

# **Arvo Part's Fratres and his Tintinnabuli Technique**

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*This Master's Thesis is carried out as a part of the education at the University of Agder and is therefore approved as a part of this education. However, this does not imply that the University answers for the methods that are used or the conclusions that are drawn.*

University of Agder, 2012

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# Acknowledgments

I would like to express my gratitude to all the people who helped me to complete this thesis, and to those who taught me many things during my schooling at the University of Agder and prior to my arrival to Kristiansand.

First of all, I must thank my teacher Bård Monsen for his support and everything he taught me. I would also like to thank my supervisors, professors Knut Tønsberg and Per Kjetil Farstad, for their consult and their will to help. Here I must also mention my dear colleagues Marina Popović, Nikola Marković, Stevan Sretenović, Jelena Adamović and Andrej Miletić for being so kind to share their knowledge, experience and criticism with me throughout the time we spent together. I also thank Professor Trygve Trædal for being so kind to organize concerts for my colleagues and myself.

My gratitude goes also to my girlfriend for the immense amount of support in the process of writing this thesis. The biggest thanks goes to my brother for inspiring me to explore the world of music and to my parents for their love and strong support over the years.

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## **The aim of the thesis**

The goal of this thesis is to identify the elements of Pärt's 'tintinnabuli' technique in one of his works written for violin and piano, *Fratres*. I will also analyse the basic principles of 'tintinnabuli' technique and make an overview of its appliance on other works in order to acknowledge the variation of its usage. In addition to this, it would be important to give an overview of this technique from a violinist's point of view. This I will demonstrate through the violin techniques Pärt used to achieve his musical intentions.

## **Definition of the problem**

The overview of the main principles of tintinnabuli technique; analysis of the tintinnabuli technique within *Fratres* and its use on the violin.

## **Methods**

I have used books and online articles to find an important data about the definition of tintinnabuli and biographical facts about Pärt's life. For the analysis of the *Fratres* I used the score and for the analysis of the interpretation I listened to and compared various recordings.

## **Expectations**

During this research my expectations were to find out more about Pärt's unique technique which would help me understand this music better.

## **Section 1**

In this section I will outline the essential biography data and give an overview of the evolution of his pre-tintinnabuli compositional styles.

## **Section 2**

Here I will discuss about the main principles of tintinnabuli technique; this section is very important for the understanding of the future chapters of the thesis.

## **Section 3**

In this section I will go through the evolution of the tintinnabuli in his early tintinnabuli works.

## **Section 4**

In the fourth section I will start the analysis of *Fratres*. Here I will analyse the use of tintinnabuli in *Fratres*; I will also discuss the resemblance between passacaglia and *Fratres*'s form; later I will explain how tintinnabuli technique was used in the violin part; and finally I will debate about the challenges of the interpretation of *Fratres*.

## Introduction

The music of Arvo Pärt is very popular nowadays. It has attracted the attention of many people around the world, it is played in the most eminent concert halls and it has been played in many movies. His music appears to be both, ancient and modern, thus many have attempted to track down its origins.

*“One senses its roots and its spirit, but the structure of the music is harder to grasp. A curious union of historical master-craftsmanship and modern ‘gestus’, it is music that could have been written 250 years ago and yet could only be composed today.”<sup>1</sup>*

Some of the styles in which Pärt’s music has been described are: minimalism, spiritualism, spiritual minimalism, holy minimalism, and sacred music. These style tags are correct to a degree in which Pärt’s music is recognized in the American minimalist movement of 1960s. Nevertheless, after a detailed analysis of his music, these terms become inadequate in fully defining his style, in that they fail to even hint at the strong medieval influences in his works. Pärt has even been referred to as a “minimalist pioneer,” although the composer himself would probably more closely align his music with that of the Gothic period.

If we try to find influences of Pärt’s music we may encounter, in addition to Gregorian chant and medieval heterophony, the liturgical music of Stravinsky, Satie’s *Socrate*, and seldom even the ceremonial music of Janáček. Still, this does not mean that Pärt is influenced by these or any other composers, he just uses few notes and much repetition, as they do. The usage of few notes and much repetition should place him in the same category with American minimalists represented by La Monte Young, Terry Reilly, Steve Reich and Philip Glass, however, neither that is fitting enough to define his style completely. His minimalistic approach does not come from simple and hypnotic repetition, which characterizes American minimalism, but from the search for rejuvenated tonality without standard functions that were dominant in Classicism and Romanticism. Nevertheless, his music does contain both traditional minimalism and elements of medieval renaissance music intertwined with the technique he created called ‘tintinnabuli’.

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<sup>1</sup> <http://www.arvopart.org/analyses> :accessed in February, 2012

## Biography and Evolution of Compositional Style

Arvo Pärt was born in Estonia on September in 1935. He grew up in Tallinn. In 1958 he received employment in a music section of Estonian radio, working as a recording director and a composer of music for film and television. At the same time he studied composition at the Tallinn Conservatory with Professor Heino Eller who introduced young Pärt to Schoenberg's twelve tone serialism also called 'dodecaphonism'.

Pärt's early works also reveal the influence of Russian neoclassic composers such as Shostakovich and Prokofiev (two *Sonatinas* and a *Partita*, both written in 1958). His first dodecaphonic work was *Necrolog*, written for orchestra in 1960, this piece is significant because it marks the beginning of what was later dubbed Pärt's 'experimental period', an early compositional period where Pärt explored the possibilities of serialism and aleatory techniques. *Necrolog* was also the first Estonian work to use twelve-tone serialism. Two choral works that followed, cantata *Meie aed* and oratorio *Maailma samm*, brought him the first prize at the Young Composers' Competition in Moscow. Next choral work is a one-page composition called *Solfeggio*. This is an interesting work because it hints the minimalistic simplicity of his future works. *Solfeggio* consists of a series of major scales and therefore resembles an exercise.

*Symphony No. 1* (also called *Polyphonic*) was dedicated to Professor Eller and is known for a fairly clear twelve-tone structure, integral serialism and some elements of sonorism (musical trend initiated by Penderecki and Gorecki). *Perpetuum mobile* was composed in 1963, a year in which Pärt graduated at the Tallinn Conservatory. It is a mathematically imagined work in strict serialism with series that derive from those of the Symphony. Composing with such strict serial rules, has brought Pärt to creative dead end and forced him to take another path in which he focuses his creativity on experimenting with collage technique.

Pärt's collage technique combined the serial structure with the actual borrowed musical material of composers such as Bach and Tchaikovsky. Borrowed



material included not just quotations but also the large parts of unchanged music of many composers from the past. Tonality also came along with borrowed musical material, yet, it did not change the basic dodecaphonic structure.

Pärt has once said that his collages “were an attempt to replant a flower in alien surroundings (the problem of the suitability of tissue; if they grow together into one, the transplantation was the right move). Here, however, the idea of transplantation was not in the foreground - I wished rather to cultivate a single flower myself.”<sup>2</sup>

*Collage sur B.A.C.H* for strings, oboe, harpsichord and piano was among the first works composed using collage technique. Quotations of Bach’s *Sarabande* can be found in the second movement of the piece mixed together with piano clusters. Later compositions reveal other quotations such as Tchaikovsky’s *Children’s Album* in the *Second Symphony*, or Bach’s *Well-tempered Clavier* in *Credo*. Some compositions, however, do not contain direct quotations but Pärt’s own imitation of some early style. *Pro et contra* is an example where Pärt imitates Baroque style rather than actually borrowing direct quotations from the past. *Credo* was the last piece Pärt wrote using collage technique and it marks an end of the so called ‘transitional period’.

In the year of 1968, after composing the *Credo*, Pärt began to study medieval renaissance music of French and Franco-Flemish composers such as Josquin Des Prez, Johannes Ockeghem, Guillaume de Machaut and Jacob Obrecht. This was a period of Pärt’s creative silence which he ended in 1971 with *Symphony No.3*, a composition which is significantly different from any of his previous works. For the first time in his life Pärt introduces polyphony into his work and it is obvious that he was influenced by Dutch polyphony. However, this work also contains some elements of classical period. Unlike any previous work, *Symphony No.3* is entirely tonal and tonality shows a new path that Pärt is about to take and never to return to dodecaphony. In 1972 he composed *Lied en die Geliebte*, a symphonic cantata after which he went back into another period of creative silence where he searched for ways to express himself through redesigned tonality.

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<sup>2</sup> <http://www.arvopart.org/bio.html> : accessed in February, 2012

The end of Pärt's second creative silence came after four years. The year of 1976 was flooded with new compositions which presented Pärt's new and self-invented technique called 'tintinnabuli' (the name derives from the Latin word for "bells"). The first piece composed in tintinnabuli technique is *Für Alina* for piano. It is the composition of widely spaced pitches, open intervals, great calmness and simplicity (for which his music is also perceived as minimalistic), tonality and long pedal tones. These characteristics have become essential elements in Pärt's post-1976 compositions.

The tintinnabulation holds two main ingredients, two voices of which one is made out of a single triad that marks the tonal centre of the piece or the section of the piece, and a melodic line (or lines) which counterpoint the triad.

Pärt's music of this period, rightfully called 'tintinnabuli period', is characterized as serene, graceful, sad, calm, enigmatic, mystical and ancient. It sounds very old and reminds us of medieval choral music, yet, somehow at the same time it sounds very fresh and new. His new style has encountered many complaints from critics who were saying that Pärt was simple-minded. Critics have also unfairly grouped him with composers of so-called "holy minimalism" (together with composers like Vasks, Tavener, Gubaidulina and Gorecki), but unlike these composers Pärt uses very rigorous system in his tintinnabuli technique, a system whose strict parameters remind of Schoenberg's dodecaphony. If Pärt had never used twelve-tone series he would have never invented his technique.

Among his best known and most often performed works are three pieces composed in tintinnabuli style *Fratres*, *Cantus in Memoriam Benjamin Britten* and *Tabula Rasa*. They were written in 1977, just a year after the first tintinnabuli work was composed. These works brought him fame and his music began to be performed in the West. Pärt had many difficulties with the Soviet officials, so in 1980 he finally decided to emigrate. Firstly he moved, together with his family, to Vienna and a year later they moved to Berlin where he still lives today. Since his emigration Pärt has focused his attention to choral music with religious texts. Works that followed, such as: *St. John Passion*, *Te Deum*, *Litany*, *Magnificat* and *The Beautitudes*, contain much more dissonance than his early tintinnabuli works, however, dissonance in this case is

used only to enrich the harmony while the harmonic basis has remained unchanged. A fact worth mentioning here is that Pärt has never used chromaticism.

Numerous versions of *Fratres*, *Cantum*, *Festina* and *Siloun`s Song* have been made for variety of chamber groups. All of these works have been continuously recorded and performed all over the world.

## Tintinnabuli

*“Tintinnabulation is an area I sometimes wander into when I am searching for answers – in my life, my music, my work. In my dark hours, I have the certain feeling that everything outside this one thing has no meaning. The complex and many-faceted only confuses me, and I must search for unity. What is it, this one thing, and how do I find my way to it? Traces of this perfect thing appear in many guises – and everything that is unimportant falls away. Tintinnabulation is like this. Here I am alone with silence. I have discovered that it is enough when a single note is beautifully played. This one note, or a silent beat, or a moment of silence, comforts me. I work with very few elements – with one voice, two voices. I build with primitive materials – with the triad, with one specific tonality. The three notes of a triad are like bells and that is why I call it tintinnabulation.”<sup>3</sup>*

I have already mentioned, the creative silence in which Pärt had been before announcing his first tintinnabuli work *Fur Alina* in 1976. And it turned out that this four year long period was in fact fulfilled with exploration of simple melodic lines and triads. Pärt’s previous work, *The Third Symphony* had already hinted some of the elements of his tintinnabuli technique, such as tonality and influence of Gregorian plainsong, however, when first tintinnabuli composition was created it was radically different from any of his previous works. Pärt now revealed that the centre of his interest is a triad rather than tonality. He needed to find a way of sustaining a sounding triad while making it possible to move through its powerful traditional gravity. He also showed the need for constraints because he feared that too much freedom can be dangerous. “It can be good or bad. It is dangerous, this freedom. Without discipline, freedom is very dangerous.”<sup>4</sup>

The tintinnabuli base consists of the combination of the two simple elements: a melodic line and a triad. The continuity of these two simple elements is achieved by leading melodic line step by step and triad tones which rotate depending on melodic line.

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<sup>3</sup> Hillier Paul, Arvo Pärt, 1997 (p.87)

<sup>4</sup> Arvo Pärt, The Sound of Spirit – NYTimes.com

*Für Alina* was the first work composed using tintinnabuli technique. This short, simple, tranquil and serene piece is written for piano and it is technically very simple to play. It marks the basics of tintinnabuli: there are two lines depending one on the other, one line is moving freely but gradually in small steps while the other line fills the pitches of the ‘tonic’ triad. There is no chromaticism or the change of tempo or tonality.

In the next few years Pärt created a large number of works in his newly developed style. All those pieces seem to have something in common, as if they belonged to a one large work process, the exploration of tintinnabuli. Those works share the same musical concept but there are no repetitions of any section, except the very often used descending Eolian mode.

*“The tintinnabuli style is based on a simple system for retaining the horizontal and vertical manifestations of the pitch- melody and harmony (scales and arpeggiated triads). The harmonic framework has been tilted sideways to form a musical line.”*<sup>5</sup>

Tintinnabuli sound is not just a texture made of mixed scales and triads but a result of a specific composition method developed during the Pärt’s quiet period, a method that was strongly influenced by (but not based on) medieval music with strict rules which remind us of Schoenberg’s strictness in dodecaphony. Tintinnabuli technique has very clear principles which were not made arbitrarily but are a result of observation and re-evaluation of the meaning of tonality. Pärt has searched for a way to establish tonality as a standard base of the musical expression but without the traditional harmonic functions of Romanticism and Classicism.

The elements of tonal music can be reduced to triad and the diatonic scale, which may be seen as two sides of a coin- a tonality can be expressed both vertically and horizontally.

Some aspects of tintinnabuli resemble modality, however, there are no modulations or chromaticism, harmony does not include any functions in the traditional sense, there is no sense of tension and relief and the constant presence of tonic triad and the drone indicate modal music. Tintinnabuli is the new mixture of

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<sup>5</sup> Hillier Paul, Arvo Pärt, 1997 (p.90)

tonal and modal music, the use of tempered tuning and emphasis on the triadic structure categorically dismiss the idea of neo renaissance simply because there were no tempered instruments in renaissance time and triads were not used vertically.

Base of tintinnabuli is a two-sided texture which holds the melodic line on one side and the 'tintinnabuli' line which presents the pitches of the tonic triad. Melodic line can be composed in accordance to the textural pattern or as completely abstract musical procedure, but it is very seldom composed freely. However, the melodic line was composed so that tintinnabuli voice fits in a way that is never arbitrary but is guided by one principle which can be applied on various ways. Tintinnabuli voice is always one of the pitches of the tonic triad (never unison or octave) that is intertwined with the melodic line in constant and specific manner. Once the relationship between the melodic line and tintinnabuli voice is set it does not change and it is applied constantly.



The example above shows the foundation of the tintinnabuli technique where the tintinnabuli line is a triad pitch that flows around the melodic line, first above the melodic line and then below. In fact tintinnabuli voice can be placed in one of two positions relative to the melodic line, it may remain above or below the melodic line, or it may alternate above and below. There are two positions of tintinnabuli voice:

- 1) Tintinnabuli voice sounds a pitch in the triad which is closest to the melodic line (1<sup>st</sup> position) and
- 2) Tintinnabuli voice sounds the pitch which is next but one in the triad (2<sup>nd</sup> position).

Now it becomes evident that there are three possible ways of applying the tintinnabuli voice to the melodic line:

1. Alternating above and below the melodic line (alternating)
2. Remaining above the melodic line (superior)
3. Remaining below the melodic line (inferior)

The following example shows the application of some of these basic positions to a simple A minor scale.

The image displays four musical staves, each representing a different application of the tintinnabuli voice to an A minor scale. The scales are written in treble clef and consist of eight notes: A, B, C, D, E, F, G, A. The first staff shows the scale in 1st position, superior, with the tintinnabuli voice (circled notes) placed above the melodic line. The second staff shows the scale in 2nd position, superior, with the tintinnabuli voice placed above the melodic line. The third staff shows the scale in 1st position, inferior, with the tintinnabuli voice placed below the melodic line. The fourth staff shows the scale in 2nd position, inferior, with the tintinnabuli voice placed below the melodic line.

In practice first position is often used as alternating and the second position is used as superior or inferior.

The whole tintinnabuli technique is created as symmetric system and therefore there is an option of alternating any sequence from above or below (Pärt uses this very often and, as we will see in the future chapters, *Fratres* is based on this principle). The example shows some ways of how the tintinnabuli voice can be applied to a simple A minor scale.

Melodic line is composed with more freedom than tintinnabuli line, it may range from the simple scale pattern that moves step by step, to any small variation of the scale: repeated pitches, interval jumps, inversions of the scale, repeated intervals, etc. However, the creation of the melodic line can be categorised in four modes which are simple ascending or descending scales which have direction of arriving to the central pitch:

1. ascending from the tonic
2. descending from the tonic
3. descending to the tonic
4. ascending to the tonic

This example demonstrates the four modes:



For the sake of preserving the natural balance, the relation between different modes is immensely important, therefore, modes 1 and 2 impose as a pair, the same goes for modes 1 and 3, 3 and 4 or 2 or 4. The central pitch is usually the tonic of the triad and melodic scales are supposed to ascend or descend to this pitch, however the central pitch does not necessarily have to be the tonic (although it usually is), it can also be one of the remaining two pitches of the tintinnabuli triad.

When we add to these basic modes the possibility of varying the melodic line by repeating the pitches within the melody, non-gradual movement, use of multiple pitches as the centre of the melodic line, octave transpositions, introduction of a break within the melodic line, we can only then see the immense creative possibilities of this very simple but strict compositional system.



*“In one of our discussions about tintinnabuli, Pärt described to me his view that the melodic lineal always signifies the subjective world, the daily egoistic life of sin and suffering; the tintinnabuli voice, meanwhile, is the objective realm of forgiveness. The melodic line may appear to wander, but it is always held firmly by the tintinnabuli line. This can be likened to the eternal dualism of the body and spirit, earth and heaven; but the two lines are in reality one line, a twofold single entity.”*<sup>6</sup>

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<sup>6</sup> Hillier Paul, Arvo Pärt, 1997 (p.96)



Another interesting composition from this earliest period is *If Bach had been a bee keeper...* Initially it was composed in form of concertino for winds, harpsichord and tape only to be rearranged for winds, piano and strings later. It is a highly unusual piece for this period because of its rich chromaticism, an element which is vivid contrast with the basic principles of tintinnabuli technique (diatonic scales and triads). On the other hand this work can be interpreted as a further development of tintinnabuli technique because in this work we find the first arpeggiated motifs, the element which is soon to become the well-known characteristic of the tintinnabuli instrumental music. Once again here Pärt introduces the B-A-C-H motif which he multiplies and varies for the sake of harmonic richness which is supposed to create an effect of bees swarming. The BACH motif is varied metrically, it is also transposed and layered together with other transpositions for the greater harmonic saturation. Pärt here introduces for the first time the diminished seventh.

In 1977 Pärt creates a torrent of new compositions. Some of these compositions are considered his best works and three of these works are very often performed today: *Fratres*, *Cantus*, *Tabula Rasa*.

*Arbos* is the first piece Part created in this period and it indicates the shape of the tree. One look at the score reveals how Pärt achieved this shape of the tree musically. Notes are spread throughout the time in three layers, each in its own speed. They represent the three layers of tree (branches, trunk and roots). Rhythm remains the same but every following phrase starts with its rhythm reversed. Melodic lines accentuate A-D-G-D pitches. In all three layers the melodic line occurs by gradual addition of one pitch at the end of every phrase, similar to the principle in above discussed *In Spe*. The highest and the fastest melodic line is followed by one inferior tintinnabuli line; the middle melodic line is surrounded by two tintinnabuli lines, one superior and one inferior; the lowest and the slowest melodic line is accompanied by one superior tintinnabuli line. Many versions of this work have been made, however each and every one contains some kind of percussion to articulate the phrases.

Pärt's next work was *Cantus*. The full title of this composition is *Cantus In Memoriam Benjamin Britten* and it shares some of its characteristics with *Arbos*: a compound triple metre, a note-by-note construction of a descending phrase, an alternating rhythmic current, simultaneous sounding of the same material in a

proportionally slower tempo, descending pitches in all parts from a high register in the beginning to a low one at the end. *Cantus* has five layers of tempo, each presented one octave lower and twice slower as the preceding one. Top two layers, same as bottom two layers, have one tintinnabuli line in first inferior position. Middle layer, however, consists of only melodic line and no tintinnabuli line and it is presented by violas. Melody is a simple descending A minor scale (Aeolian rather than harmonic or melodic). As the music progresses the fast layer cover the greater amount of material than their slower counterpoint, and every layer reaches their final pitch of the A minor triad in the low register.

The beginning of the string entry in the *Cantus In Memoriam Benjamin Britten*:



Pärt's next composition was a cycle of six short variations for piano. It is also based on a diatonic scale and together with *Fur Alina* it is the only piece for solo piano that was composed using tintinnabuli technique. Almost all of Pärt's tintinnabuli compositions from his Estonian period are based on consonant combinations of pitches, using only white keys on the piano and the Aeolian minor scale with tonic and dominant as tonal centres for the melodic line.

*Fratres* distinguishes itself from the group as being the early example of relatively dissonant harmony. However dissonant it may be, it is always supported by underlying A minor triad. The unusual dissonance in this piece is accomplished by using the augmented second B flat- C sharp, the augmented second can be seen as harmonic D minor scale. Harmony is further enriched with the introduction of a

second melodic line. Melodic pattern remains the same throughout the piece and it consists of three bars and its inversion. Two-bar rhythmical pattern is implemented between each six melodic bars and it represents a frame for the melodic structure. This rhythmical frame can be found in several instrumental tintinnabuli compositions where it enhances the silence and serenity of the music.

Three vocal works followed *Fratres: Missa Syllabica*, *Cantate Domino* and *Summa*. Each one of these vocal compositions relies on the text in a new manner which directed Pärt towards diatonic step by step melodies once again, still, the melody is not connected to the abstract constructional process anymore.

The conclusion to his early tintinnabuli works comes with the double concerto for two violins, string orchestra and prepared piano called *Tabula Rasa*. It sums up all the instrumental tintinnabuli works rather than introducing any new principles. Two movements, *Ludus* and *Silentium*, are contrast in mood and tempo. The relation between the central pitches for *Ludus* and *Silentium* may resemble the tonal relationship between traditional contrast movements of Classical or Romantic period, however this relation is not audible (the second movement begins with dominant, however it was not anticipated nor expected) and therefore it proves that Pärt has accomplished to strip the tonal music out of its traditional functions. “We were all a bit surprised by the empty picture of the score, it was all tonal and so transparent. There were so few notes... It’s a cleansing of all the noise that surrounds us,”<sup>7</sup> - Gidon Kremer.

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<sup>7</sup> Arvo Pärt, *The Sound of Spirit* – NYTimes.com

## Fratres

I first heard *Fratres* in 2004, performed by Gidon Kremer and Kremerata Baltica on the “Bemus music festival” in Belgrade, and I thought it was the astonishingly serene and beautiful piece. Though it sounded very new to me, it had already been performed all over the world and also had become quite famous.

The first *Fratres* was composed in 1977. The question of scoring in the original version was left open. Numerous versions of *Fratres* have been made up to now, but only significant difference comes from instrumentation, the base structure of the work remains the same. The most different versions are for solo violin and piano, and for solo cello and piano. Even though the harmonic structure, which is preserved in the piano part, remains the same, the violin part (or cello part in its version) plays a series of variation based on the underlying material. Other versions of *Fratres* have been scored for: strings and percussion; solo violin, strings and percussion; string quartet; cello and piano; violin and piano; wind octet and percussion. The version for violin and piano was made in 1980. It is noted in the score that Pärt dedicated this version to Elena and Gidon Kremer. The famed violinist had also given the first performance of Pärt’s *Tabula Rasa* in 1977.

The word ‘fratres’ means ‘brethren’, an archaic plural of the word ‘brother’. The name had maybe come from the Pärt’s thoughts about the relation of the two voices of his compositional style; however, I am uncertain about this.

*Fratres* can be seen as a piece with theme and eight variations. Or even nine variations on top of the theme. Every variation is a six-bar phrase divided by two-bar fragments after each presentation of the theme. Structure of the six-bar phrase remains the same throughout the piece so it is easy to count the bars of this work. Nine times six bar plus nine times two bars equal seventy two bars. The six-bar phrase consists of three bars of very simple material and its inversion. First bar is in 7/4 time, next bar grows to 9/4 time due to expansion of the melodic line, and consequently the third bar is in 11/4 time. The same order repeats in the inversion. This pattern of times does not change throughout the piece.

The six-bar phrase:

The image displays three staves of musical notation, each representing a variation of a six-bar phrase. The first staff is in 7/4 time and features a melodic line with eighth notes and dotted rhythms, accompanied by a bass line with chords. The second staff is in 11/4 time and shows a similar melodic structure with more complex rhythmic patterns. The third staff is also in 11/4 time and continues the melodic development. All staves maintain a consistent harmonic structure with two melodic lines and two drones on A and E.

Harmony is the same in every variation. There are always two melodic lines present, one or two tintinnabuli voices and two drones on A and E (except in the opening phrase). The only harmonic element that changes throughout the piece is the central pitch of the two melodic lines. The central pitches descent in thirds and they complete the circle in the variation no.8 and go one step further in the final variation. Note that these six-bar patterns are not marked as variation in the score, however they are variations of the underlying ever present theme.

All variations are different in character. Pärt seems to have explored all the technical possibilities of the violin. He uses very different techniques for each variation, and few variations are extremely challenging technically. Pärt introduces harmonics, double stops, triple stops, arpeggiated chords and a very broad range of pitches.

## Fratres and Passacaglia

We have seen that the whole structure of *Fratres* is based on one very simple motif tunnelled through a tintinnabuli system of variation. The motif floats on top of always present A and E drones, and changes its form in many ways through the piece. This fact reminds me of passacaglia form. Passacaglia is a very old dance form with continuous variation in  $\frac{3}{4}$  time where musical units alternate on top of unchanging ostinato voice. Here I must mention that passacaglia is very often identified as chaconne, another old dance form based on variation. There are many discussions and ambiguous theories on the matter of why are the two often identified as the same, however, here I will embrace the opinion that chaconne is a variation form where ostinato has to be a theme, opposed to passacaglia in which ostinato can consist of any voice. In the above mentioned definition of passacaglia, one may at first notice that *Fratres* cannot be in the passacaglia form because it is not in  $\frac{3}{4}$  time nor it is a dance. *Fratres* is a multi-metric composition where times change with every bar and it cannot be the dance because of its tranquil character. However the passacaglia form has evolved in many ways since its early origins, especially in Germany:

*“A passacaglia from well before 1675 by J.C. Kerll (who had studied in Rome) still used the traditional descending tetrachord as ground-bass formula; however, later composers such as Buxtehude and Pachelbel introduced bass formulae of their own devising, which were treated during at least the first part of the composition as rigorous ostinatos. These bass progressions assume a thematic significance not present in the traditional formulae, as various techniques borrowed from chorale improvisation were brought to bear on them. The busy passage-work and contrapuntal density largely obliterated any dance feeling, and relationships to the genre’s origin became increasingly tenuous.”*<sup>8</sup>

Some famous passacaglias were composed in times other than  $\frac{3}{4}$ , for instance Haendel’s Passacaglia from *G minor suite*, therefore I feel that the rules about time and dance can be taken with some reserve due to their flexible meaning.

The next question is whether *Fratres* has the suitable kind of variation. Undoubtedly it does consist of variation, it is very clearly presented and obvious but

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<sup>8</sup> <http://www.oxfordmusiconline.com/subscriber/article/grove/music/> :accessed in March, 2012



now there is the matter of finding the ostinato part. In traditional passacaglias ostinato can usually be found in low register, played by bass, cello or in the left hand of the piano, and it never changes. In *Fratres* we have to search for it in the piano part since the violin part is always changing. Piano part holds both melodic lines and tintinnabuli voice in every variation but, although the tintinnabuli voice never changes, the two melodic lines are created of different pitches each time they appear even though their structure remains the same. We can conclude that only material in the piano score that doesn't change, is the two drones A-E, everything that happens with the music material in *Fratres* is solidly anchored by these two drones. However, two lying drones are not enough to make an ostinato because the definition of ostinato implies that there should be a repetition of a pattern made out of changing musical elements. The only thing that can be seen as ostinato is the tintinnabuli six bars structure which changes slightly and regularly according to the rules of tintinnabulation, like a skeleton and a skin of an aging man.

The conclusion to whether *Fratres* could be seen as passacaglia is still not very clear, it definitely fits the description of passacaglia to a certain degree but it can only be seen as passacaglia in a broader sense, as a modern passacaglia where the actual structure can be seen as ostinato which underlies all the variation. It is obviously not a dance nor it has a typical time, yet, *Fratres* would not be the first exception to these rules either.

## Fratres and tintinnabuli

*Fratres* was written in 1977, in the time when most of Pärt's early and most successful works have been written. His earliest tintinnabuli compositions, composed in 1976, followed the basic tintinnabuli principles very strictly, and as the time went by, his approach to tintinnabuli composition was becoming richer and increasingly free.

*Fratres* contains all the basic tintinnabuli principles, but it also brings much more, it has been enriched with some elements that cannot be found in pre-*Fratres* tintinnabuli works. For the first time, Pärt had introduced two melodic lines to counterpoint the tintinnabuli voice. Melodic line contains the augmented second B flat-C sharp, also introduced for the first time, which can be observed as part of harmonic D minor scale. This interval will greatly contribute to the dissonance of *Fratres*, a feature not very common for the early tintinnabuli period (with the only exception being the '*If Bach had been a bee keeper...*'). Tintinnabuli voice follows the basic tintinnabuli rules strictly as it only contains the notes of A minor tonic triad. Throughout the piece, except in the opening, all the activity in the music is firmly anchored by two drones on A and E (the tonic and dominant of the A minor scale and also the two tones of a tintinnabuli triad).

Development of the melodic line is somewhat consistent with his previous works. Base of the melodic line is made out of four notes, four simple notes which give birth to all activity of the music, like a little seed of life which grows in every direction except towards the tintinnabuli voice which follows and constrains the structure.

The basic structure for foundation of music material:



The central pitch of the melodic line is C sharp, around which everything revolves. The half note on C sharp opens the piece and it is followed by two quarter notes on B flat and D, and the phrase ends with the central pitch as dotted half note, these four notes make the 'seed'. The four-note motif evolves by adding two extra pitches to the 'seed'. The two extra pitches are added after B flat and D respectively and they move one step further away from the central pitch, each following the direction of the previous pitch. The two added pitches last as long as their preceding notes. Pärt decided to place the motif and its derivatives to one bar respectively even though the variations of the motif last longer. Thus, the two added pitches extend the bar metre from 7/4 time to 9/4 time and later to 11/4. The expansion of the motif occurs two times resulting in a melodic line which holds all seven pitches of the D minor scale, with G being the lowest pitch, F highest and C sharp being the central pitch. Following the opening three bars is the inversion of the same material. The fourth bar brings the central pitch, which remains the C sharp, but this time it is followed by D after which comes B flat. Rhythm remains the same in the inverted bars.

The second melodic line is parallel to first as it follows the same pattern in tenths above. Tintinnabuli voice is placed between the two melodic lines and it plays the pitches of A minor triad. In relation to the first melodic line, the tintinnabuli voice is superior in second position and in relation to the second melodic line it is inferior, also in second position.

The central pitch of the melodic line changes after each presentation of the six-bar pattern. After each presentation of the pattern, the tonal centre descends in thirds, and eventually comes back to the C sharp from the beginning (but this time in a lower octave), yet, it goes one step further and ends with the central pitch from the second presentation of the six-bar pattern, on A in the first melodic line and on C sharp in the second. Interesting feature of the last presentation is that A and C sharp are the pitches of A major tonic triad, as well as the last three beats of an ending sequence. It seems as if Pärt wanted to alternate into A major area to give the piece a comforting ending. The descent of pitch centres is noticeable just by glancing at the piano part of the score where the register in piano part descends from both hands being written in the G clef towards the end where both hands are written in the F clef.

The descent of central pitches of two melodic lines throughout the variations:



The tintinnabuli voice remains in the same position relative to the two melodic lines. It is always between them, it is superior in the second position relative to the lower melodic line, and inferior in the second position relative to the second melodic line.

The two drones on A and E are always present in the left hand of the piano score. That also means that they appear only after the unaccompanied six bars of the violin part. The drones are written as very long notes, with as many beats as the bar holds.

Between all presentations of the six-bar pattern there is a two-bar fragmented structure which holds the A and E pitches (drones) as well as G, D, A and E pitches which are open strings on a violin. The open string pitches in this case simulate the percussion instrument because they are played pizzicato, they did not come out of tintinnabuli principle. *Fratres* ends with this two-bar fragment, the music fades away in very soft dynamics marked as “*ppp*” in the piano part and as “*pp*” in the violin part. The open string pitches are played pizzicato every time except in the final fragment where it is marked “*con legno*”. Thus, this part should be played by softly hitting the strings with a wooden part of a bow. The effect makes it difficult to actually hear all the pitches because the sound of a bow hitting the strings produces some extra noises and therefore veils the sound of the pitches and resembles the percussion.

## Tintinnabuli and violin in *Fratres*

In the previous chapter I explained how the *Fratres* was built by using the basic tintinnabuli principles and which techniques Pärt used to further develop the structure. In this chapter I will focus on the methods that Pärt used to exploit the full potential of the technical capabilities of violin and how the technical aspect of violin playing interacted with tintinnabuli technique.

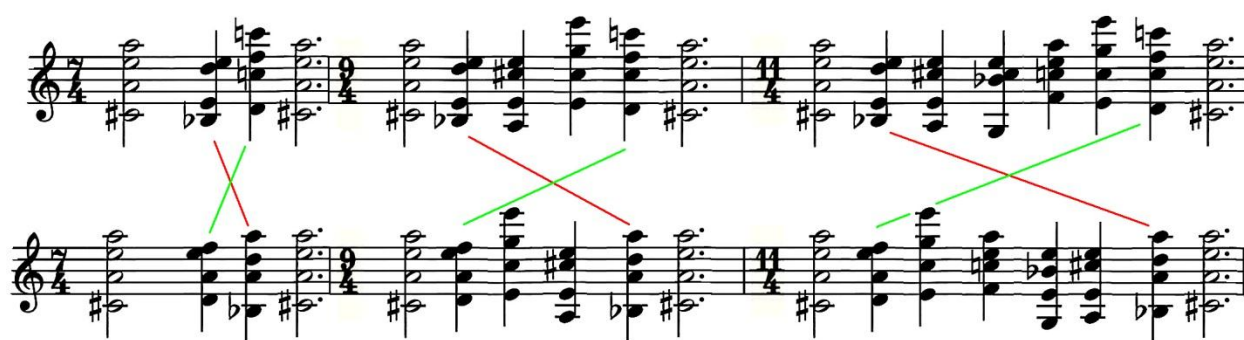
Violin solo six-bar opening brings four-tone chords arpeggiated in a very virtuosic fashion. This way of presenting the phrase through arpeggios was first written in “*If Bach had been a bee keeper...*” in 1976, only one year before Pärt had composed *Fratres*. The four-note arpeggios are meant to be played extremely fast. The duration of one actual note is very short as they are marked as 64<sup>th</sup> notes within a triplet. This means that there are twenty-four notes in just one beat. This effect leaves an impression of being surrounded by a swarm of bees and therefore I find it interesting that Pärt named his first composition in which this effect is introduced “*If Bach had been a bee keeper...*”

This is the example of arpeggiated chords from the beginning of *Fratres*:

The image shows a musical score for the beginning of *Fratres*. It features a single staff in 7/4 time with a key signature of one flat (B-flat). The score is marked with a box containing the number '1'. Above the staff, there is a tempo marking '♩ ≈ 63' and the instruction 'legato'. The music consists of three measures, each containing a four-note arpeggiated chord. Each chord is marked with a '3' and a bracket, indicating a triplet. The first measure starts with a sharp sign (#) on the staff. The dynamics are marked as 'ppp poco a poco cresc. sino al fff' at the bottom of the staff.

Each of the four notes of the chord is played on a different string of a violin. The first melodic line is always in the lowest register, played on the G string, and therefore, unlike the other three notes, it is clearly audible. The second melodic line and tintinnabuli voice keep their relative positions. The tintinnabuli voice is always

between the two melodic voices. The fourth note of a chord is always one of tintinnabuli pitches, sometimes it duplicates the already sounding pitch and sometimes it plays one of two remaining pitches of A minor tonic triad. Pärt explored all the possibilities for variation here, so when the same chord from the first three-bar section appears in the inversion of the same bars, it is noted differently whenever possible (the two melodic lines don't change but Pärt chose different pitches for the tintinnabuli voice).



Pärt chose different tintinnabuli pitches in the inversion

After the chaotic six-bar pattern introduction comes the two-bar fragment which begins with loud chord (A and E drones) played by piano. As I mentioned in the previous chapter, the open strings pitches in this fragment are meant to represent some kind of percussion and therefore Pärt marks those two chords to be played ‘pizzicato’.

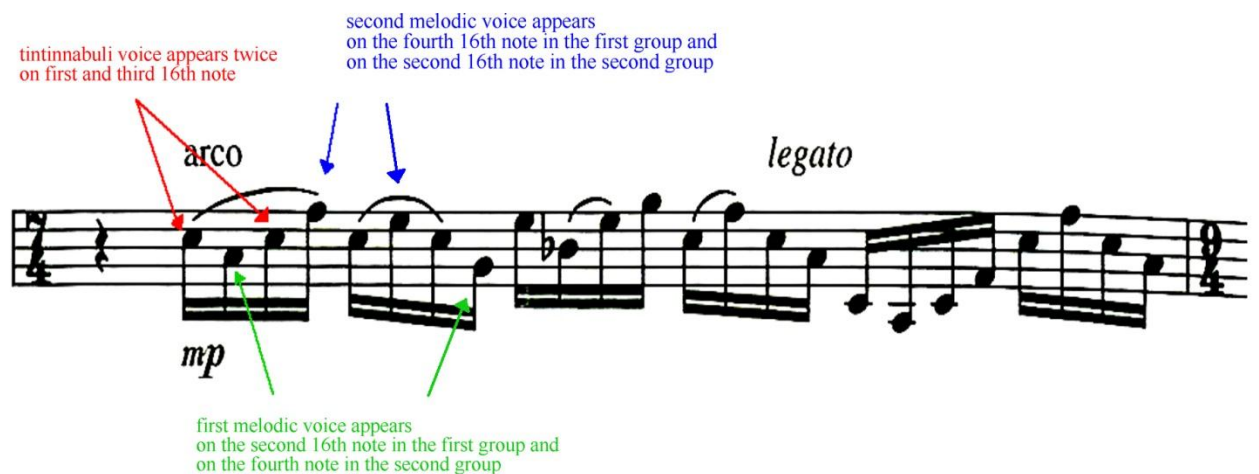
The second six-bar pattern brings the atmosphere with great serenity. The pattern is very quiet. The violin part marks the ‘ppp’ dynamics while the piano plays in ‘pp’. In first three bars the violin holds a very long fifth (A and E drones) while the piano part contains both melodic lines, the tintinnabuli voice and it also doubles the two drones from the violin part in unison. In the following inversion of these three bars Pärt doubles the tintinnabuli voice. The violin plays the tintinnabuli voice in harmonics. Pärt here makes a three-bar descend in register. In the first bar of the inversion the violin plays the tintinnabuli voice in super octaves, in the second bar it is

doubled in octaves and in third it is played in unison. Only first two bars of the inversion are played in harmonics.

The gradual descent in register is shown in this example:



The violin part contains both melodic lines and the tintinnabuli voice in the third six-bar pattern. In this variation Pärt used four 16<sup>th</sup> notes for each beat. First and third 16<sup>th</sup> notes are always the repeated tintinnabuli voice. The principle by which the two melodic lines appear is a bit more complicated but also very symmetrical. In the first group of 16<sup>th</sup> notes, the second 16<sup>th</sup> note is the first melodic line and the fourth 16<sup>th</sup> note is the second melodic line. In the next group of 16<sup>th</sup> notes the two melodic line swap their places and they continue to alternate their positions throughout the variation.



First and fourth bars begin with a quarter note break. I assume that Pärt thought that it was unnecessary to repeat the same pitches on top of longer notes at the beginning of the phrase because the same pitches are already sounding in the piano part.

Fourth variation of the six-bar pattern is very simple in its tintinnabuli structure but it is also very virtuosic from the violinist point of view. The two melodic lines are thirds and the tintinnabuli voice is superior in first position. The chords made out of these voices are broken into 32nd notes and distributed on three strings. Broken chords generally present a challenge for most violinists, when played ‘non legato’ they require a great deal of skill in order to have a clear articulation of the string crossings. This variation gives a rather agitated feeling as a contrast to the previous two tranquil variations.

Broken chords in fourth variation:

The image shows a musical score for the fourth variation. It consists of three staves. The top staff is a single five-line staff with a treble clef, a 7/4 time signature, and a box containing the number '4'. It starts with a quarter rest, followed by a series of 32nd notes, and ends with a quarter rest. Above the staff, the text 'arco non legato' is written, and below the staff, the dynamic marking 'f' is present. The middle and bottom staves are a grand staff with two treble clefs and a 7/4 time signature. The middle staff has a dynamic marking of 'mf' and contains four chords. The bottom staff contains four chords, with a repeat sign at the end. The time signature changes to 2/4 at the end of the piece.

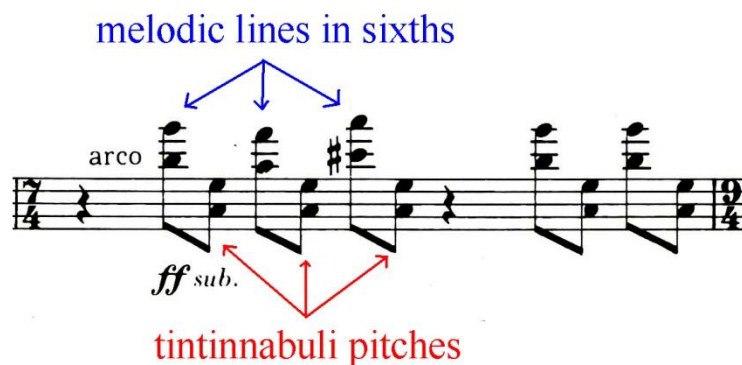
In the fifth variation there are new pitches along with the already existing pitches of two melodic lines and the tintinnabuli voice, however, from the violinist point of view, they are very easy to play.



Simple violin part of the fifth variation:



The two melodic lines are clearly separated from the tintinabuli voices in the sixth variation. Two semi crotchets divide the beat, the first semi crotchet plays the two melodic lines in sixths and in very high positions, the second semi crotchet plays the two open strings (A and E), both representing the tintinnabuli pitches.



This variation is maybe the most difficult to play of them all because the double stops in such high positions make it very hard to achieve good intonation. What makes this variation even more difficult is the fact that after each double stop one must lift the fingers for the sound of open strings in the second semi crotchet. By lifting the fingers one loses the firm grip which give orientation for the neighbouring double stops.

Seventh variation is very interesting because it contains some kind of gradual augmentation and decrease of structure, line a structural crescendo and decrescendo. The first bar has only one line (the tintinnabuli voice), the second bar has two lines (the first melodic line and the tintinnabuli voice), and the third bar has three lines (both melodic lines and the tintinnabuli voice). In the inverted bars this structural augmentation decreases back to just one line in the final bar. The chords in this variation are not arpeggiated. When playing chords, the only technical challenge is to produce a pleasing sound with a good intonation.

The structural crescendo :

arco  
mf one-note line in the first bar

double stops in the second bar

triple stops in the third bar

The central pitches complete the circle in the following variation. It has the same central pitches as the first six-bar pattern. In this variation violin plays only on top of dotted half notes at the end of each bar. Material in the violin part consists of passages that play the pitches of A major tonic triad. Here these pitches represent both melodic lines and the tintinnabuli voice, with C sharp being the first melodic line, E the second melodic line (E also belongs to the tintinnabuli pitches) and A as the tintinnabuli voice.

A-major passages on the top of dotted half note in eighth variation:

Last variation consists entirely of harmonics, very special effect common to all string instruments. In the past, harmonics were used in many virtuoso pieces of music by Sarasate and Paganini. They were also frequently used by impressionists to picture the dreamy atmosphere. In *Fratres* they contribute to the soft and divine atmosphere of the final variation. The harmonics double the second melodic line but they also play two tintinnabuli pitches on top of each dotted half note from the piano score.

harmonics double the second melodic line:

*Fratres* ends with two-bar fragment where violin plays the open strings pitches. These pitches are noted to be played ‘con legno’, another special effect. The ‘con legno’ effect is achieved by tilting the bow so the wooden part of it hits the strings. It resembles some kind of percussion because the material introduces some noise which partially veils the sound of the actual pitches.

## Interpretation of *Fratres*

Composers write music down on a piece of paper. They write the pitches, duration of the notes, their rhythm, register, modulations, the metre, etc. Still, all these musical elements can be interpreted in myriad of different manners. This is why composers often mark a way in which they want these elements to be interpreted. Specifically, they mark the dynamics (forte, piano...), the moods (gentile, furioso...), the tempo (allegro, largo...), etc. Yet, even with very precise markings, all musical elements are still susceptible to various interpretations. Markings are there to give just a frame of composer's original idea. When an artist performs a work, the work itself is far beyond composer's influence. Artist can disregard any markings and replace it with his own if he feels that his ideas are more suitable for the performance. Still, the artist should never alter the content of the composition. Two artists will definitely interpret the same work in a different manner. Even if one artist should try to copy the interpretation of the other artist, he will definitely fail to achieve his goal completely.

In *Fratres*, markings are scarce. Pärt marks the dynamics only once at the beginnings of each variation, and twice in the two-bar fragment which separates the variations. Does this mean that Pärt did not want any change in dynamics during the variation? Or does it mean that he simply left the artist to create their own dynamics according to their musical taste? A bit of both I think. I believe that the noted dynamics should not change drastically but that slight oscillations within the same dynamics are acceptable. The way in which these oscillations will be made depends entirely on the performer.

There is only one crescendo and not a single decrescendo in *Fratres*. The only crescendo in the piece is in the opening section. The virtuosic arpeggio chords have a huge dynamic range to travel across in just six bars. Pärt marks the dynamics as follows: *ppp poco a poco cresc. sino a fff*.

Besides the dynamics, Pärt marks few accents to be played on pizzicato chords in the two-bar fragments. The two bars of the fragments are contrasting in dynamics in most appearances of the fragment.

The fifth variation is the only place where Pärt noted the manner of the interpretation. There he wrote 'rubato', it means that an artist has some freedom regarding the tempo change, he can slightly alter the tempo by speeding up and slowing down again. These tempo changes should be very slight. Other than this 'rubato', there are no markings of tempo change throughout the piece. In fact, at the very end of the piece, Pärt reminds us that the tempos should not change at all. Two bars before the ending of the piece Pärt notes: non rit. sin' al fine.

I have been listening and comparing the performances of two great masters on the violin: Gidon Kremer and Vadim Repin. I was very surprised to hear that two interpretations are very similar to each other. It seems like both performances are very consistent with the Pärt's original text. Both Kremer and Repin develop the opening crescendo very beautifully by starting the piece quietly and slowly taking the dynamics to a very loud fortissimo. Their choice of tempo is also very similar. The only significant difference can be noticed in variations no.5 and no.8 where Kremer allows himself more freedom in phrasing. In the fifth variation, the one with 'rubato' mark, Kremer brings noticeably more change in tempo than his younger colleague, and in the variation no.8 he decided to remove the slur from the passages and to play them in 'portato' fashion. Both artists use a lot of vibrato to embellish their sound. Technically their performances are superb.

## Conclusion

Arvo Pärt is one of the most innovative composers of today. He created a unique and remarkable compositional style by using his own invention, the tintinnabuli technique. Pärt constructed a system which is based on variation of very small and simple musical units. The tonality in his compositions has a very unique meaning; it is stripped of its traditional meanings and functions. I think that the way in which Pärt re-created tonality is extraordinary.

Throughout this thesis my goal was to learn more about this fascinating technique, and also to see the practical application of its rules on the example of *Fratres*. I wanted to explore the interaction of the tintinnabuli technique with technical possibilities and limitations of the violin from a violinist point of view. And finally, I wanted to focus on the ways of interpretation of this new musical style.

I found out that Pärt's music, even though it is based on simple motifs, can be very complex in its structure. The motifs are transformed by all possible means of variation and then placed in multiple layers. Pärt uses many kinds of variation; he uses inversions, repetitions, transposition, variations of rhythm, etc. He skilfully plays around with arpeggios, harmonics, pizzicato, con legno, double stopping, triple stopping, chords, passages, etc. I find it very fascinating that all these elements are varied so much, while tempo, harmony and rhythm remain unchanged. Pärt achieved beautiful balance between the elements that change and those that don't change; it is identical to the balance between the melodic voice and tintinnabuli voice. One element is free, it represents creative forces within the artist; and the other element is strict, it represents the discipline. Through his music, Pärt eloquently suggests that the creative freedom and discipline depend on each other, that they are, in fact, one entity.

When I first started playing *Fratres* on my violin before I knew anything about tintinnabuli, I felt that the piece was strangely difficult to phrase nicely. The score seemed empty and I couldn't really sense the direction of the music in the violin part nor could I recognize the theme within the variations.

Now, after the in-depth analysis of the score, I realise the logic behind the irregular phrases and constant repetition of the pitches. I feel that the understanding of the structure and the awareness of the two tintinnabuli voices can be extremely helpful for finding your own way of interpreting the music.

The answers to the question of finding the right interpretation of any piece are numerous and indefinite. However, after careful observation of many performances of *Fratres*, my conclusion about the ways of interpretation is somewhat consistent with Pärt's philosophy about tintinnabuli and the duality of one entity. Therefore my conclusion is that Pärt wants us to strictly follow his instructions from the score, but those instructions should not be perceived as restraints or limitations because they simply prevent us from introducing too much freedom into the performance. The instructions about tempo and dynamics are like discipline of the unchanging harmony and rhythm, or like a tintinnabuli voice. The performer's creative freedom can be expressed through other interpretative elements such as the use of vibrato, the sound production, articulation, etc.

## **About the enclosed recording**

Together with my valued colleague Nikola Marković, I recorded Arvo Pärt's *Fratres* for violin and piano. The mutual idea for the interpretation of this piece was that we should take slower tempo so we could evoke some ethereal feelings and to simply enjoy the sounds of our instruments. We placed the microphone at approximately five-meter distance from us so it could pick up some echo from the concert hall. In the opening solo violin section I decided to alter the indicated dynamics simply because it is more comfortable to play the arpeggios slightly louder. I think we succeeded to produce a beautiful sound and the serene and ethereal character of the piece. For me the greatest challenge was to play the technically most difficult sections in a way that doesn't do any violence to the serene atmosphere of the piece. I feel that I managed to overcome the challenge to a certain degree; still, I feel that there are some things which could be better, such as intonation and sound production in the arpeggios. However, I hope that you will be able to recognize my musical intentions and to enjoy our performance.



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- <http://www.youtube.com/watch?v=FukUz9z9HkY>
- [http://www.youtube.com/watch?v=fbTK-uY\\_dIQ](http://www.youtube.com/watch?v=fbTK-uY_dIQ)
- <http://www.youtube.com/watch?v=7vdgZAJVnes>

### The scores used in examples:

- Arvo Pärt, *Fratres für violin und clavier* (1980), ue 17274, universal edition