this work, the M-voice alternates the first and third mode every measure, and the two M-voice lines move in a contrary motion; therefore, the two M-voice lines are not in the same mode within the same measure (see Example 42):¹¹⁴

1st mode	3rd mode	3rd mode	1st mode	3rd mode
3rd mode	1st mode	1st mode	3rd mode	1st mode

Example 42: Excerpt from the soprano and alto part of Pärt's *Cantate Domino canticum novum* for choir and organ, mm. 9-14

¹¹⁴ The original score *Cantate Domino canticum novum* was published by Universal Edition A.G., Wien 1980. Example 42 is my reproduction with some text notes added.

Also, because the M-voice lines move in a contrary motion, the T-voice of both lines accompany above and below their M-voice lines alternatively. The excerpt from Example 43 shows the cooperation between the M-voice and T-voice lines.¹¹⁵

The image shows a musical score for a choir and organ. It consists of five staves. The top two staves are for the Soprano and Alto voices, both in treble clef. They sing the Latin text: "Can - ta - te Do - mi - no, et be - ne - di - ci - te no - mi - ni e - jus:". The Soprano line starts on a higher pitch and moves generally downwards, while the Alto line starts lower and moves generally upwards, illustrating contrary motion. The next two staves are for the organ, with a bass clef and a 'C' time signature. These staves contain accompaniment that alternates between being above and below the vocal lines. The bottom two staves are for the piano accompaniment, in treble and bass clefs, providing harmonic support.

Example 43: Excerpt from Pärt's *Cantate Domino canticum novum* for choir and organ, mm. 9-14

From the excerpt above, two M-voice lines in the soprano and alto part move in a contrary motion. Moreover, the T-voice lines from the organ accompany the M-voice lines above and below alternatively. Example 44 below is an interpretation of Example 43:

¹¹⁵ The original score *Cantate Domino canticum novum* was published by Universal Edition A.G., Wien 1980. Example 43 is my reproduction.

T-voice alternating at 1st position

Example 44: Interpretation of *Cantate Domino canticum novum*, mm. 9-14. The quarter note heads represent the T-voice lines from the organ part, and the whole notes represent the M-voice lines from the soprano and the alto.

Other than moving strictly according to the M-voice modes, the M-voice line in this work is also organized by the text. Each text syllable contains one note, and each word is separated by the bar lines. This M-voice setting is analogous to the M-voice in *Missa Sillabica*. Moreover, Pärt indicates the end of every phrase that punctuations occur with a longer note value on the stressed syllable of the word. He also marks the last word of each stanza with the longest note value (to be explained below), and uses the double bar lines at the end (see Example 45):¹¹⁶

Example 45: Excerpt from Pärt's *Cantate Domino canticum novum* for choir and organ, mm. 32-42¹¹⁷

¹¹⁶ The original score *Cantate Domino canticum novum* was published by Universal Edition A.G., Wien 1980. Example 45 is my reproduction. (Measure numbers are not in the original score)

¹¹⁷ G.O. as notated in the excerpt means *Grand Orgue*. In the original score, Pärt indicates "R. Bourdon 8' Flûte 4' Octave 2' G.O. Bourdon Doux 8' Flûte 4'" in the organ part.

Example 45 shows that the M-voice line is organized by the text. At mm. 34 and 37, the longer note notations are marked on the last word where the punctuations occur, and the double lines on top of the quarter note heads indicates the longest note value at m. 42, where the stanza ends.

I hear the form of this work as a simple expanded one-part form (AA') based on how Pärt sets up the choir parts. Since the piece is based on the text, he divides the text of thirteen stanzas into two parts. Stanzas 1 to 6 comprise the first section, stanzas 7 to 12 consist of the second section, and the last stanza is an extended ending. Pärt repeats the same order of the choir for the second part, whereas the organ remains from the beginning to the end. The table below shows the order of the choir parts (see Example 46):

		Stanza / Rehearsal Number												
		1	2	3	4	5	6	7	8	9	10	11	12	13
Choir Parts (SATB)	S	S	S	S			S	S	S	S			S	S
	A		A	A			A		A	A			A	A
	T			T	T	T	T			T	T	T	T	T
	B			B		B	B			B		B	B	B

Example 46: The order of the choir parts from Pärt's *Cantate Domino canticum novum* for choir and organ

The table above shows that the order of choir parts from stanzas 1 to 6 is the same as from stanzas 7 to 12, and stanza 13 is the extended ending, at which all parts sing together again. I believe that Pärt needs different ways to end his music, such as adding notes. Therefore, this extended ending in stanza 13 can be understood as a cadence, similar to the end of *Für Alina*.

CHAPTER 4

TYPE 3

The T-voice remains either superior or inferior in the first type (as described in Chapter 2) while it alternates its M-voice at the same position in the second type (as described in Chapter 3). There is another type of Pärt's tintinnabuli technique that derives from the first two types. In *Ein Wallfahrtslied* (1984), *Es sang vor langen Jahren* (1984), and *Stabat mater* (1985), the T-voice is organized differently from the first and second type. It neither alternates, nor remains superior and inferior, but the T-voice tends to enclose the M-voice both superior and inferior. This enclosing T-voice is shown in the example below (see Example 47):¹¹⁸

The musical score for Example 47 consists of two staves. The top staff is for Violin I, labeled 'M-voice', and the bottom staff is for Violin II, labeled 'T-voice'. Both staves are in 4/4 time and marked 'con sord. sempre'. The M-voice part (Violin I) features a sequence of whole notes: F#4, G4, A4, B4, C5. The T-voice part (Violin II) features a sequence of quarter notes: F#4, G4, A4, B4, C5, D5, E5, F#5, G5, A5, B5, C6, B5, A5, G5, F#4. Dynamics markings include *pp* at the beginning, *pochiss.* under the first two measures, and *sim.** under the last two measures. The T-voice line encloses the M-voice line, supporting it both above and below.

Example 47: Excerpt from the violin I and II part of Pärt's *Ein Wallfahrtslied*, mm. 1-2

In *Ein Wallfahrtslied*, the violin II behaves like the T-voice line that encloses the M-voice in the violin I part. The T-voice does not remain superior, or inferior, or alternating; rather it supports the initial, centric pitch, F sharp, of the M-voice (as shown in Example 47). The example below shows both the M-voice and T-voice lines. The whole notes represent the M-voice line that moves by a step, and the quarter-noteheads stand for the T-voice lines that support their centric M-voice notes. The T-voice supports the M-voice both superior and inferior at the first position, and they ascend and descend mostly by step (see Example 48):

¹¹⁸ The original score *Ein Wallfahrtslied* was published by Universal Edition in Wien 1996. Example 47 is my reproduction with some text notes added.



Example 48: Interpretation from M-voice and T-voice from the violin I and II of Pärt's *Ein Wallfahrtslied*, mm. 1-4

There are some extended notes in the T-voice of Example 48; however, the tintinnabuli technique in the third type focuses on the T-voice that supports the M-voice in both superior and inferior position rather than acting as an extension of the T-voice.

The technique in this third type becomes more obvious in *Stabat mater* (1985) where Pärt sets up two T-voice lines supporting one M-voice line. In *Stabat Mater*, the T-voice line acts differently in different sections of the work, but it remains in one style throughout each section. The first appearance in *Stabat Mater* of the new tintinnabuli fashion appears at mm. 109-118 (see Example 49):¹¹⁹

Example 49: Excerpt from Pärt's *Stabat Mater* for S.A.T. soli; violin, viola, and cello, mm. 109-113

¹¹⁹ The original score *Stabat Mater* was published by Universal Edition in Wien 1985. Example 49 is my reproduction with some text notes added. The example reflects the spareness of the original score. Note: The next section of this discussion focuses on *Stabat Mater* in greater detail.

In the example above, both the choir and the strings have their own T-voice and M-voice parts. The tenor voice and the cello take the M-voice part, and the contratenor (alto), soprano, violin and viola take the T-voice part. If we transpose the M-voice lines in the tenor and the cello up by an octave, we can see that their T-voice lines from the same section support them at the first position both superior and inferior. In the example below which interprets Example 49, the whole notes represent the M-voice, which is transposed from the tenor part. The quarter note heads represent the T-voice from the soprano and contratenor part. We can see that the T-voice from the soprano and contratenor enclose the M-voice at the first position (see Example 50):



Example 50: Interpretation of Pärt's *Stabat Mater*, mm. 109-113

Analysis of *Stabat Mater*

Stabat Mater was composed in 1985 when Pärt got a commission by the Alban Berg Foundation. The title is a similar name to the medieval sequence that was attributed to Jacopone da Todi (c. 1230-1306), a Franciscan monk.¹²⁰ There are two hymns in *Stabat Mater*, which are *Stabat Mater Dolorosa* and *Stabat Mater Speciosa*. *Stabat mater Dolorosa*, which means “sorrowfully his mother stood” in Latin, reflects Mary’s suffering during Jesus Christ’s crucifixion. It has been set into music throughout centuries by many composers, such as Josquin, Palestrina, Lassus, Rossini, Verdi, Poulenc, Penderecki, and Pärt. Wright suggests that Pärt’s version of *Stabat Mater* text is very similar to the version of Palestrina. This is probably because

¹²⁰ Wright Thesis, 116.

Pärt may have known the Palestrina's setting when he studied pre-Baroque music during the 1970s.¹²¹

This work differs from Pärt's other music that uses sacred texts because other works are set up for choir; however, *Stabat Mater* was composed for string trio and solo voices (soprano, contratenor (alto), and tenor). This instrumentation suggests a similar sound to chamber music.¹²² The poetic form of the *Stabat Mater Dolorosa* text is a standard form for a later sequence.¹²³ The sequence includes ten stanzas, which are organized by the sixty lines of text, or twenty verses. The rhyme scheme of each stanza is AABCCB, and the pattern of syllabic meter is 887887¹²⁴ (see Example 51):

<u>Text</u>	<u>Scheme</u>	<u>Syllables</u>
Stabat mater dolorosa	A	8
juxta crucem lacrimosa,	A	8
dum pendeat filius.	B	7
Cujus animam gementem,	C	8
contristatam et dolentem	C	8
pertraxit gladius.	B	7

Example 51: Text from *Stabat Mater Dolorosa*, verses 1-2 (lines 1-6)

This work is in the Aeolian mode and syllabic style, which is similar to *Missa Sillabica* and *Cantate Domino canticum novum*. Pärt sets the rhythm with the long-short rhythm that comes from the first rhythmic mode throughout and uses some of the second rhythmic mode, short-

¹²¹ Ibid, 117.

¹²² Hillier AP, 145.

¹²³ Wright Thesis, 117.

¹²⁴ Hillier also refers to this syllabic meter. He writes, "In the *Stabat Mater* poem not only is the rhythm uniform throughout, but the number of syllables in each verse is also regular: 8, 8, 7." (Hillier AP, 145.) According to *The New Princeton Encyclopedia of Poetry and Poetics*, "Syllabic Meter is defined by the number of syllables per line." The New Princeton Encyclopedia of Poetry and Poetics, "Meter," <https://libproxy.library.unt.edu/login?url=http://www.credoreference.com/entry/prpoetry/meter> (accessed October 26, 2012).

long, according to the Notre Dame School¹²⁵ on the string part of section 3 and 4 against the first mode. A whole note represents a longer note value, and a half note stands for a shorter value (see Example 52):¹²⁶

The image shows a musical score for Example 52. It consists of three staves. The top staff is for Tenor (T) voice, with lyrics: "San - cta ma - ter, i - stud a - gas,". The middle staff is for Violins (VI.) and the bottom staff is for Violas (Va.). The tempo is marked "Tempo I" and the dynamics are "mf". The time signature is 3/2. The vocal line has a long note followed by a short note, and then a long note followed by a short note. The string parts have a long note followed by a short note, and then a long note followed by a short note.

Example 52: Excerpt from Pärt's *Stabat Mater* for solo voices and string trio, mm. 273-276 (section 3)

Example 52 shows that Pärt uses the second rhythmic mode, short-long, on the string part to conflict with the tenor that holds the first rhythmic mode which appears throughout the piece.

There is a deviation of the short-long rhythm at mm. 219-257. Pärt uses a half rest to replace the first half of the longer note value in the long-short at the T-voice line (see Example 53):¹²⁷

¹²⁵ Wright Thesis, 118.

¹²⁶ The original score *Stabat Mater* was published by Universal Edition A.G., Wien 1985. Example 52 is my reproduction.

¹²⁷ The original score *Stabat Mater* was published by Universal Edition A.G., Wien 1985. Example 53 is my reproduction with some text notes added.

223 M-voice
 mp
 Ct mo - ri - en - tem de - so - la - tum,
 T-voice
 T mo - ri - en - tem de - so - la - tum,
 mp
 T-voice
 Vc.

Example 53: Excerpt from Pärt’s *Stabat Mater* for solo voices and string trio, mm. 223-224

In Example 53, the contratenor takes the M-voice line while the tenor and the cello take the T-voice part. Pärt replaces half rests at the first half of the longer note value of each long-short pattern. In the T-voice lines, there are half rests and half notes instead of the whole notes, which stand for longer note values. Having discussed rhythm, we now expand on form.

Pärt divides the work into small sections. Other than prelude and postlude sections at the beginning and the end of the work, he alternates stanza and ritornello in every section. In the prelude and postlude sections, only the word “Amen” is used throughout. These sections are written with a regular time signature 3/2; however, in the stanzas and ritornello sections they are written with irregular time signatures, which are based on the text and rhythmic modes.

Pärt divides each word with a bar line, and separates each line of text with a dotted bar line as shown in Example 54.¹²⁸ More over, every verse ends with a longer note value. He also

¹²⁸ The original score *Stabat Mater* was published by Universal Edition A.G., Wien 1985. Example 54 is my reproduction with some text notes added.

divides the text into four different groups, and the string trio interrupts each group with ritornellos:

233 *mf* 238

S E - ja ma - ter, fons a - mo - ris, me sen - ti - re

T *mf* E - ja ma - ter, fons a - mo - ris, me sen - ti - re

244

vim do - lo - ris fac, ut te - cum lu - ge - am.

vim do - lo - ris fac, ut te - cum lu - ge - am.

Vc. *mf*

Example 54: Excerpt from Pärt's *Stabat Mater* for solo voices and string trio, mm. 233-244

All the T-voices and M-voices are not fixed to specific instruments. All parts can take both T-voice and M-voice lines. The example below shows that the T-voice in *Stabat Mater* is in the third enclosing type which is developed from the first and the second type. It alternates the M-voice at the first position only within the same measure; therefore, it often creates a repetition in the T-voice line. The first note in the T-voice line of every measure is in the same type, either above or below the M-voice note, with the last note in the T-voice part of the previous measure (see Example 55):¹²⁹

¹²⁹ The original score *Stabat Mater* was published by Universal Edition A.G., Wien 1985. Example 55 is my reproduction with some text notes added.

133 T-voice
Ct O quam tri - stis et af - flic - ta
p

M-voice
T O quam tri - stis et af - flic - ta

138 T-voice
Ct fu - it il - la be - ne - dic - ta

M-voice
T fu - it il - la be - ne - dic - ta

Example 55: Excerpt from Pärt's *Stabat Mater* for solo voices and string trio, mm. 133-140

The example below is an interpretation of Example 55. The whole and half notes are the M-voice from the tenor part that is transposed up an octave, and the quarter note heads are the T-voice from the contratenor part. The first quarter note head of every measure remains the same as the measure before, either above or below the M-voice. As a result, the notes in measures 133-134, and 136 are the only notes in their measures considered as both the first and the last note of the measure (see Example 56):

Alternating at the 1st position

133 above above above below below below above below

138 below above above below below above below above

Example 56: Interpretation of Pärt's *Stabat Mater* for solo voices and string trio, mm. 133-140. The first quarter note head of every measure remains either above or below according to the last quarter note head of the previous measure

Sometimes, the third type of the T-voice appears when two T-voice lines play together with one M-voice line. It especially occurs when all parts play at the same time. The two T-voice lines in the solo voices enclose the M-voice line from the voice part. And the two T-voice lines from the string parts also enclose their M-voice from the string part. Pairs of T-voice and M-voice also can be defined from the same rhythmic mode (see Example 57):¹³⁰

109 *f*

Soprano
Sta - - - bat ma - - ter do - lo - ro - sa

Contratenor
f
Sta - - - bat ma - - ter do - lo - ro - sa

Tenor
f
Sta - - - bat ma - - ter do - lo - ro - sa

Vi.
Va.

113

S
ju - xta cru - cem la - cri - mo - sa,

Ct
ju - xta cru - cem la - cri - mo - sa,

T
ju - xta cru - cem la - cri - mo - sa,

Vi.
Va.

¹³⁰ The original score *Stabat Mater* was published by Universal Edition A.G., Wien 1985. Example 57 is my reproduction.

116 G.P.

S
dum pen - de - bat fi - li - us.

Ct
dum pen - de - bat fi - li - us.

T
dum pen - de - bat fi - li - us.

G.P.

Example 57: Excerpt from Pärt's *Stabat Mater* for solo voices and string trio, mm. 109-119

From Example 57, all parts play at the same time. Pärt separates the texture of the voice parts and the string parts from each other. These two groups also have a different rhythmic mode to identify their groups. In the voice parts, the tenor holds the M-voice, and it is enclosed with the two T-voice lines from the soprano and the contratenor lines. The T-voice lines modify the alternating technique, as explained earlier. They stay above and below the M-voice alternatively, and they appear at the same time to enclose the M-voice in the tenor. The T-voice and M-voice in the string parts also act a similar way, but the M-voice is now on the cello part, and the violin and viola take the T-voice parts as shown in Example 58.

Solo voices

String Trio

Sta - - - bat ma - ter

do - lo - ro - sa ju - xta cru - cem

la - - cri - mo - - sa, dum

pen - de - bat fi - li - us.

G.P.

G.P.

Example 58: Interpretation of Pärt's *Stabat Mater* for solo voices and string trio, mm. 109-119

Example 58 is an interpretation of the excerpt from Example 57. The voices and the string trio are separated individually on a different staff. In the upper staff, the T-voice from the tenor remains in the same note value at an octave higher. The soprano is represented with the quarter note heads at the same octave, and the diamond note heads represent the contratenor at the same octave. In the lower staff, the cello, which holds the T-voice line, is represented with the same note value at two octaves higher. The violin remains in the same octave with the quarter note heads, and the diamond note heads stand for the viola, which is transposed up by an octave. Example 58 shows that the two T-voice lines from both voice and string parts stay above and below their M-voice lines alternatively, and they create the third type of the T-voice, enclosing the M-voice.

The M-voice line in this work is mostly in a syllabic style and organized by the text and its stanzas, and it moves according to the M-voice modes. Wright claims that the M-voice line moves away from the centric pitch at the first two lines of text in every verse, and the M-voice moves towards the centric pitch on the third line of text¹³¹ (see Example 59a and 59b):¹³²

Stabat mater dolorosa
juxta crucem lacrimosa,
dum pendeat filius.

Example 59a: Text from *Stabat Mater Dolorosa*, verses 1 (lines 1-3)¹³³

109 *f*
Tenor Sta - bat ma - ter do - lo - ro - sa ju - xta
114
T cru - cem la - cri - mo - sa, dum
117
T pen - de - bat fi - li - us. G.P.

Example 59b: Excerpt from the tenor part of Pärt's *Stabat Mater* for solo voices and string trio, mm. 109-119

Example 59b shows the tenor part, which holds the M-voice line in the section. The centric pitch of the example is pitch class A. The example shows that the last notes of line 1 and 2 of the text are E3 (at m. 115) and E4 (at m. 112). The M-voice line moves away from the tonal

¹³¹ Wright Thesis, 121.

¹³² The original score *Stabat Mater* was published by Universal Edition A.G., Wien 1985. Example 59b is my reproduction.

¹³³ At, the cross her station keeping,
stood the mournful mother weeping,
close to Jesus to the last.

Translation by Fr. Edward Caswall (1814-1878)

Michael Martin, "Stabat Mater dolorosa," *Thesaurus Precum Latinarum*, <http://www.preces-latinae.org/thesaurus/BVM/SMDolorosa.html> (accessed October 27, 2012).

center to E3 and E4 at the first two lines of the text, and the M-voice remains the centric pitch, the last note of m. 118, at the third line of the text.

The M-voice mode in *Stabat Mater* is significant. Hillier explains that the text lines of each verse also reflect the M-voice modes. The M-voice interchanges only either the first and second mode, or the third and fourth mode. Also, this alternating of the modes is based on the rhyme scheme of the poem. For example, when the M-voice is in the first and second mode on line 1 and 2 of the text, it changes to the third and fourth mode on line 3 of the text¹³⁴ (see Example 60a and 60b):¹³⁵

Cujus animam gementem,
 Contristatam et dolentem
 Pertransivit gladius.

Example 60a: Text from *Stabat Mater Dolorosa*, verses 2 (lines 1-3)¹³⁶

The musical score for Example 60a consists of three staves. The first staff is for Contratenor, starting at measure 120 with a piano (p) dynamic. It features three measures: the first is in 3/2 time with a 2nd mode label, the second is in 5/2 time with a 1st mode label, and the third is in 7/2 time with a 2nd mode label. The lyrics are 'Cu - jus a - ni - mam ge - men - tem,'. The second staff is for Ct, starting at measure 123. It features three measures: the first is in 3/2 time with a 2nd mode label, the second is in 3/2 time with a 1st mode label, and the third is in 4/2 time with a 1st mode label. The lyrics are 'con - tri - sta - tam et do - len - tem'. The third staff is for Ct, starting at measure 126. It features two measures: the first is in 3/2 time with a 3rd mode label, and the second is in 9/2 time with a 4th mode label. The lyrics are 'per - tran - si - vit gla - di - us.'

Example 60b: Excerpt from the contratenor part of Pärt's *Stabat Mater* for solo voices and string trio, mm. 120-127

¹³⁴ Hillier AP, 145.

¹³⁵ The original score *Stabat Mater* was published by Universal Edition A.G., Wien 1985. Example 60b is my reproduction.

¹³⁶ Through her heart, his sorrow sharing,
 all his bitter anguish bearing,
 now at length the sword has passed.

Translation by Fr. Edward Caswall (1814-1878)

Michael Martin, "Stabat Mater dolorosa," Thesaurus Precum Latinarum, <http://www.preces-latinae.org/thesaurus/BVM/SMDolorosa.html> (accessed October 27, 2012).

Example 60b presents the contratenor part, which holds the M-voice line in the section. This excerpt shows that the M-voice line is in the first and second mode when singing line 1 and 2 of the text, “Cujus animam gementem, contristatam et dolentem”. Afterwards, it changes to the third and fourth mode on line 3 of the text, “pertransiuit gladius”.

The M-voice changes to the third and fourth mode on line 3 when it is in the first and second mode on the text line 1 and 2.¹³⁷ The example below shows the soprano part that holds the M-voice line of the section. The M-voice is in the third and fourth mode on line 1 and 2 of the text, and then it changes to the first and second mode on the text line 3 (see Example 61a and 61b):¹³⁸

Quis est homo, qui non fleret,
Christi matrem si videret
In tanto suplicio?

Example 61a: Text from *Stabat Mater Dolorosa*, verses 5 (lines 1-3)¹³⁹

179 *mp* 4th mode
Soprano
Quis est ho - mo, qui non
184 4th mode 4th mode 3rd mode 4th mode
S fleret, Chri - sti ma - trem si vi - de - ret
189 2nd mode 1st mode
S in tan - to sup - pli - ci - o?

Example 61b: Excerpt from the soprano part of Pärt’s *Stabat Mater* for solo voices and string trio, mm. 179-191

¹³⁷ Hillier AP, 145.

¹³⁸ The original score *Stabat Mater* was published by Universal Edition A.G., Wien 1985. Example 61b is my reproduction.

¹³⁹ Is there one who would not weep,

whelmed in miseries so deep,

Christ's dear mother to behold?

Translation by Fr. Edward Caswall (1814-1878)

Michael Martin, “Stabat Mater dolorosa,” Thesaurus Precum Latinarum, <http://www.preces-latinae.org/thesaurus/BVM/SMDolorosa.html> (accessed October 27, 2012).

Stabat Mater is a long piece lasting about twenty-four minutes duration.¹⁴⁰ It is divided into sections, each section alternating between text and string ritornello. Pärt sets form up almost completely symmetrically. He organizes the form of this work by the text stanzas (see Example 62):

Sections	Prelude	Stanzas 1-2	Ritornello 1	Stanzas 3-5	Ritornello 2	Stanzas 6-8	Ritornello 3	Stanzas 9-10	Postlude
mm.	1-108	109-156	157-178	179-260	261-272	273-354	355-377	378-422	423-530
No. of bars	108	48	22	82	12	82	23	45	108
No. of stanzas	(Amen)	2	-	3	-	3	-	2	(Amen)

Example 62: Bar numbers and sections in *Stabat Mater*

The table shows that Pärt divides the text into four groups: two groups of two stanzas and two groups of three stanzas. Each text group is enclosed with prelude, postlude, or ritornello. Ritornello 2 is the middle section; therefore, the piece is in a symmetrical form. The bar number of prelude and postlude are the same, and other sections have a similar bar numbers to their matches.

Analysis of *Es sang vor langen Jahren*

Es sang vor langen Jahren, subtitled *Motette für de la Motte*, was composed in 1984, as the result of a commission Pärt received from the German musicologist Diether de la Motte. That year, he asked ten composers to write a setting of *Es sang vor langen Jahren*. It is written by Clemens Brentano (1778-1842), a German Romantic poet. This work is also Pärt's first setting in German, and it does not relate to religious matters.¹⁴¹

The work is for solo alto, violin and viola. Pärt divides the text into halves, and each half ends with a string section. It is mainly in A Aeolian, but the T-voice in the second half of the text

¹⁴⁰ "durata: ca 24 min" is indicated in the original score.

¹⁴¹ Hillier AP, 164.

is E Phrygian, and then changes back to A Aeolian at the end of the section. Therefore, the T-triad notes of A Aeolian area are A, C, and E, and the T-triad of the second half are E, G, and B. Pärt treats some words as passing syllables, which is different from earlier works that are in a syllabic style.¹⁴² Example 63 shows that the word “Jahren” is treated as a passing syllable, whereas other words are set to have one note per a syllable (see Example 63):¹⁴³



Example 63: Excerpt from the alto part of Pärt’s *Es sang vor langen Jahren* for alto, violin and viola, mm. 8-16

The M-voice in this work moves mostly following the M-voice modes. Pärt simply adds some notes above and below the T-triad notes to the melodic shape in the M-voice line. Until the last stanza of both halves of the text, mm. 46-64 and mm. 154-172, the alto part that takes the M-voice line remains in the T-triad notes in order to prepare for the entrance of the string sections. The M-voice line uses “short-long” rhythms, the second rhythmic mode according to the medieval concept.¹⁴⁴ The quarter notes stand for a shorter rhythm, and the half notes represent a longer rhythm. Every line of the text starts with a shorter rhythm on the third beat of the measure, and each ends with a longer rhythm or extended long rhythm (dotted half note or tied

¹⁴² Ibid.

¹⁴³ The original score *Es sang vor langen Jahren* was published by Universal Edition A.G., Wien 1985. Example 63 is my reproduction.

¹⁴⁴ Edward H. Roesner, "Rhythmic modes." *Grove Music Online. Oxford Music Online.* Oxford University Press, accessed November 3, 2012, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/23337>.

dotted half note). Moreover, the words that are treated as passing syllables are placed at the last word of line one and four of every stanza (see Example 64a and 64b):¹⁴⁵

Ich sing und kann nicht weinen
 Und spinne so allein
 Den Faden klar und rein,
 Solang der Mond wird scheinen.

Example 64a: Stanza 2 (lines 5-8) from *Es sang vor langen Jahren* by Clemens Brentano (1778-1842)

27 *mp*
 Ich sing und kann nicht wei - nen und spin - ne so al - lein den
 36
 Fa - den klar und rein, so - lang der Mond wird schei - nen.

Example 64b: Excerpt from the alto part of Pärt’s *Es sang vor langen Jahren* for alto, violin and viola, mm. 27-44

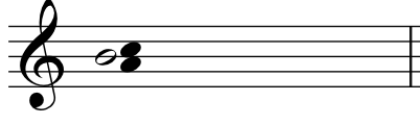
Example 64b shows that every line of the text begins with a quarter note on the third beat of every measure (mm. 27, 31, 35, and 40), and the last syllable of every line is placed on a longer note value (mm. 31, 34, 38, and 44). Also, the last word of line one and four of the stanza, “weinen” and “scheinen”, are composed as passing syllables. And they are the words that end with “-en” in the text.

While the alto is singing, the T-voice part is held in the violin and viola. There are two parts of the T-voice in the string section. One of the strings sustains the drone of the centric pitch before the other string part appears on the altered enclosing T-voice. The T-voice in this work is

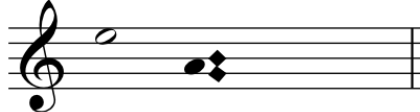
¹⁴⁵ The original score *Es sang vor langen Jahren* was published by Universal Edition A.G., Wien 1985. Example 64b is my reproduction.

developed from the original third type, enclosing the M-voice. Instead of enclosing the M-voice line, the T-voice has two notes enclosing itself (see Example 65):

Original enclosing T-voice

1.) 

Altered enclosing T-voice

2.) 

Example 65: Hypothetical representation of the M-voice and T-voice

Number one from Example 65, the whole note represents the M-voice, and quarter note heads represent of the T-voice. The M-voice, B, has two T-voice notes, A and C, enclosing it. This enclosing idea occurs in *Stabat Mater*. Number two from the same example is an altered enclosing T-voice, which occurs in this work. The whole note, again, represents the M-voice, The quarter note head A stands for the T-voice note, and there are two notes with a diamond note head, B and G. The note B and G enclose the T-voice note A, which comes from the same idea as the regular enclosing T-voice.

Most of the T-voice enters on the third beat at the end of text line, and is followed by its enclosing notes with a longer note value. The enclosing notes of the T-voice can be in the same or different octave. The excerpt in the example below shows the T-voice notes and their enclosing notes (see Example 66):¹⁴⁶

¹⁴⁶ The original score *Es sang vor langen Jahren* was published by Universal Edition A.G., Wien 1985. Example 66 is my reproduction.

21

Alto

da wir zu - sam - men wa - ren. Ich

mp

Violin

Viola

28

Alto

sing und kann nicht wei - nen und spin - ne so al - lein den

mp

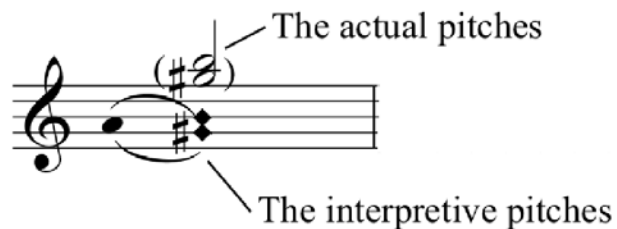
Violin

mp

Viola

Example 66: Excerpt from Pärt's *Es sang vor langen Jahren* for alto, violin and viola, mm. 21-35

In Example 66, the T-voice on the violin part enters on the third beat with a shorter note value at mm. 25 and 34, and then the enclosing notes follow it with a longer note value at mm. 26-27 and 35. Moreover, the enclosing notes of the T-voice are transposed up by an octave at m. 35. Example 67 is an interpretation of the violin part in mm. 34-35. The quarter note head stands for the note A4 in m. 34 which is a T-voice note. The half notes are the enclosing note from m. 35, and the diamond note heads are the interpretation of the half notes that enclose the T-voice note at an octave higher.



Example 67: Interpretation of T-voice and its enclosing notes from the violin part of Pärt's *Es sang vor langen Jahren* for alto, violin and viola, mm. 34-35

Each T-voice note that occurs after the end of the text line has a perfect fifth relationship with the last note of the phrase of the M-voice line it follows. The T-voice is either higher or lower than the last note of the line by a perfect fifth (see Example 68):¹⁴⁷

Example 68: Excerpt from Pärt's *Es sang vor langen Jahren* for alto, violin and viola, mm. 35-46

From Example 68, the last note of the text line is A3 on the alto at m. 38 which is a perfect fifth lower than the T-voice, E4, on the violin at m. 39. At m. 44, the last note of the text line is E4,

¹⁴⁷ The original score *Es sang vor langen Jahren* was published by Universal Edition A.G., Wien 1985. Example 68 is my reproduction with some text notes and signs added.

which is perfect fourth lower than the T-voice, A4, on the violin; however, if the note E were transposed up by an octave, it would be a perfect fifth above the T-voice note. This relationship between the M-voice and T-voice may sound similar to the “V-I” concept in the classical music theory; nevertheless, Pärt’s music is inspired by medieval music, which had come before fully functional harmony was concerned, and *Es sang vor langen Jahren* is modal music.

There are two places, at mm. 53 and 138, on the string part where there should have been a T-voice note, but there is not one. There is the note D4 at m. 53 that is enclosed with C and E, the T-triad notes. Even if it were perfect fifth lower than the A on the alto part, it would not be the T-voice. On the other hand, the alto line remains the T-triad notes from mm. 46-64 (see Example 69):¹⁴⁸

The image shows a musical score for three parts: Alto, Violin, and Viola. The Alto part is in G major and 4/4 time, with lyrics: "Da wir zu - sam men wa - ren, da sang die Nach - ti - gall. Nun". The Violin part has a tremolo effect starting at measure 53. The Viola part has a mezzo-forte (mf) dynamic marking at measure 53. The Alto part has a piano (p) dynamic marking at measure 46. The violin part has a mezzo-forte (mf) dynamic marking at measure 53. The viola part has a tremolo effect starting at measure 53.

Example 69: Excerpt from Pärt’s *Es sang vor langen Jahren* for alto, violin and viola, mm. 46-55

¹⁴⁸ The original score *Es sang vor langen Jahren* was published by Universal Edition A.G., Wien 1985. Example 69 is my reproduction.

I believe that this note D4 in m. 53 is similar to a cadence point that lead to the end of the first half of the piece in m. 64. Because this section, mm. 46-65, takes the last stanza of the text in the first half of the piece, and the alto part, which sings the M-voice line from the beginning, sings only the T-voice notes in this section.

As you can see at m. 138 of the example below, there is the note F on the viola part that is followed by the T-triad notes, E3 and G3. It is also at perfect fifth lower than the last note C on the alto; however, there is the fermata sign at m. 140. This F3 on the viola part can be explained as a non-functional interruption because it is a second scale degree of this E Phrygian mode section (see Example 70):¹⁴⁹

The image shows a musical score excerpt for three parts: Alto, Violin, and Viola. The Alto part is in treble clef and has lyrics 'ge - fah - ren. singt'. The Violin part is in treble clef and has a fermata sign over the final measure. The Viola part is in bass clef and has a note F marked with a fermata sign at measure 140. A box highlights the note F in the Viola part and the word 'ren.' in the Alto part, with an arrow pointing from the box to the note F.

Example 70: Excerpt from Pärt's *Es sang vor langen Jahren* for alto, violin and viola, mm. 136-140

This type of interruption also occurs in *Für Alina*. The example below shows that the last note of m. 11 is not a T-triad note, which is the T-voice line as discussed earlier in Chapter 2. The note C sharp 4 is also a second scale degree of mode in *Für Alina* (see Example 71):¹⁵⁰

¹⁴⁹ The original score *Es sang vor langen Jahren* was published by Universal Edition A.G., Wien 1985. Example 66 is my reproduction.

¹⁵⁰ The original score *Für Alina* was published by Universal Edition A.G., Wien 1990. Example 66 is my reproduction.

The image shows a musical score for piano, consisting of two staves. The top staff is in treble clef and the bottom staff is in bass clef. The key signature is two sharps (F# and C#). The time signature is 8. The score is divided into two measures. The first measure contains a melodic line in the treble clef and a bass clef line with a fermata. The second measure contains a melodic line in the treble clef and a bass clef line with an asterisk. The number '8' with an arrow points to the first measure.

Example 71: Excerpt from Pärt's *Für Alina* for piano, mm. 10-11

CHAPTER 5

CONCLUSION

The preceding chapters have traced Pärt's biographical and musical background, the function of tintinnabuli technique in his music, the basic background of bell acoustics, and the development of the tintinnabuli types during the years 1976-1985. To reiterate, Pärt was born in Paide, Estonia, and studied with Heino Eller at Tallinn Conservatory. His compositions in tonal and "Socialist Realism" style started to show in public in late 1950s. He wrote *Nekrolog* in 1960; as a result, this work was not only his first dodecaphonic work, but also the first serial work that was composed by the Soviet Union composer. After that, Pärt kept actively composing, and adopted other avant-garde musical techniques from the west. After writing *Credo* in 1968, Pärt became less active in composing music. He turned his attention to studying pre-Baroque music, and early music practice during the years 1968-1976. He emerged from his self-imposed silence with numerous works in the style, which he invented and called "tintinnabuli". Later on, his tintinnabuli technique was used and altered to different ways in many of his works as described in previous chapters.

In tintinnabuli works, Pärt suggests his musical philosophy of purity, beauty, and simplicity. To add to that, the symmetry of work is another significant aspect of Pärt's tintinnabuli works. All of Pärt's works that were studied and provided as example works in previous chapters contain some characteristics in musical basis, such as form, M-voice line, texture, and orchestration, which are related to the symmetrical concept. *Für Alina* and *Stabat Mater* both comprise symmetrical forms; however, the form in *Für Alina* is evenly contributed by the amount of notes in a bar and measure number (as shown in Example 16), and the sections of text and ritornellos make the form balance in *Stabat Mater* (as shown in Example 62). The

contrary direction of two M-voice lines gives a symmetrical idea in *Missa sillabica* (as shown in Example 37) and *Cantate Domino canticum novum* (as shown in Example 42). The character of vocals lines in these two works was founded in the way because of their similiar instrumentation. The soprano line, which is doubled by the tenor line, always moves contrarily with the other double pair on the alto and bass. The T-voice in *Es sang vor langen Jahren* makes the texture balance with their enclosing T-voice (as shown in Example 16). *Cantus in Memory of Benjamin Britten*, on the other hand, creates its symmetry with its orchestration of the string part. Pärt sets all the strings, except the viola, divisi, and each of them either takes the M-voice or T-voice part, and accompany the other voice in the same instrument. However, the viola does not have divisi. It was setup only on the M-voice, which is not accompanied by any T-voice line (as shown in Example 27). The fact that Pärt chooses not to divide the viola part, which has middle register, forms a symmetrical layer in the string orchestra part.

I believe that there are two aspects of symmetry in Pärt's works, which are vertical and horizontal aspect. They are both part of the compositional technique. The vertical aspect can be easily perceived by the listeners at the moment they hear it, such as the orchestration in *Cantus in Memory of Benjamin Britten*. The horizontal aspect, on the other hand, might be more difficult to perceive, and it requires memory and experience of the listeners, such as the symmetrical form of a larger work. To recapitulate, Pärt's usage of symmetrical form, M-voice line, texture, and orchestration can be found in many of his tintinnabuli works; and this symmetrical concept can be one of the most straightforward ideas that expresses the philosophy of simplicity in his tintinnabuli works.

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