

2010

Joep Franssens' Harmony of the Spheres: a conductor's analysis

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**JOEP FRANSSENS' *HARMONY OF THE SPHERES*:
A CONDUCTOR'S ANALYSIS**

A Monograph

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Musical Arts

in

The School of Music

by
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December 2010

Acknowledgements

As this work marks the culmination of a long educational process, I first must express great appreciation to my wife, Emily, and my family for their significant support and patience. The challenging balance of family, work, and this project was made bearable by their love and encouragement.

I am grateful to Centenary College of Louisiana, to both my faculty colleagues and students, for their patience as I finished this document. Two of my students provided much-needed data entry that expedited my analysis. Bonnie Cook researched translations, and Vincent Turregano implemented my analytical procedure for Movement V and offered his enthusiasm for the project. Both have my great appreciation for their assistance.

My undergraduate experience at Centenary College was a remarkable platform for my future educational pursuits, made all the more poignant by the passionate direction of Choir Director Dr. Will Address who helped inspire my love of choral and sacred texts.

At Emory University I found a wonderful balance of theology and musicianship, and I am grateful to Dr. Eric Nelson for showing how the two can be profoundly intertwined and for inspiring me to continue my education to the highest level.

To Dr. Ken Fulton, who taught me the critical aspect of musical architecture, which was to prove an important ingredient in this paper: your guidance throughout my doctoral studies and this project was exemplary.

I am thankful to the faithful committee members for your aid in my research and your willingness to serve.

And, lastly, the academic pursuit of Joep Franssens' music has been both challenging and inspirational. I wish him continued success with his music, while offering the great hope that it rises in appreciation in the United States.

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Abstract

Harmony of the Spheres is Dutch composer Joep Franssens' most extensive choral work to date, exhibiting a substantial possibility to enter the international repertoire as a complete work; however, several of the movements can stand alone effectively. Presented in five symmetrically conceived movements, Franssens scores the piece for SSAATTBB chorus with only the addition of full string orchestra for Movement III. The composition seeks to explore profound connections between science, music, philosophy, religion, and human relationships, intertwining excerpts from Benedict de Spinoza's magnum opus, *Ethica*, allusions to the ancient idea of the music of the spheres, and European minimalism. Franssens considers himself part of a movement amongst Dutch composers known as "New Spirituality" in the Netherlands.

The research is divided into three chapters. The first chapter offers a brief background of the composer and describes the compositional history behind *Harmony of the Spheres*. Chapter Two, titled "Spheres of Influence," explores the diverse influences on the composer and the work: Spinoza and *Ethica*, the ancient concept of the *music of the spheres*, American and "Holy" minimalisms, and the compositional philosophies of the Franssens and J. S. Bach. These critical underpinnings enlighten much of the compositional strategy and style employed by the composer. The final chapter presents an analytical overview of the work, informed by the varying influences described in Chapter 2 as well as representing a conductor's perspective in relating the intriguing stylistic traits and challenges of the work.

Chapter 1: Background of Joep Franssens and *Harmony of the Spheres*

The rich history of music in the Netherlands extends far back to the early Renaissance period. While the sphere of influence was most prominent then in a musicological sense, Dutch composers continue to seek out innovative musical styles and profound subjects. As Bas van Putten writes, Joep Franssens (b. 1955) is a product of a post-serial generation that found Dutch composers using “traditional tonality to create an accessible musical idiom whilst avoiding neo-romantic undertones”¹ A contrapuntalist whose first works originally show the influence of Johann Sebastian Bach and the Ligeti of *Atmospheres*,² Franssens now describes his music as representing “New Spirituality” in the Netherlands, a movement akin to the so-called “Holy Minimalist” music of composers such as Arvo Pärt and Henryk Gorecki.³ This kinship is more directly felt in a stylistic sense rather than a religious one; minimalist ideas such as the reduction of materials, repetition, static harmonies, and an atmospheric quality are prominent features of his music.

Originally a pianist, Franssens turned to composition and studied with innovative Dutch composer Louis Andriessen at the Royal Conservatory in The Hague and later with Klaas de Vries at the Rotterdam Conservatory.⁴ Interestingly, he considers Klaas de Vries more

¹ Bas van Putten, *Joep Franssens: Harmony of the Spheres* (CD Liner Notes), Translated by Robert Benjamin, Compact Disc (Muziekgroep Nederland: Composers’ Voice Special, CV 133): 23.

² Bas van Putten, *Joep Franssens*, Translated by Robert Benjamin (Amsterdam: Donemus, 1999), 13.

³ Joep Franssens, Interview by author, 12 February 2007, Baton Rouge, LA/Netherlands, Tape Recording, In possession of author, Baton Rouge, LA. All transcribed quotes have been edited for grammar.

⁴ Putten, *Joep Franssens*, 13.

influential, despite his teacher's more academic and serial style, rather than Andriessen, with whom he arguably shares more stylistic attributes. Regarding Andriessen, Franssens remarks:

When I went to Louis, it was at the beginning of the 1980s. I started with him, because he was the only composer in Holland with which I could relate in a certain way. And still, there are some overlapping ideas we have in common. But on a personal level, it didn't mesh at all. And that's the reason why I left him after two years. It was a funny situation. But you feel attracted to someone because you feel he has a part of the same musical identity, but it doesn't give any guarantee about whether it works or not... [The parts of the similar musical identity] have to do with statics in a certain way, but only in general. I think there is a kind of overlapping interest. For instance, he would say he would be interested in Janet Jackson; he would say he was interested in Plato; and he would say he was very much interested and involved with Bach—all those kind of things. In a certain way, he felt very much connected with people. He has a main interest also in jazz and popular music... So there were a lot of musical ideas and identities that were the same. And that gave me the idea that there would be a good communication, but it didn't [work]. The other way around, the next teacher I had was Klaus de Vries in The Hague, who was teaching in Rotterdam. And I did not feel attracted to his musical language, but in a personal way and in exchanging my ideas, he meant a lot to me. So it was a strange experience... At the end I studied two years with Louis and five years with Klaus.⁵

The composers' own words are intriguing in describing his relationships with teachers, but also in unveiling his wide range of stylistic influences. His interest in popular music foreshadows his musical language—one that can be constructed with careful contrapuntal ideas but simultaneously seeks an accessible sound. It also illuminates the dynamic between the intellectual and emotional processes. As he has spoken of quite forthrightly, serial composition has little interest for him, despite his successful studies with Klaus de Vries. In fact, he only tried it once as an exercise:

For me, it's too much of a one track mind, because it is only focused on the head and not on the heart. That's a simple answer, no? I become irritated, frustrated, and feel empty inside. That's also the enormous attraction to the music of Bach, because I always feel this interrelated system between the very technical approach of the music while at the same time, the very emotional approach.⁶

⁵ Franssens, Interview by author, 12 February 2007.

⁶ Franssens, Interview by author, 12 February 2007.

Franssens was introduced to the music of Johann Sebastian Bach at the age of ten, singing the *St. Matthew Passion*, an experience which led to great influence in his compositional style. He considers his journey toward being acknowledged as a serious composer in the Netherlands to have been a struggle because his musical ideas were opposite of the perceived academic approach; only in the last decade has he felt accepted and recognized for his stylistic contributions.⁷

Franssens' first works coincide with the beginning of his composition studies, and they mostly consist of chamber works and smaller instrumental pieces.⁸ Nearly all of these early compositions as well as his later efforts carry a title with some extra-musical association, another example of Franssens seeking to go beyond purely intellectual composition; however, it should be noted that he feels little connection to the music of the nineteenth century despite some programmatic similarities.⁹ Aside from *Harmony of the Spheres*, the composer has written only a handful of substantial choral works, including *Phasing* (1985, 1991 for Women's Choir and Orchestra) and *Magnificat* (1999, for soprano solo, chorus, orchestra). *Phasing* and a later orchestral work titled *Sanctus* (1996) are perhaps the two pieces that most foreshadow the musical language of *Harmony of the Spheres*.

Harmony of the Spheres (2001) is Franssens' most extensive and renowned work to date, though not particularly well known outside of the Netherlands and Europe. Conceived in an organic process over seven years (1994-2001), the hour-long work is a cycle in five movements that are symmetrical in both macro and micro formal structures and is based on texts by

⁷ All biographical information in this paragraph, unless otherwise attributed, comes from: Joep Franssens, Interview by author, 12 February 2007.

⁸ See Appendix A for complete works list.

⁹ Franssens, Interview by author, 12 February 2007.

seventeenth century philosopher Benedict De Spinoza (1632-1677). It is scored for eight-part mixed chorus (SSAATTBB) and string orchestra (Movement III only). Juxtaposing excerpts of Spinoza's treatise *Ethica* that explore the nature of God and humanity with ancient allusions to the Music of the Spheres in title, Franssens creates a slow-moving atmospheric work, whose aural experience belies an intense and detailed construction. Franssens expands realms of diatonic harmony by extending tonal areas both spatially and metrically, an effect which alludes to his Dutch musical ancestors, whose music was linearly and contrapuntally conceived with little aural sense of regular metric rhythm.

The history of the composition is interesting for its organic evolution if nothing else.

Franssens did not have any intention of writing a large cycle.

That's something I learned about myself—I give a very strong authority to what I call emotional intelligence. And what I mean by that is the whole emotional system has a very strong inner logical organization. And, of course, when I start to write a piece, there are certain things I feel attached to, and they are also my orientation, but there are also things I do not know! But there are compasses which are there without exactly knowing where they are, but I know they are there. For instance when I was writing *Harmony of the Spheres* the way it is now, it's just like this program I saw on Discovery about the way the Earth changed through the millions of years it existed. And what you can see: the whole time, the forms of what is land and what is sea changes.¹⁰

In 1994 Franssens wrote a competition piece for four male voice parts (TTBB), calling it “Harmony of the Spheres.” Afterwards he felt the piece would work better for mixed chorus, so he re-scored it for eight voice parts (SSAATTBB). That version was first performed in 1997, and the composer's response amounts to an epiphany:

I heard it here in Amsterdam in a very nice church with good acoustics, because the piece needs a lot of acoustic reverberation. And it was very much the way I meant it... the way

¹⁰ Franssens, Interview by author, 12 February 2007.

I wanted to hear it. During the last note, which sounded 3-4 seconds, I suddenly realized and quite directly that this is not finished. This is only the beginning of something.¹¹

Coincidentally, the composer wrote a second piece with similar musical language in 1996 for choir; both employ a modulation principle of progressing through the circle of fifths.¹² In 1998 Franssens began to develop the idea the both pieces might work together, and as part of a larger cycle. In the next three years he filled in the other movements, using the initial two circle-of-fifths movements as the outer frame:

So that's the reason why the idea was born that modulation would be the orientation for the whole piece. So I decided that the outer movements would be both going through the circle of fifths. Movement II and Movement IV are only using two or three modulations. And the middle part is just three flats, rotating around itself the whole time.¹³

The performance history is inconsistent, however, at this juncture; in 1999 the Netherlands Chamber Choir, under Estonian conductor Toni Kaluste, began working on the first movement. Of the five movements, the first has been performed the most, according the composer, which includes the Netherlands Chamber Choir tour to America in 2001:

It was that part which was done very often, and Kaljuste felt very attracted to my music... And I think under his leadership they did that [movement] 30 or 40 times. The second part was added and they did that five or six times. But the whole cycle was only performed once.¹⁴

The technical demands of the work prohibit many amateur choirs from possible performance, but this initial collaboration with the Netherlands Chamber Choir proved fruitful for Franssens as he was able to refine the piece, particularly the first two movements.

¹¹ Franssens, Interview by author, 12 February 2007.

¹² Franssens' orchestral work *Sanctus* employs the same concept, and he wrote it during the same time as well, clearly indicating this compositional idea was captivating to him.

¹³ Franssens, Interview by author, 12 February 2007.

¹⁴ Franssens, Interview by author, 12 February 2007.

In fact, all I need is up to five performances and then the piece is ready. I can remember when the Netherlands Chamber Choir started to perform the music; I found some things that could be better. But now, the first movement is completely ready. But in general, all pieces of mine, after the first performance, there are always revisions. Revisions might be a new melodic line, or change of instrumentation, or replace notes, or any kind of situation is possible. What I know is that the piece is very difficult to perform, even for the Netherlands Chamber Choir. It isn't a matter of which part is most difficult; what is difficult is to perform the whole cycle.¹⁵

The first movement continues to receive occasional performances, and Franssens is not bothered at all that movements might be performed out of the greater context, since they were originally conceived as separate works.¹⁶ The composer continues to refine the piece to provide greater accessibility to potential choirs, adding optional strings on the outer movements to aid the singers. However, he remains emotionally and artistically tied to the original conception, which reserves the strings only for the third movement to symbolize the divine.¹⁷

Despite its difficult nature, the work is a sublime example of rare modern choral writing which offers the listener multiple opportunities to explore on different levels. Certainly the trance-like inducement of minimalism adds a rich ethereal quality. And despite the lofty subject matter embraced by the title, Franssens authors an extraordinary journey into humanity's role both with each other, the cosmos, and the divine.

¹⁵ Franssens, Interview by author, 12 February 2007.

¹⁶ Franssens, Interview by author, 12 February 2007.

¹⁷ Franssens, Interview by author, 12 February 2007.

Chapter 2: Spheres of Influence

Benedict De Spinoza

Franssens' choice of texts could not be more obscure, or more enigmatic, than the words of seventeenth century philosopher Benedict De Spinoza (1632-1677). Spinoza is not himself obscure, for he is considered an extremely important figure in the field of philosophy, albeit with some controversy. However, the nature of the texts Franssens selected, as well as their source context, is intriguing. Many texts throughout the dense history of choral music have come from poetry, and it is often metered and lyrical in nature. Other sources such as prose and unmetred poetry are available also, but philosophical treatises in the form of geometric proofs have never been a significant source. And yet, Franssens carefully and profoundly has excerpted brief selections from Spinoza's monumental work *Ethica* for *Harmony of the Spheres*.

Franssens discovered Spinoza at the age of eighteen and describes his experience as profound: "...when I read the first page, I didn't know what happened to me, but I had the feeling I was reading something completely new, completely different, and also I immediately had this feeling that something would coincide between me and the text, and that also happened."¹⁸ As misunderstood as Spinoza was (and often still is), Franssens returned to him at a point in his own life when he felt the same ostracism, or perhaps he simply resonated with such a prominent thinker from his Dutch homeland. Stephen Nadler describes the controversial philosopher as a "metaphysical and moral philosopher, political and religious thinker, biblical exegete, social critic, grinder of lenses, failed merchant, Dutch intellectual, Jewish heretic."¹⁹ The disparity of opinions about Spinoza (e.g., some say he was an atheist, others a "God intoxicated man") is underscored by Don Garrett: who writes: "Providing explicit definitions of

¹⁸ Franssens, Interview by author, 12 February 2007.

¹⁹ Steven M. Nadler, *Spinoza: a life* (Cambridge: Cambridge University Press, 1999), xi.

his terms and formal demonstrations of his doctrines, he sought to clarify his meaning and reasons more diligently than has perhaps any other philosopher, yet few philosophers have proven more difficult to interpret.”²⁰ Since many interpretations of his writings abound, the appeal of Spinoza is not the absolute message delivered; rather, it is the depth of the challenge embraced by the philosopher, creating a seemingly infinite number of interpretations and thus securing a measure of timelessness, which might further appeal to the Franssens.

Spinoza left several important writings including *Korte Verhandeling van God, de mensch en deszelvs welstand* (Short Treatise on God, Man and His Well-Being, ca.1660), *Tractatus de intellectus emendatione* (On the Improvement of the Understanding, 1662), *Principia philosophiae cartesianae* (Principles of Cartesian Philosophy, 1663), *Tractatus Theologico-Politicus* (A Theologico-Political Treatise, 1670). *Ethica* was published posthumously in 1677 as per Spinoza’s instructions, for he feared the hostile reception his other works had received.²¹

Spinoza laid out the work in five sections: One—Of God; Two—Of the Nature and Origin of the Mind; Three—Of the Origin and Nature of the Affects; Four—Of Human Bondage or the Powers of the Affects; Five—Of the Power of the Intellect or on Human Freedom.²² Each part begins with a set of definitions and axioms to effectively frame the intellectual operandi in use; what follows is the substance of each part—a series of propositions with a set of

²⁰ Don Garrett, *The Cambridge Companion to Spinoza* (Cambridge: Cambridge University Press, 1996), 2-3.

²¹ Genevieve Lloyd, *Routledge Philosophy Guidebook to Spinoza and the Ethics* (New York: Routledge, 1996), 24.

²² Benedict de Spinoza, *A Spinoza Reader: The Ethics and Other Works*, Translated by Edwin Curley (Princeton, NJ: Princeton University Press, 1994), viii.

accompanying proofs.²³ In an attempt for ultimate rationality, Spinoza laid out his philosophy in the most mathematical way possible—structured geometric proofs.

Ironically, Franssens excerpts Spinoza in a way that appears, at first glance, to be highly illogical. Figure 1 illustrates translations of the texts used in *Harmony of the Spheres* and also notes their direct context from *Ethica*.

Several important observations may be drawn from these excerpts. The most immediate impression is the fact that no attempt is made to use these texts in any chronological sense or even as an overall representation of *Ethica*. Franssens resisted the temptation to use one text from each part of *Ethica* for each movement of *Harmony of the Spheres* (there are five parts to each work). Neither are the selected texts from the proposals or proofs, which are by the far the densest explanatory language used by Spinoza. Rather, the composer has selected these texts from the definitions and supplementary items in the appendices, and this is illuminating. Spinoza may feel that these selections are universal truths in nature and need no additional explanation. While they are extracted from their original context, these statements alone convey profound truths more directly than the processes of geometric theorems. It has even been suggested that “these non-geometrical sections offer an alternative version of the work’s central themes.”²⁴ And, it should be noted, despite its possibilities, that Franssens in no way intends to present *Ethica* in music; the title, *Harmony of the Spheres*, alone indicates a different organization to be considered in a later section.

²³ For instance, Part I of *Ethica* has eight definitions, seven axioms, and thirty-six propositions.

²⁴ Lloyd, *Spinoza*, 22.

I

Above all, people derive benefit from forming associations and joining together in such a way that they form more and more unity, doing everything they can to intensify friendship.

(Part Four: Appendix, Item 12)

Hearts, however, are conquered not by arms, but by love and nobility.

(Part Four: Appendix, Item 11)

II

Free is called that which exists from the necessity of its nature alone, and is determined to act by itself alone.

(Part One: Definition Seven)

III

By God, I understand what is of absolutely infinite being, that is, a substance consisting of an infinity of attributes, of which each one expresses an eternal and infinite essence.

(Part One: Definition Six)

IV

I say that we take action when something comes to pass, in us or outside us, of which we are the adequate cause, that is, when something in us or outside us follows from our nature, which can be clearly and distinctly understood through it alone. On the other hand, I say that we suffer when something comes to pass in us, or something follows from our nature, of which we are only a partial cause.

(Part Three: Definition Two)

V

Although people, then, tend to try to organize everything to their own liking, advantage rather than disadvantage results from their mutual bond.

It is best to endure injustice with evenness of temper, applying oneself diligently to all that leads to union and forming friendships.

(Part Four: Appendix, Item 14)

Hearts, however, are conquered not by arms, but by love and nobility.

(Part Four: Appendix, Item 11)

Figure 1. Texts from Spinoza's *Ethica* used in *Harmony of the Spheres*²⁵

²⁵ Poetic translations from Latin as found in the score. Joep Franssens, *Harmony of the Spheres* (Amsterdam: Donemus, 2001).

Like so many other large choral works, the composer has arranged the texts in an order to suit his purpose. Consider Johannes Brahms, who, in his *Ein Deutsches Requiem*, uses a juxtaposition of scriptures from a variety of places in the Bible, connected together by themes fashioned by the composer himself. Franssens has employed a similar process; however, he parallels the logical approach Spinoza employed with his own textual organization which also suggests the symmetrical form of the musical materials. The outside movements, I and V, describe people and their relationships with other people; the music is similar as well, exemplifying a slow-moving texture. Movements II and IV depict autonomy and freedom, and they contain the fastest delivery of text. Movement III deals with the nature of the divine. By juxtaposing themes of God's nature, human nature, and human communion, the listener gains a glimpse of Spinoza through the lens of Franssens.

Two additional key points need further examination. While it would be easy to dismiss Franssens' extortion of Spinoza as short-changing the breadth of *Ethica*, it is in fact this reductive approach that offers a more expansive frame for the composer and listener to explore. By reducing Spinoza, or at least extracting points that seem meaningful to the composer, the choral work offers greater room and imagination for intellectual and emotional interpretation. Minimalists, in both art and music, have long known that reducing a concept to its basic image or materials seeks to force the viewer to concentrate solely on the object, bringing it greater purpose—the object now shed of its environment. It aims, as the art critic Kenneth Baker put it, “to clarify the terms in which art takes a place in the world” by eliminating the metaphor.²⁶ However, this idea also allows greater imaginative exploration of what the purpose or meaning of the object is, since there is no direct or literal context to specify a particular meaning.

²⁶ Stanley Sadie, ed., *Grove Music On-Line*. S.v. “Minimalism” by Keith Potter, <http://www.grovemusic.com>, (accessed 13 December 2006).

Franssens, in an interesting choice (though it is stylistically something he exhibits in other works), elongates the syllabification of the text to such an extreme that individual words hold no intelligibility, but it is rather the *idea* of the text that the composer is exploring. This allows the listener to contemplate the suggested idea in a way that is both creative and timeless. According to Borstlap, this is a primary consideration in Franssens' exploration of the divine: "The divine, which by definition is timeless, is thus expressed in the physical world and in the harmony of the interrelationships of human beings."²⁷ To achieve this aim, both Movements I and V conclude poignantly with this phrase (translated): "Hearts, however, are conquered not by arms, but by love and nobility."

Interestingly, the Latin word "animi" is translated as "hearts" (it literally means "at hearts") in the above English translation, but it is often translated in *Ethica* as "minds."²⁸ The difference is often analogous to emotion and intellect and is significant in illustrating a final connection between Spinoza and Franssens. According to Genevieve Lloyd, the geometric procedure used by Spinoza deceives us into thinking he is completely logical in his approach:

The deductive structure which dominates the appearance of the *Ethics*, moreover, is in some ways misleading. The spirit of the rationalist ideal may pervade the whole work, but within that structure Spinoza's rhetorical style is by no means uniformly 'geometrical'... This is a work rich in irony; and Spinoza does not resist the occasional descent into sarcasm. It is also, as we shall see, a work rich in the exercise of imagination... And we shall see too that, despite his rationalism, his theory of the relations between reason and supposedly lesser forms of knowledge provides a theoretical base for these exercises of the philosophical imagination. The work is also rich in emotional content.²⁹

²⁷ John Borstlap, *Joep Franssens: Harmony of the Spheres* (CD Liner Notes), Translated by Josh Dillon, Compact Disc (Muziekgroep Nederland: Composers' Voice Special, CV 133): 21.

²⁸ For instance, the translations of Elwes and White (revised by Sterling) use this meaning. See specific sources under Spinoza in the Bibliography for the full citation.

²⁹ Lloyd, *Spinoza*, 21.

The discrepancy in the translation of “animi” offers poignantly what would have appealed so much to Franssens to begin with, an ideal kernel from which to organize his composition. If music does not ultimately touch the heart, no matter its style, it “misses the point altogether.”³⁰ Perhaps intuitively, the composer picked up on the emotional threads of *Ethica* and sought to parallel those threads in *Harmony of the Spheres*.

The Music of the Spheres

In one deft blow of titling, Franssens effectively puts a thematic umbrella over his work, despite the fact that there is no internal evidence of direct theoretical relationship to the ancient *music of the spheres*. Rather, as the composer is fond of saying, it is his own idea of the *music of the spheres* that he wishes to explore—an idea which he freely admits may run counter to Spinoza’s views:

I had this interview in Italy at the university, and they had this question for me. Someone said, “You call it *Harmony of the Spheres*, and you use the text of Spinoza, but the music of the spheres has a very programmatic character. Spinoza was not very interested in the music of the spheres. Even stronger, he didn’t feel connected and didn’t like it at all.” So in the beginning it looked like a trap, but really it was not. They were asking, “In what way could this antiquated concept be traced in my music?” And the whole time, I explained it wasn’t! I was not interested in the old idea and writing an illustration of it in a musical language. The only thing I was interested in was giving my own personal idea, my very subjective idea about the harmony of the spheres, without any historical link or connection. I only wanted to express my personal idea about this, and that’s exactly why it was possible for me to call it *Harmony of the Spheres*—to use the text of Spinoza without having a friction between Spinoza’s detest of music of the spheres and my own personal idea!³¹

While it is beyond the scope of this document to flesh out interpretations (or indeed, speculations) regarding Spinoza’s views on the subject, it is important to note the dynamic

³⁰ Franssens, Interview by author, 12 February 2007.

³¹ Franssens, Interview by author, 12 February 2007.

contrast between his ideas and Franssens', for their forced juxtaposition creates a greater tension and challenge within the overall artistic expression. While Franssens is certainly entitled to artistic liberty, he nonetheless submits an irresistible challenge to explore *Harmony of the Spheres* within the overall mythology of the *music of the spheres*, which dates back to the ancient Greeks.

The idea, in the simplest terms, is that “mathematical laws were thought to underlie the systems both of musical intervals and of heavenly bodies, and certain modes and even certain notes were believed to correspond with particular planets, their distances from each other, and their movements.”³² The concept folded into a broader philosophy that Boethius later described as three types of music:

musica instrumentalis—the ordinary music made by singing or playing an instrument, such as the plucking the lyre, blowing the pipe, and so forth;

musica humana—the continuous but unheard music made by each human organism, especially the harmonious (or inharmonious) resonance between the soul and the body;

musica mundana—the music made by the cosmos itself, which would come to be known as the *music of the spheres*.³³

All three types are alluded to in *Harmony of the Spheres*. *Musica instrumentalis* is exhibited by the tools that make the actual music, from the strings in Movement III to the human voice which carries the weight of the work. *Musica humana* is alluded to textually, especially Movements II and IV, as the text explores how an individual copes with autonomous freedom and the actions and causes thereof. Finally, the title and character of the music both embody the concept of *musica mundana*. This highly esoteric relationship is intertwined with the nature of music itself, as Jamie James remarks:

³² J. Peter Burkholder, Donald Jay Grout and Claude V. Palisca, *A History of Western Music*, 7th Edition (New York: W.W. Norton & Company, 2006), 3.

³³ Burkholder, *A History of Western Music*, 42.

Music contains in its essence a mystery: everyone agrees that it communicates, but how? When a poet is happy, the reader knows it because the poet has told him so; and furthermore, through the symbolism of language, the poet can explain precisely how happy he is, which delicate shades of the emotion he is experiencing at the moment, and why. Yet when we listen to the allegro of a Mozart's symphony, if the performance is vivid and heartfelt, it actually creates in us a sensation of joy. It is true that music is a form of symbolic language, but it is of an entirely different species than the symbolism of language... Somehow, Mozart's symphony, rather than telling us about joy, creates joy. The music is a zone of joy. How is that possible? The Greeks knew the answer: music and the human soul are both aspects of the eternal. The one stimulates the other powerfully and, one might say, with scientific precision, thanks to the essential kinship of the two.³⁴

While this may appear to be lofty idealism, the concept rings true as overtones in *Harmony of the Spheres* and in the compositional philosophy of Franssens. Always seeking to combine an emotional heart with intellectual underpinning, the work's ethereal aural atmosphere belies its sophisticated musical structures. Franssens also explores this concept textually with verbal references to the human as an individual and in larger group interactions, and ultimately engaging the divine. As Mariken Teeuwen notes, "The image of a sounding cosmos, however, remained a simple one: a speculative system that—once understood—could help mortals to grasp the divine order of creation."³⁵

Music for the ancient Greeks was inseparable from science and art, so they believed similar scientific processes were important in probing the mystery of music. James remarks, "The asking of questions was the intellectual breakthrough, and the answers were as poetic and expansive as the questions, for there existed no data with which they were expected to conform,

³⁴ Jamie James, *The Music of the Spheres: Music, Science, and the Natural Order of the Universe* (New York: Grove Press, 1993), 17.

³⁵ Mariken Teeuwen, *Harmony and the Music of the Spheres: The Ars Musica in Ninth-Century Commentaries on Martianus Capella* (Leiden: Brill, 2002), 190.

aside from the perceived order and beauty of creation.”³⁶ The inquisitive culture of the ancients led to some remarkable discoveries and concepts, including Pythagoras’s discovery of the arithmetical relationships between the harmonic intervals (i.e., the 3:2 relationship of a perfect fifth).³⁷ The next step was identifying the musical space between the heavenly bodies.

Pythagoras’s system was set forth in this manner: from Earth to moon was a whole step; from the moon to Mercury, a half step; from Mercury to Venus, another half step; from Venus to the sun a minor third; the sun to Mars, a whole step; from Mars to Jupiter, a half step; from Jupiter to Saturn, a half step; and from Saturn to the sphere of the fixed stars, another minor third. The resultant scale was C-D-Eb-E-G-A-Bb-B-D.³⁸ In the mind of Aristotle, this was the natural progression of ideas from the early work of Pythagoras:

The motion of bodies of that size must produce a noise, since with our Earth the motion of bodies far inferior in size and speed of movement also has that effect. Also, when the sun and the moon and all the stars, so great in number and in size, are moving with so rapid a motion, how should they not produce a sound immensely great? Starting from this argument, and the observation that their speeds, as measured by their distances, are in the same ratios as musical concordances, they assert that the sound given forth by the circular movement of the stars is a harmony.³⁹

Aristotle’s concept is remarkable for its time, and though their scientific results do not quite match the brilliance of Aristotle’s theory, scientists today can attest to sounding cosmos. For instance one black hole registers a sound of Bb 57 octaves below middle C, beyond our hearing

³⁶ James, *The Music of the Spheres*, 4.

³⁷ James, *The Music of the Spheres*, 32.

³⁸ James, *The Music of the Spheres*, 40.

³⁹ James, *The Music of the Spheres*, 38.

capacity.⁴⁰ John Borstlap writes: “In this vision, a common arrangement of numerical relationships united the orbits of the planets, the overtone series of the acoustic world and the musical intervals which derive from it, the formal beauty of nature and of humankind, and the beauty of architecture.”⁴¹ This is somewhat related to one of Spinoza’s key points, that God and nature are one and the same.⁴² For James, that such an abstruse concept could survive to the present day is remarkable:

Despite the odds, the ancient tradition of the musical cosmos, embracing and unifying noble rationalism and ecstatic mysticism, has survived. What we may call the great theme—the belief that the cosmos is a sublimely harmonious system guided by a Supreme Intelligence, and that man has a place preordained and eternal in that system—runs throughout Western civilization, even if during the declining era of Romanticism it is a muted leitmotif.⁴³

The idea was formally revived by fifth century Latin philosopher Boethius who strove to recapture much of the ancient Greek ideals.⁴⁴ Since then it has received occasional revivals and new spins, including Kepler’s great work *Harmonices mundi* in 1619.⁴⁵

⁴⁰ Susan Rankin, “*Naturalis concordia vocum cum planetis*: Conceptualizing the Harmony of the Spheres in the Early Middle Ages,” *Citation and Authority in Medieval and Renaissance Musical Culture*, Suzannah Clark and Elizabeth Eva Leach, editors, (Woodbridge, Suffolk: The Boydell Press, 2005), 5. Rankin cites the following source: News Release, “Music of the Spheres”, University of Cambridge, 10 September 2003. The complete quote is: “scientists at the Institute of Astronomy in the University of Cambridge had measured the pitch of a black hole as Bb, 57 octaves below middle C.”

⁴¹ Borstlap, *Harmony of the Spheres* (CD Liner Notes), 17.

⁴² Alan Donagan, “Spinoza’s Theology,” in *The Cambridge Companion to Spinoza* (Cambridge: Cambridge University Press, 1996): 343.

⁴³ James, *The Music of the Spheres*, 19.

⁴⁴ Stanley Sadie, ed., *Grove Music On-Line*. S.v. “Music of the Spheres” by James Haar, <http://www.grovemusic.com>, (accessed 29 July 2009).

⁴⁵ *Grove Music On-Line*. S.v. “Music of the Spheres” by James Haar.

Despite the age of these ideas, they are not forgotten concepts in modern music; indeed one could argue that *musica mundana* is quite analogous to John Cage’s aleatoric principles—music sounds all around us in the world. Franssens’ prominent allusion to those ancient and medieval treatises continues to declare the idea that the cosmos was ordered and contains musical space. While he has attested to his lack of interest in presenting the actual ancient scalar and theoretic models in modern musical language, his philosophical intersection with the *ideas* of Spinoza and the *music of the spheres* are important, and it helps create a well-defined musical and textual structure for his work.

Much of *Harmony of the Spheres* is slow-moving with elements of melodic staticism and overlapping harmonies, yet the key and modulation principles are quite apparent. Thus Franssens ties into the concept of the *music of the spheres* while reinforcing his own symmetrical construction of the ideas of the texts.

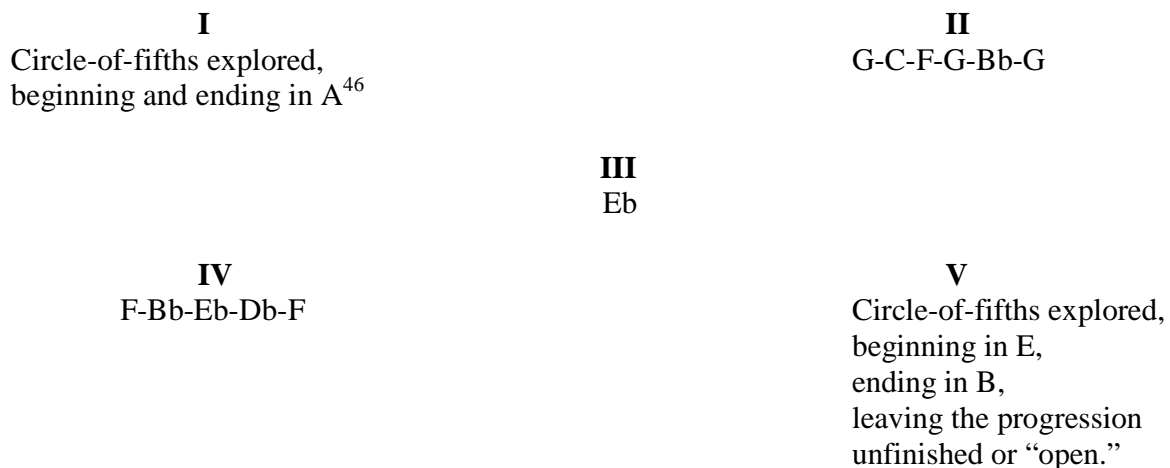


Figure 2. Key relationships for each movement of *Harmony of the Spheres*

⁴⁶ The order of the circle-of-fifths in Movements I and V is indicated through the composer’s use of key signatures in the score.

It is the musical order of these ideas which makes the historical *music of the spheres* allusions compelling. Jamie James summarizes the underlying concept best:

Picture to yourself, if you can, a universe in which everything makes sense. A serene order above revolves in sublime harmony. Everything you can see and hear and know is an aspect of the ultimate truth: the noble simplicity of a geometric theorem, the predictability of the movement of heavenly bodies, the harmonious beauty of a well-proportioned fugue—all are reflections of the essential perfection of the universe. And here on earth, too, no less than the heavens and in the world of ideas, order prevails: every creature from the oyster to the emperor has its place, preordained and eternal. It is not simply a matter of faith: the best philosophical and scientific minds have proved it so.⁴⁷

Perhaps, then, Franssens' use of a single key in three flats is not so coincidental in Movement III, carrying obvious associations with the number of the movement as well as the historical connection of "three" to the heavens or trinity. Beethoven and many other mass composers often set the "Sanctus" with either three flats or sharps for this very reason, but Franssens has dismissed this notion as relevant to his own movement.⁴⁸ Instead, he refers to the movement as the "heart of the work," saying while the single key seems logical within the tonal organization, it also presents philosophical connections to its textual subject, the divine.⁴⁹ Here, in the center of *Harmony of the Spheres*, God is portrayed as an eternal constant, both with imperceptible motion (IIIa) and constant revolution (IIIb).

The further outward one travels from God in Franssens' universe, the more modulatory the music becomes, exploring human interactions in a multitude of keys. This idea is all the more intriguing since the twelve notes used in the chromatic scale are found across cultures throughout the world. As Dale Purves ponders, "Philosophers and scientists have struggled for

⁴⁷ James, *The Music of the Spheres*, 3.

⁴⁸ Franssens, Interview by author, 12 February 2007.

⁴⁹ Franssens, Interview by author, 12 February 2007.

centuries to explain why we find certain combinations so appealing... ‘Why is it, despite the fact that we can hear many, many different pitch relationships, we use just these twelve relationships in music pretty much universally?’”⁵⁰

Indeed, by shifting through every key using the circle-of-fifths (also containing the obvious circular allusion to a sphere), Franssens also taps into this notion of universal and intercultural exploration of harmony. The word “harmony” does not merely carry musical connotations but embraces the other meanings of the word—“agreement” or “accord.” The word “spheres” also does not refer specifically to planets or heavenly bodies, but to realms of ideas not ultimately dictated by Franssens. Thus the composer allows the listener to explore intellectually (or philosophically) these connections or merely experience the work through its ethereal musical language.

Minimalism

The term *minimalism* comes from the visual arts, but in music, it describes a style of composition characterized by an intentionally simplified rhythmic, melodic, and harmonic vocabulary.⁵¹ It is often seen as a reaction to the complexity of *modernism*, seeking a more accessible sound, an idea that would appeal to Franssens. According to Keith Potter, musical minimalism tends to be “tonal or modal where modernism is atonal, rhythmically regular and continuous where modernism is periodic and fragmented, structurally and texturally simple

⁵⁰ Ker Than, “In Search of Music’s Biological Roots” *Duke Magazine* (May-June 2008): 40-41. Than quotes Dale Purves extensively. Purves explores beyond the usual connections of math and music and hypothesizes the greater biological relationship with music as akin to speech.

⁵¹ *Grove Music On-Line*. S.v. “Minimalism” by Keith Potter.

where modernism is complex.”⁵² The difficulty in summarizing the movement is at least partly due to the fact that it is still evolving. Modern minimalist music bears little resemblance to its early forerunners, many of whom, such as Steve Reich in *Clapping*, preferred a high degree of phase shifting. While it contains both structural and improvisatory elements, its contra-modernism puts it in the realm of the avant garde, and strangely, makes it more appealing to audiences. Karolyi Otto describes this idea:

In the sphere of music, the minimalists set out to reject the complexities of the largely serial thinking which dominated the post-Second World War period. They proposed instead a return to tonality and modality in their most elementary forms in which harmonic movements are reduced to the minimum and obstinate repetitions of rhythmic patterns and small diatonic melodic units are used. The music thus created is reduced to its most elemental forces, the effect of which is not unlike some trance-inducing Oriental music. Herein lies the immediacy of its appeal to audiences, but not so much to the musical establishment, which, by and large, equates complexity with value.⁵³

Otto makes a few key points that have direct correlation to Franssens. First, the notion that the music induces a “trance-like” quality has inherent appeal. While it would be incorrect to suggest that *Harmony of the Spheres* is easy to perform or has not been composed with some measure of complexity, the aural result is not unlike what Otto describes, projecting an atmospheric quality. In effect, this is an emotional response rather than an intellectual one; again, for Franssens, if the music does not touch both the head and the heart, it loses its appeal. And lastly, while this section will seek to examine the varied trends of evolving minimalism, the key concepts seem unchanging.

American composers La Monte Young (b.1935), Terry Riley (b.1935), Steve Reich (b.1936), and Philip Glass (b.1937) are widely considered to be the pioneers of musical

⁵² *Grove Music On-Line*. S.v. “Minimalism” by Keith Potter.

⁵³ Otto Karolyi, *Modern American Music* (London: Cygnus Arts, 1996), 101.

minimalism.⁵⁴ Of the group Glass has perhaps achieved the greatest acclaim and reached widespread audiences with operas such as *Einstein on the Beach* and his work on film scores. The group's key stylistic contributions were an intentionally simplified rhythmic, melodic, and harmonic vocabulary. As minimalism moved into the 1980s, greater prominence was given to melodic profile, timbral variety, and sheer sonic allure:

These new dimensions have made their music richer and deeper, at least from a conventional Western perspective, while rendering less audible the processes controlling its note-to-note details. Later still, a reappearance of a kind of harmonic motion. The result of all these tendencies has been to emphasize the importance of harmonic progression and, in some cases, a more encompassing narrative development across broader spans on time.⁵⁵

The idea that harmonic motion could still exist is interesting, for early minimalism had little harmonic implications and presented a more static environment. However, by expanding harmony over broader timeframes, the music could synthesize the original concepts and also enhance the perception of gradual changes. Robert Schwartz describes Reich's views on this very concept:

Reich emphasized that the structure of music—what he calls the “musical process”—must be audible to the listener. To ensure that audibility, the process must unfold very systematically and very slowly. “I am interested in perceptible processes,” he wrote. “I want to be able to hear the processes happening throughout the sounding music. To facilitate closely detailed listening, a musical process should happen extremely gradually... so slowly that listening to it resembles watching the minute hand on a watch... you can perceive it moving after you stay with it a little while.”⁵⁶

⁵⁴ *Grove Music On-Line*. S.v. “Minimalism” by Keith Potter.

⁵⁵ *Grove Music On-Line*. S.v. “Minimalism” by Keith Potter.

⁵⁶ K. Robert Schwartz, *Minimalists* (London: Phaidon Press Limited, 1996), 11.

The obvious result of this philosophy is the lengthening of the music derived from such a viewpoint, and part of the reason *Harmony of the Spheres* is an hour-long work despite consisting of only five movements based on brief texts.

LaMonte Young is widely considered the grandfather of minimalism, and his style differs somewhat from the other early minimalists in that his concern is with sustained sounds (rather than pulsating repetition) and static harmonies, which are articulated with unchanging dynamics over long periods of time,⁵⁷ features that exist in much of Franssens' style. "My own feeling is that if people aren't carried away to heaven, I'm failing," remarked Young in 1966.⁵⁸ His first important work in this style is *Trio for Strings* (1958), which applied reduction in a highly individualized style. Potter writes that "Young's static harmonies, articulated with unchanging dynamics over long periods of time, set the agenda for a musical minimalism built on exploring the innards of sound."⁵⁹

In Europe, these tendencies manifest themselves in a slightly more religious and individualistic way. Robert Schwartz describes this "Holy Minimalist" trend:

... Pärt is not alone in having wrestled with external political repression and internal spiritual crisis. Nor is he alone in having combined elements of minimalism with the fervent mysticism of the Orthodox ritual and the timeless utterances of East European folk music. A similar synthesis may be found in the works of the Polish composer Henryk Gorecki, ...the Gregorian composer Giya Kancheli, and the English composer John Tavener. Indeed, a whole new stylistic umbrella—"spiritual minimalism"—has been coined to set these composers apart from their more hyperactive American brethren.⁶⁰

⁵⁷ *Grove Music On-Line*. S.v. "Minimalism" by Keith Potter.

⁵⁸ Schwartz, *Minimalists*, 12.

⁵⁹ *Grove Music On-Line*. S.v. "Minimalism" by Keith Potter.

⁶⁰ Schwartz, *Minimalists*, 216.

While Franssens stylistically exhibits many of the American minimalist traits and even refers to Steve Reich as an influential composer, he aligns himself with “New Spirituality” in the Netherlands, referring to these latter European composers and their trends. Pärt may be the most applicable example for Franssens. Schwartz further writes, “For Pärt’s new style... displayed an extreme reduction of musical means... a musical language made up of the simplest, most elemental ingredients of tonality—scales, triads, and arpeggios—deployed with a static serenity, an ethereal clarity of texture, and a penchant for extended silences. If this was minimalism, it was of a sort far removed from the rapid fire, kinetic, pop-influenced repetitions of Reich and Glass.”⁶¹

Also worth describing are the similarities of “holy minimalist” music with older musics, specifically “the contemplative quality of Gregorian Chant, the stasis of medieval organum, and the repetitive, motoric rhythms of Baroque music.”⁶² The ethereal nature of much of *Harmony of the Spheres* conceptually equates well to the contemplative and timelessness of chant, as do the static and slow-moving harmonies to organum. The Baroque motoric rhythms appear in Movement III of *Harmony of the Spheres*, combined with (for the first time) the pulsating repetition typical of minimalism (Figure 3).

There is an assumption, Robert Fink suggests, “that minimalism and Baroque are both basically musics of tightly patterned cyclic repetition.”⁶³ This kinship, for Franssens, is felt even more deeply as he considers the music of Johann Sebastian Bach.

⁶¹ Schwartz, *Minimalists*, 214.

⁶² Schwartz, *Minimalists*, 10.

⁶³ Robert Fink, *Repeating Ourselves: American Minimal Music as Cultural Practice* (Berkeley, University of California Press, 2005), 170.



Figure 3. *Harmony of the Spheres*, Movement III, mm. 316-320⁶⁴

⁶⁴ All *Harmony of the Spheres* music examples come from Joep Franssens, *Harmony of the Spheres* (Amsterdam: Donemus, 2001).

Johann Sebastian Bach

The legacy of Johann Sebastian Bach (1685-1750) is well-documented, though much of his influence only began to grow long after his death in 1750. During his own time, Bach was seen as disconnected from the contemporary trends of classicism, well in-motion during his last years in Leipzig.⁶⁵ Claude Palisca notes, “The reluctance of Bach’s contemporaries to grant him credit that the perspective of two centuries shows to be his due is an important historical fact that must not be lost in the later enthusiasm for his music.”⁶⁶ This air of estrangement is perhaps not so different than Franssens’ struggle under the weight of serial academic music during much of his career. Two other connections bear exploration; one is affinity of musical style while the other is purely conceptual.

The kinship between Baroque and minimalist music offers more direct insight into Bach and Franssens. Quoting Jonathan Scheffer, Robert Fink writes, “Think of Bach’s suites for Cello and their long series of arpeggios through the circle-of-fifths. They are at once expansive in time and rigid in gesture, harmonic rhythm locked in a regular, marching pulse. Now think of Philip Glass, of ecstatic arpeggios and simple harmonic changes, and you may begin to hear a great unison sounding through the history of music.”⁶⁷ It is too much, perhaps, to suggest a direct homage of the circle-of-fifths progression in Bach’s cello suites with Movements I and V of *Harmony of the Spheres*; certainly the idea for both has stylistic appeal for harmonic exploration. Once again of note are the words used to describe both musics—“expansive in

⁶⁵ Claude V. Palisca, *Baroque Music*, Third Edition (Englewood Cliffs, New Jersey: Prentice Hall, 1991), 336.

⁶⁶ Palisca, *Baroque Music*, 335.

⁶⁷ Fink, *Repeating Ourselves*, 171.

time, rigid in gesture, harmonic rhythm locked in a regular, marching pulse.” Figure 3 illustrates these features.

However, Bach’s influence for Franssens is more intangible, representing a more primordial attraction. It is the emotional expression underpinned by internal logic—music that touches both the “head and heart” as Franssens is fond of saying:

I think when we talk about music being technical on the one hand, or a kind of science if you want, and on the other hand being emotional, then I think that the sum of the two together could be something else, something more. That’s also the main thing I feel listening to the music of Bach. Something that can be very strongly analyzed on the one hand, and on the other hand, it can also have a very emotional approach. And the two together give something extra, something unknown, and something that cannot be touched. And maybe something that cannot be comprehended. And that’s something spiritual, something that cannot be explained.⁶⁸

Consider the careful construction of the harmonic organization of the entire piece; there is form, symmetry, balance, and order, symbolic of the *music of the spheres*. Yet the organization is also led by the meaning of the texts. The exploration of the circle-of-fifths becomes meaningful because it relates to the idea of humanity exploring more harmonious relationships with one another. Due to the sustained quality of the rhythms, this significance is drawn out over a longer period of time. Movement III’s centrality of Eb major matches the constancy of the divine. The implications of the texts have inspired the musical form.

Many scholars believe this also to be a key ingredient of Bach’s music; not only is there sophisticated formulaic composition with clever harmonic and melodic ideas, but also Bach’s usage of these elements is often to support an emotional or textual—indeed theological—concept. Nowhere is this more apparent than in his vocal music, particularly the cantatas. In *Gottes Zeit ist die allerbeste Zeit* (BWV 106; God’s time is the very best time), Bach employs a choral fugue near the end of the second movement to set the text, “Es ist der alte

⁶⁸ Franssens, Interview by author, 12 February 2007.

bund; mensch, du musst sterben” (It is the Old Law; Mortal, you must perish). The overall theme of the cantata deals with faith and death. Bach presents the finality of death, presented as the old law, in a fugue, one of the most strict musical forms (Figure 4).

Figure 4 shows a musical score for Johann Sebastian Bach's Cantata BWV 106, Movement II, "Es ist der alte bund" Fugue. The score is in G major, 3/4 time, marked Andante. It features five staves: Flute (Fl.), Alto (A.), Tenor (T.), Bass (B.), and Continuo (Cont.). The lyrics are: "Es ist der alte Bund: Mensch, du mußt sterben, du mußt, du Es ist der." The score includes a key signature of one sharp (F#) and a common time signature (C). The tempo is marked Andante. The score is written for a five-part setting, with the Continuo part providing a bass line. The lyrics are in German and are repeated across the staves.

Figure 4. Johann Sebastian Bach, Cantata BWV 106, Movement II, “Es ist der alte bund” Fugue⁶⁹

When the fugue ends, a final sighing gesture from the soprano soloist marks the point of death, an extraordinary interplay between the logical construction of the music and the emotional meaning of the words (Figure 5).

Like Brahms’ great *Ein Deutes Requiem*, Bach’s creative genius extended beyond the music itself into the libretto creation, often with dramatic, theological, and artistic satisfaction—a compositional mindset shared by Franssens.

⁶⁹ All BWV 106 music examples come from Johan Sebastian Bach, *Cantata: Gottes eit ist die allerbeste Zeit* (London: Ernst Eulenburg).

Chapter 3: Analysis

Introduction

Like many post-Romantic and twentieth century compositions, *Harmony of the Spheres* requires a broader approach in tonal analysis. Franssens' minimalism entails long spans of time to realize harmonic progressions, often disguised by displaced, canonic, or phased vocal parts. Thus, because of the various compositional techniques used to reinforce the textual structure, the analysis seeks to consider similarly constructed movements to better explore the compositional strategy as well as recognize unifying factors achieved by the entire musical construction. Movements I and V contain nearly identical musical textures, harmonic modulation, form, and metric ambiguity. Movements II and IV employ fewer modulations but embrace a higher degree of mensuration and utilize exactly the same form. The third movement, rotating around C minor and Eb major, references compositional approaches from the other movements while offering new ideas in a pure minimalist style. Therefore, three sections of analysis with multiple and different analytical demands are warranted.

While several moments in the work can be analyzed with functional harmonic tools, Franssens often presents the harmonic structure in pan-diatonic organizations, emphasized by melodic or overlapping chord structures, or simply a collection of pitches that reference tonal regions. Repetition of certain melodic gestures or pitches can also give a sense of tonal center. However, continued exploration reveals an underlying harmonic structure that has common elements throughout *Harmony of the Spheres*. Much of the work centers on harmonic modulation and arrival, despite an elongated, disguised, or seemingly ambiguous aural experience present in Movements I, III, and V particularly.

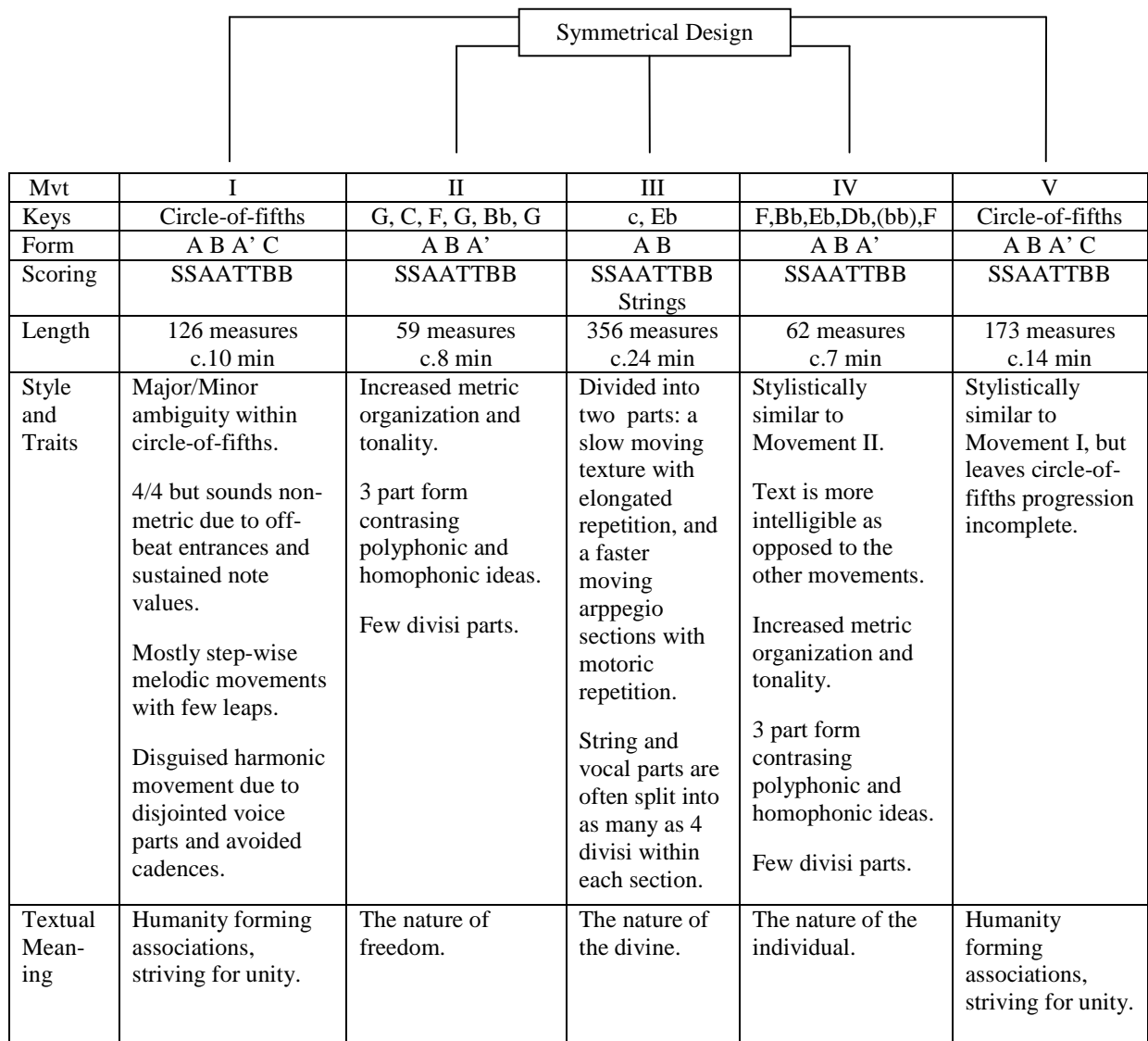


Figure 6. Analysis Chart comparing all movements.

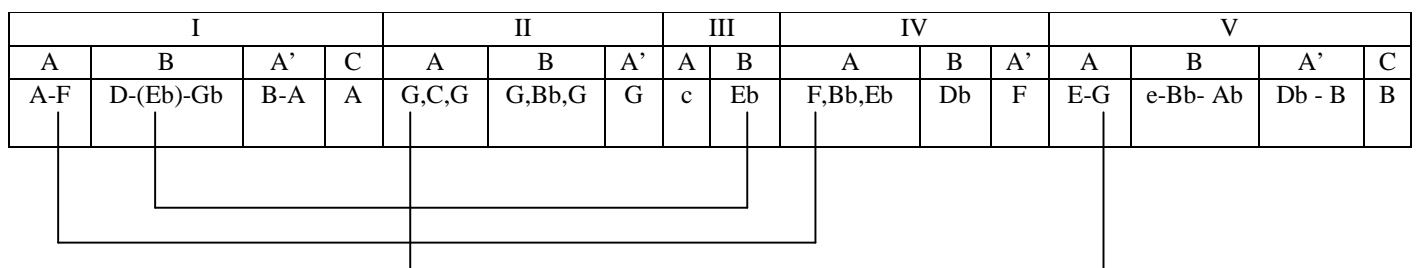


Figure 7. Primary key relationships between movements

Examining the overall harmonic structure (Figures 6 and 7) reveals a few important organizational patterns. The flow of the work moves from the most extreme modulation to a constant key area and back out again. The music, melodically and texturally, also becomes more compressed as it moves inward. The form also compresses from four to three to two sections by the middle movement. The primary key centers of Movements II (G) and IV (F) are both important arrival points in Movements I (F) and V (G), signifying the end of Section A, and they move to the relative minor in each instance to begin Section B. With the circle-of-fifths progression beginning with A major, Eb is the exact middle point in the progression, foreshadowing the key of Eb as the center of the entire work in Movement III. Other structural elements will be discussed within the context of each movement.

The Harmony of the Collective

The two principle nouns in the work's title offer multiple insights. "Harmony" not only refers to musical ideas but also to the accord a community of persons might experience: as the text translation suggests, people gain benefit from joining together to produce more unity. The first and fifth movements imply a deeper understanding of exploring harmony, mirroring both musical and human principles. The ancient Greeks would have approved, given their multi-dimensional outlook of music that Boethius later describes.

The word "spheres" also conjures an array of musical, textual, and visual metaphors. A sphere is circular in nature and has neither a beginning nor an end. A sphere implies a sense of constant existence and timelessness. On the other hand, a clock is measured as a circle and gives discrete divisions. However, time itself is continuous and infinite, the clock hands revolving forever. Our sense of time is largely formed by the movement of rotating planetary spheres that travel in long circular or elliptical orbits.

Franssens' usage of the circle-of-fifths is not unique to *Harmony of the Spheres*; his orchestral work *Sanctus* also employs the same concept. However, in Movements I and V of *Harmony of the Spheres*, the technique helps make profound reference to “harmony” and “spheres.” Exploring modulation references humanity’s exploration of relationships, doing “everything possible to intensify friendship,” as the text translation states. Musically, the circle-of-fifths is an orbit, theoretically never ending. This interplay forms the *modus operandi* for these movements.

Movement	I				V			
Scoring	SSAATTBB Divisi Phasing				SSAATTBB Divisi Phasing			
Time & Tempo	4/4 ♩=50-52 <i>molto sostenuto e espressivo</i>				4/4 ♩=50-52 <i>molto sostenuto e espressivo</i>			
Length	126 measures				173 measures			
Form	A	B	A'	C	A	B	A'	C
Key Areas	Circle-of-fifths: A - F	Circle-of-fifths: d - Gb	Circle-of-fifths: B-A	A	Circle-of-fifths: E - G	Circle-of-fifths: e -Ab	Circle-of-fifths: Db - B	B
Dynamics	<i>pp-f</i>	<i>pp-f</i>	<i>pp-mf-pp</i>	<i>pp</i>	<i>pp-f</i>	<i>pp-f-pp-ff</i>	<i>pp-ff-pp</i>	<i>pp</i>
Style Traits	<p>Phased, displaced, and elongated vocal parts, slowly stacking in entrances.</p> <p>Avoids authentic cadences.</p> <p>mm. 37-55 marked by minimalistic entrances outlining D minor.</p> <p>Continuous build in texture, volume, and range to Gb cadence on “agere,” the only authentic cadence in the movement.</p> <p>C section contains repeated patterns in each part until the end.</p>				<p>Phased, displaced, and elongated vocal parts, slowly stacking in entrances.</p> <p>Avoids authentic cadences.</p> <p>37-55 marked by minimalistic entrances outlining e minor.</p> <p>Continuous build in texture, volume, and range to Ab cadence on “ferre,” the only authentic cadence in the movement.</p> <p>C section contains repeated patterns in each part until the end. Similar ostinati patterns as in first movement</p>			
Text Synopsis	People forming relationships; hearts not conquered by arms but love.				People forming relationships; hearts not conquered by arms but love.			

Figure 8. Movements I and V Comparison

Stylistically, Movements I and V are nearly identical in scoring, form, modulation through the circle-of-fifths, displaced vocal parts, phasing in sectional divisions, non-metric rhythmic structure, elongated syllables of text which obscure words, and textual theme. Of the last two features, Franssens makes the following remark in the score performance notes: “Concerning all movements: textual phrasing does not necessarily coincide with musical phrasing. Music and text move independently from each other.” This note is most appropriate to Movements I, III, and V, which utterly destroy textual comprehension with sustained syllables. For a work that obviously organizes itself around textual themes, this obscurity of the actual words is interesting. The composer describes this conundrum:

I only focus on what it says... I’m not focused on whether my music expresses the text in a way that it should be clearly audible. A friend of mine said years ago, “Why do you use all these texts, because I can’t hear anything!” And then I said, “Well, that’s also not my intention to hear it, because if you want to know what it is about, you can read it in the program notes. The reason why I use texts is only because I want to say the same thing in a different language. I want the spirit of the text to be in the music, or the spirit of the music is in the text. I’m not interested in making a melody that perfectly fits the rhythm of the text. I can even go so far that the meter of the music and the meter of the text are two separate identities... And whether the third phrase or second phrase matches the third word of the phrase or the fifth, it’s not important, because it’s about the overall idea. A lot of words represent together an idea, and that idea is expressed in the text, and I also want to express it in the music. And they both have their own meters... it’s very simple.”⁷⁰

This duality is most apparent whilst analyzing the circle-of-fifths progressions, which usually do not coincide with the text phrasing, although a few important significant exceptions occur. However, it is important to note that the displaced vocal parts do coordinate with syllables in the text, which will affect the analysis of these two movements.

⁷⁰ Franssens, Interview by author, 12 February 2007.

Movement I

Form:	A	B	A'	C
Measures: <i>Reduction</i> <i>Segments:</i>	1-37 1-6	37-86 7-13	87-108 14-16	108-126 17-22
Tonal Areas:	A (1-9) D (10-19) e (20-27) C (28-30) F (31-37)	d (37-55) Bb (56-57) Eb (58-67) Ab (68-72) Db (73-75) Gb (76-86)	B (87-92) E (93-100) A (101-108)	A (108-126)
Dynamics	<i>pp-f</i> (cresc. throughout)	<i>pp-f</i> (cresc. throughout)	<i>pp-mf-pp</i>	<i>pp</i> (with dim. to nothing)
Thematic Ideas	Phased, displaced, and elongated vocal parts, slowly stacking in entrances. Avoids authentic cadences. Ends on V of F.	Deceptive cadence to D minor. mm. 37-55 marked by minimalistic entrances outlining D minor. Continuous build in texture, volume, and range to Gb major cadence on “agere,” the only authentic cadence in the movement.	Common Tone Gb becomes F# (V of B) for an enharmonic modulation. Entrances similar to opening in style and order. Section ends on a B minor chord (in A), which is also the opening chord of the piece.	Enters with soprano for the first time, and each subsequent entrance descends through the vocal parts rather than the general ascent shown in the other sections. This counter motion supports the “however” in the text. Each voice part is its own ostinati, and repeating insistently to the end; each successive entrance occurs at different metrical points.
Text Poetic Translation	Above All, people derive benefit from forming Associations	and joining together in such a way that they form more and more unity,	doing everything they can to intensify friendship.	Hearts, however, are conquered not by arms, but by love and nobility.

Figure 9. Movement I Analysis Chart

Both Dutch and English translations are included in the score preface, but each in reality is a poetic rather than literal translation. The Latin text coincides with the musical form fairly linearly, and a more accurate word-for-word translation is included:

A	Hominibus apprime utile est, consuetudines jungere, <i>People above all derive benefit from associations forming</i>
B	Seseque iis vinculis astringere, quibus aptius de se omnibus unum efficiant, <i>and with each other joining together in such a way that they form all in unity produce</i> et absolute ea agere, <i>and completely acting</i>
A'	Quae firmandis amictiis inserviunt. <i>to strengthen friendship devoted</i>
C	Animi tamen non armis, sed Amore, et Generositate vincuntur. <i>Hearts however not arms indeed love and nobility conquer</i>
Poetic Translation	Above All, people derive benefit from forming associations and joining together in such a way that they form more and more unity, doing everything they can to intensify friendship. Hearts, however, are conquered not by arms, but by love and nobility.

Figure 10. Literal Translation of Movement I Text

Spinoza's theme is direct and universal; indeed it reflects the historical benefit that is derived from forming communities and eventual civilizations. The objective is qualified only by the final line, offering the philosopher's key ingredient to lasting harmony. The text also suggests that forming associations is a process, and perhaps a difficult one, never suggesting the act is accomplished, and only recommending the value of the journey. As humanity strives to form relationships, the quality of this action is in the exploration itself.

Franssens parallels these ideas musically. Despite the ordered harmonic implications by the given key signatures, the individual tonal areas are seemingly ambiguous in the composer's application. Each sectional divisi employs phasing, and when combined with sustained displacement of each voice part in the larger texture, few functional chords are derived by examining vertical sonorities at any point in time. This technique is foreshadowed in Franssens' *Phasing* (1985) in a nearly identical manner.

Phasing within each sectional divisi, creating pitch redundancy.

The musical score is a handwritten manuscript for a piece titled 'Phasing' (1985), measures 37-42. It consists of 16 staves, organized into four systems of four staves each. The instruments are labeled on the left: S (Soprano), A (Alto), Vc. (Violoncello), and Cl. (Clarinet). The notation includes various musical symbols such as notes, rests, and dynamic markings like 'p' (piano) and 'mp' (mezzo-piano). Red arrows point from a text box to specific phasing patterns in the S and A parts. The score is marked with 'L 3' at the bottom left and 'Sample Son' at the bottom right.

Figure 11. *Phasing* (1985), mm. 37-42

Phrasing within each sectional divisi, creating pitch redundancy.

$\text{♩} = 50-52$ molto sostenuto e espressivo

Soprano 1
Soprano 2
Alto 1
Alto 2
Tenor 1
Tenor 2
Bass 1
Bass 2

molto legato sempre *pp*
Ho - - - - -
Ho - - - - -
Ho - - - - -
Ho - - - - -
Ho - - - - -
Ho - - - - -
Ho - - - - -
Ho - - - - -

Displaced Chord Tones

6 cresc. *p* cresc. ...
S.1 - mi - - - - - ni - - - - -
S.2 - mi - - - - - ni - - - - -
A.1 - mi - - - - - ni - - - - -
A.2 - mi - - - - - ni - - - - -
T.1 - mi - - - - - ni - - - - -
T.2 - mi - - - - - ni - - - - -
B.1 - mi - - - - - ni - - - - - bus
B.2 - mi - - - - - ni - - - - - bus

Figure 12. Movement I, mm. 1-9.

The implied absence of time is the clue to discovering the harmonic organization of the movement; the texture is intentionally non-metric and atmospheric in quality. Time is not important in the analysis, and vertical captions as they occur in the music are less important as well. The pieces of this musical puzzle have been stretched and disjoined in an extreme horizontal manner and must be reassembled to better illustrate chordal motion. By correcting each pitch of each syllable into a homophonic reduction, simultaneously eliminating the phasing technique (which only causes a pitch redundancy), a clearer picture emerges.⁷¹

The analysis is Schenkerian in spirit, without fully realizing a specific prolongation that is protocol in that analytical procedure. Each pitch movement has been reduced to the fundamental of a quarter note and aligned to its corresponding word. This is not to present the text in any concise way but rather to use each syllable of each word as a reference point. Each “measure” is a “segment” of musical reduction; generally, one segment is used for one key area. Where melismas occur between multiple voice parts, an attempt at the most consonant combinations has been made (Figure 13).

The reduction is important in two significant ways. First, every pitch of the movement is present, reducing the music to a manageable format to demonstrate harmonic, melodic, and formulaic relationships. This feature makes it also a crucial step in the teaching process, to be discussed later.

⁷¹ Even the composer has remarked, “We have a saying in German [which he translates]—‘in the reduction, the master is shown.’ He becomes visible.” Franssens, Interview by author, 12 February 2007.

A

1

SA: Ho - - - min - - - - - ni - - - - -

TB: (bass line)

Franssens

A: ii_6 V_7 ($I_{6/4}$) V_7 $ii_{6/4}$ (pivot vi)

2

SA: bus ap - pri - me u - - - - - ti - - - - -

TB: (bass line)

D: (IV_7) $vii^o_{6/4}$ $I_{6/4}$ $ii_{6/4}$ $I_{6/4}$ ii_6 $V_{4/2}$ I_6 vi_7 (pivot v)

3

SA: le est con - sue - tu - - - - - di - - - - - nes

TB: (bass line)

e: iv_6 i v_6 $iv_{6/5}$ i_7 (pivot iii) C: $vi_{6/5}$ V/V $I_{6/5}$ IV (V/IV —pivot I)

5

SA: jun - - - - - ge - - - - - re,

TB: (bass line)

F: IV_6 $I_{6/4}$ ii_6 V_7

Figure 13. Movement I, Reduction, correction of pitch displacement, and elimination of phasing

B

6 7

SA
 ses - e - que i - is vin - - cu - - - lis A - strin - - -

TB

d: i _____ v/i i_{6/4} ii^o_{6/4/3} III₆
 (pivot V/VI)

8 9

SA
 ge - re qui - - - bus ap - - - ti - us de se

TB

Bb: IV₆ V₇ Eb: IV₆ IV₆ I_{6/4} IV₇ I₆ ii
 (pivot vi)

10 11

SA
 om - ni - bus u - num ef - - - fi - ci - ant

TB

Ab: vii^o_{6/4} vi iii₆ V₇ ii₆ Db: vii^o/V ii IV₇ I₇ ii IV
 (pivot vi) (pivot I)

12

SA
 et ab - - - - - so - - - - -

TB

Gb IV V_{6/4} vii^o₆

Figure 13 (continued)

SA A'

lu - - - - te c - a a - ge - re. Quae fir-man - - -

TB

Gb: $I_{6/5}$ ii I_6 $ii_{4/2}$ $ii_{6/5}$ V_7 I B: IV $vi_{6/4/3}$

SA

dis a - mi - ci - ti - is in ser - - - vi - unt.

TB

E: $ii_{6/4}$ IV IV $vii^{\circ}_{6/4}$ $V_{4/2}$ $vi_{6/4}$ $v_{6/4}$ (pivot ii) A: IV_6 ii_6

C

SA

A - - - ni - mi Ta - - - - men non ar - - - mis,

TB

IV $vi_{6/4}$ $ii_{6/4}$ $V_{4/2}$ repeated _____

SA

sed A - mo - re, et - Ge - ne - ro - si - ta - te vin - cum - tur

TB

_____ IV IV IV_7 iii V vii° IV IV_7 ii_6

Figure 13 (continued)

The critical and present point is the revelation of functional harmony in the circle-of-fifths and several unifying features that exist here and in other movements, even those written in a more homophonic or compressed texture. The composer likely began with a similar orientation and stretched the pitches horizontally into their present pan-diatonic organization. It is important to note that the listener experiences the piece somewhat differently because of this duality. On one hand, the pan-diatonic presentation adds mystery and ambiguity. Yet, as the collection of pitches alters through the circle-of-fifths, there is an undeniable sense of progressing *towards* something. The structure underneath in fact propels the music forward and makes plain its prominent cadential moments ending sections A and B particularly. These cadences do not occur randomly, but mark critical points where the displaced chord tones realign.

Several immediate observations regarding unifying factors can be made from this reduction. Various keys receive more importance (and length) than others. The words overlap with each modulation in general, demonstrating different expressions of the textual and musical phrasing to which the composer refers. And despite the clearer texture and discernible chord structures, Franssens continues to stretch tonality by avoiding cadences in various ways: added pitches, accented passing tones, inverted chords, and deceptive harmonic changes (Figure 14).

As shown in Figure 14, the composer's fondness for inverted chords prolongs tension and keeps the movement unsettled. The sustained pitches often create multiple chord possibilities as seen on the syllable "u" and "ti", the $V_{4/2}$ sliding briefly through I_6 to vi_7 , the pivot v chord for the next key of E minor. Yet, despite the numerous hinted secondary dominants throughout, they seldom resolve to their appropriate chord. Figure 14 above resolves to an A minor chord, or IV in E minor.

Non-chord tones: accented passing tones or added pitches.

SA

bus ap - pri - me u - - - - ti - - - -

TB

D: (IV₇) vii^o_{6/4} I_{6/4} ii_{6/4} I_{6/4} ii₆ V_{4/2} I₆ vi₇ (pivot v)

Note numerous inverted chords and non-root movements in bass.

Deceptive cadence

Figure 14. Movement I, Reduction Segment 2

Another feature which adds ambiguity is the prevalence of ii and IV (or iv) chords. Since the ii chord in major is also the iv chord in its relative minor, Franssens is able to further disguise major and minor tonality (see Figure 12, beginning of movement, for example). Segments 1, 2, 3, 5, 7, 8, 9, 12, 11, 14, 15, 16, and 17 to the end are all examples of opening with this harmonic initiative. It should be noted that this is another hint of the circle-of-fifths organization since scale-degree four is a perfect fifth below tonic, foreshadowing the path the music follows to the next key (Figure 15).

SA

ge - re qui - - - - bus ap - - - ti - us de se

TB

Bb: IV₆ V₇ Eb: IV₆ IV₆ I_{6/4} IV₇ I₆ ii (Ab) (pivot vi)

Figure 15. Movement I, Reduction Segments 8-9, key foreshadowing

These salient harmonic concepts help demonstrate the harmonic order buried underneath multiple layers of texture and displacement. In addition, the principle sections of the movement contain defined ending cadences that are audible in the music. The end of Section A is marked by a half cadence in F (Figure 16).

SA

jun - - - ge - - - re,

TB

F: IV_6 $I_{6/4}$ ii_6 V_7

Figure 16. Movement I, Reduction Segment 5, end of Section A

The transition to Section B, however, does not give the expected F major resolution but instead deceptively resolves to D minor (Figure 17).

SA

ses - e - que i - is vin - - cu - - lis A - strin - - -

TB

d: i v/i $i_{6/4}$ $ii_{6/4/3}^o$ III_6
(pivot V/VI)

Figure 17. Movement I, Reduction Segments 6-7, beginning of Section B

The movement from F to d, relative keys, shows the author's simple, and perhaps baroque, sense of harmonic progression. The only authentic cadence in the entire movement highlights the ending of Section B, a climatic cadence in Gb major (Figure 18).

SA
TB

lu - - - te e - a a - ge - re. Quae fir-man - - -

Gb:	I _{6/5}	ii	I ₆	ii _{4/2}	ii _{6/5}	V ₇	I	B:	IV	vi _{6/4/3}
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Only authentic cadence in movement.

Enharmonic modulation to B using Gb/F# as V.

Figure 18. Movement I, Reduction Segments 6-7, end of Section B

Not only does this motion signify the end of Section B, it also highlights the word *agere* (to act), perhaps a harmonious symbol as to the best method to “strengthen devoted friendship.” To take action is also a principle textual theme in both Movements II and IV.

Section A' references the opening in order and quality of entrances, and it does so in a primarily textural manner. While the basses enter first, apparently contrasting with the opening of the movement, in actuality the tenors' entrance still creates the same whole step dissonance as the beginning of the movement, which in both cases is followed by the altos and sopranos in succession (Figure 19).

$\text{♩} = 50-52$ molto sostenuto e espressivo

Soprano 1
Soprano 2
Alto 1
Alto 2
Tenor 1
Tenor 2
Bass 1
Bass 2

molto legato sempre *pp*
molto legato sempre *pp*
molto legato sempre *pp*
molto legato sempre *pp*
molto legato sempre *pp*
molto legato sempre *pp*
molto legato sempre *pp*
molto legato sempre *pp*

Ho - mi -

Whole Step Apart for 2nd entrance.

After TB entrances, then Altos and Sopranos in succession.

85

S.1
S.2
A.1
A.2
T.1
T.2
B.1
B.2

mp *morendo* *pp*
f *morendo* *pp*
mp *morendo* *pp*
mp *morendo* *pp*
mp *morendo* *pp*
mp *morendo* *pp*
mp *morendo* *pp*
mp *morendo* *pp*

re, que -

Figure 19. Movement I, mm. 1-5 and mm. 85-89 comparison

The entrances are nearly identical in order. The basses and tenors are reversed in voicing only, and, in each case, the first voice has the lower pitch of the dyad cluster. Section A' does not offer the tonal clarity that the previous sections managed. Though the composer returns to the key of A major, Franssens promotes tonal ambiguity by offering no I or V in this key but instead prolonging his preference for subdominant chords (Figure 20).

SA

15

dis a - mi - ci - ti - is in scr - - vi - unt.

TB

16

E:	ii _{6/4}	IV	IV	vii ^o _{6/4}	V _{4/2}	vi _{6/4}	v _{6/4} (pivot ii)	A:	IV ₆	ii ₆
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Figure 20. Movement I, Reduction Segments 15-16, end of Section A'

The final section of the movement does not function as a coda or extension of the previous music. Though it is written in a style similar style to that of sections A and B, the text inspires some key variations and new concepts. After the lengthy journey through the circle-of-fifths, Franssens qualifies it with Spinoza's axiom: "Hearts, however, are not conquered by arms, but by generous love and nobility." The differences are first apparent in the voice entrances; the entire movement has essentially built from the lower voices up, both in entrances and melodic contour, but now, for the first time, the sopranos present the initial idea, a melodic descent followed by the other voices' lower entrances (Figure 21).

Notice contrast in entrances from Sections A and A', order begins with sopranos, accentuating the "however" in the text in Section C.

Figure 21. Movement I, mm. 105-110, entrances of Section C

The second key aspect of this section is the use of ostinati in each voice part, repeating insistently to the end. Not only does this reference circular thinking and continuous return, the constant minimalist repetition adds intensity to the textual meaning, an incessant plea for peaceful relationships (Figure 22).

Appropriately, the last chord of the movement is a ii_6 in A major with an added second. Not only does this leave the listener again with the ii/iv ambiguity, it also references the first chord of the piece. The journey is therefore unresolved and is left open to further exploration.

Each voice repeats its melodic pattern to the end.

SA
TB

17 18 19

A - - - ni - mi Ta - - - - men non ar - - mis,

IV vi_{6/4} ii_{6/4} V_{4/2} (repeated)

Repeated pitches cause patterns to offline, creating other chordal possibilities.

SA
TB

20 21 22

sed A - mo - re, et - Ge - ne - ro - si - ta - te vin - cun - tur

IV IV IV₇ iii V V/ii ii IV₇ ii₆

Figure 22. Movement I, Reduction Segments 17-22, Section C

While the movement is clearly organized on harmonic principles, Franssens' use of dynamics enhances the architecture of the music, where each section tends to grow from pianissimo to forte climaxes. The use of long crescendos also increases musical tension, aids in the perception of growth, and serves a crucial function in the sustained nature of the music. It helps frame destination points for the singer, and the composer is quite specific about the dynamic arrival points (Figure 23).

Note long crescendos and carefully placed dynamic arrival points.

The musical score is divided into two systems, measures 63-72 and 73-82. The first system (mm. 63-72) includes parts for Soprano 1 (S.1), Soprano 2 (S.2), Alto 1 (A.1), Alto 2 (A.2), Tenor 1 (T.1), Tenor 2 (T.2), Bass 1 (B.1), and Bass 2 (B.2). The lyrics for this system are: "us de se om ni bus ti us de se om ni bus". The second system (mm. 73-82) includes the same vocal parts. The lyrics for this system are: "u num ef fi u num ef fi u num ef fi". The score features various dynamic markings such as *cresc.*, *mp*, *mf*, and *f*, along with crescendo and decrescendo hairpins. There are also triplets and other musical notations throughout the score.

Figure 23. Movement I, mm. 63-72

Melodically, the primarily step-wise movement also contributes to the slow-moving texture. Other than the repeated melodic patterns discussed in section C, no thematic orientation seems obvious enough to warrant recognition. The voice parts do relate to each other contrapuntally, with a high prevalence of sixth intervals. However, as the piece modulates, a general ascent is palpable, particularly in the soprano part, peaking with the high Gb in measures 78-81 (segments 12-13, see Figure 13). The ascent is made more dramatic by the escape from below (Figure 24).

Figure 24 displays two systems of musical notation for Soprano (SA) and Tenor/Bass (TB) parts. The first system, labeled '2', shows the SA part with a melodic line and the TB part with a supporting line. The second system, labeled '3', continues the melodic and supporting lines. Red arrows point from a box labeled 'Escape to Higher Descent.' to specific notes in the SA part, indicating a dramatic ascent. Brown arrows point from a box labeled 'Basses and tenors moving in sixths, supporting inverted chord structures.' to the TB part, highlighting the contrapuntal relationship between the parts.

Figure 24. Movement I, Reduction Segments 2-4, Section A

The conductor's rehearsal and interpretive challenges are great in this movement and he or she can be of little help to the singers with physical gesture. Because of the equality of the voice lines, similar to the style of Renaissance sacred music, the singers themselves must understand the musical and textual phrasing as well as meeting the significant technical, mental, and stamina demands of the score.

Teaching the piece to the choir should begin with the reductive elements, as given in Figure 13, which offers several compelling advantages. This reduces the note orientation to manageable lengths, eliminating the daunting rhythmic challenges, and allows the singers to succeed more easily in a homophonic style. More importantly, it allows the singers to more fully understand how the movement is constructed and sing with greater intentionality.

The next step is to introduce the choir to the score, but only allowing the singers to sing the *divisi I* parts. Since the *divisi* parts do not signify a range difference, this step builds confidence as the homophonic reduction now becomes the actual music. As the singers grow in their comfort level with the music by adding the rhythmic and sustained dimensions of the music, the last step simply divides the sections into their phased orientation.

In performance, conductors should take the composer's suggestion of using a venue with significant reverberation as this enhances (and aids the singers) the sustained texture. The Netherlands Chamber Choir presented this movement by surrounding the audience, which cleverly includes them in "forming associations."⁷² This idea also embraces and actualizes the spherical nature of the movement.

⁷² Franssens, Interview by author, 12 February 2007.

Movement V

The return of the musical style and textual theme of Movement I completes the symmetrical form, or circle, of the entire work. But rather than simply reprise or repeat the opening movement, Franssens further develops and elaborates the stylistic material, reflecting a deepening view of the journey, now informed by the thematic exploration of Movements II, III, and IV. Reprisal or repetition is not enough; the formation of harmonic human relationships has been changed through the lens of Free Action, the Nature of the Divine, and Individual Action. Thus, much of the following analysis examines the critical attributes that explore this intensification of philosophy.

A	Quamvis igitur homines plerumque ex sua libidine moderentur, <i>Although consequently people generally our of their desire organize</i>
B	ex eorum tamen communi societate multo plura commode, <i>from their rather common fellowship many more advantages</i> quam damna sequuntur. <i>which condemns follows</i> Quare satius est eorum injurias aequo animo ferre, <i>which endure is their injuries/injustice even minds bring/bear</i>
A'	et stadium iis adhibere, quae Concordia, <i>and race course their summons who agreeing.</i> et amicitiae conciliandae inserviunt. <i>and friendship unite devoted</i>
C	Animi tamen non armis, sed Amore, et Generositate vincuntur. <i>Hearts, however, not arms, indeed love and nobility conquer</i>
Poetic Translation	Although people, then, tend to try to organize everything to their own liking, advantage rather than disadvantage results from their mutual bond. It is best to endure injustice with evenness of temper, applying oneself diligently to all that leads to union and forming friendships. Hearts, however, are conquered not by arms, but by love and nobility.

Figure 25. Literal Translation of Movement V Text

The text directly refers to the idea expressed in Movement I: *people derive benefit from forming associations and joining together in such a way that they form more and more unity.*

However, one must acknowledge the elaboration in Movement V. The first line of text refers to the individual journey that has just been explored in Movement IV: *Although people... try to organize everything to their own liking.* On the surface, the theme of Movement IV seems to contradict the idea of forming associations. The reflection of individual action makes apparent the benefit of holistic and conscious action, rather than only a partial cause for human action. It encourages greater ownership and self-reflection as to the causes that create action. Movements I and V both advance the idea of outside influences and their subsequent benefit. Taken in complete context, the message becomes clearer. Building honest and genuine relationships does, in fact, create benefits from mutual bonding, when each person brings a clear and authentic expression of their pure nature into the process.

The next critical difference explores further how to relate to one another: *It is best to endure injustice with evenness of temper, applying oneself... to all that leads to... friendship.* Spinoza acknowledges the reality of imperfect relationships without sacrificing his optimism for ideal relationships.

The final section reprises the exact same text as Movement I: *Hearts, however, not arms, indeed love and nobility conquer.* As in the first movement, these words qualify the journey of building harmonious relationships with an important mindset. This time, though, the phrase concludes the entire work, not only representing each movement's philosophical ending but helping to bring the entire journey to a cohesive close.

Musically, the same reductive procedure as in Movement I shows similar harmonic structures underpinning modulation through the circle-of-fifths (Figures 26 and 27). Curiously,

the composer did not close the circle as in the first movement, choosing to end the work in B, the penultimate key in the sequence. He says:

You want to give space to infinity. It was done on purpose ... I think I was very much impressed by that last sentence when I wrote it. It affects not only now, but all time—it's timeless. Because it's timeless, I also had the feeling to write it down timeless, and that's also the reason I made this rotational music at the end of movements one and five. And that's also the reason, I amplified this notion by not closing the circle.⁷³

Form:	A	B	A'	C
Measures: <i>Reduction Segments</i>	1-37 <i>1-4</i>	37-102 <i>5-11</i>	103-147 <i>12-16</i>	148-173 <i>17-end</i>
Tonal Areas:	E (1-8) A (9-20) D (21-30) G (31-37)	G (37-49) C (50-59) F (60-73) Bb (74-83) Eb (84-87) Ab (88-104)	Db (105-122) Gb (123-134) B (135-147)	B (148-173)
Dynamics	<i>pp-f</i>	<i>pp-f-pp-ff</i>	<i>pp-ff-pp</i>	<i>Pp</i>
Thematic Ideas	Phrasing in each section divisi. Avoided authentic cadences.	37-55 marked by minimalistic entrances outlining E minor. Continuous build in texture to authentic cadence in Ab at measures 100-102.	Entrances similar to opening. Cadences on an E major chord, despite the B tonal area.	Enters with soprano for the first time, and each subsequent entrance descends through the vocal parts rather than the general ascent shown in the other sections. This counter motion supports the "however" in the text. Each voice part is its own ostinati, repeating insistently to the end; each successive entrance occurs at different metrical points. Similar ostinati patterns as in first movement.
Text Translation	Although people, then, tend to try to organize everything to their own liking	advantage rather than disadvantage results from their mutual bond. It is best to endure injustice with evenness of temper	applying oneself diligently to all that leads to union and forming friendships.	Hearts, however, are conquered not by arms, but by love and nobility.

Figure 26. Movement V Analysis Chart

⁷³ Franssens, Interview by author, 12 February 2007.

1 A

SA
quam - - - - vis - - - - i - - - -

TB

E: ii IV_{6/4} vii^o_{6/4}/IV

2

SA
- - gi - - - tur ho - - mi - nes o - ni - a ple -

TB

A: IV₇ I_{6/4} IV I V₆ IV₆ IV I₆ vi/iv

3

SA
- - - - rum - - - - que ex su - a li - bi - di - ne

TB

D: IV V₇ I I_{4/2} ii V₇ ii vi V_{6/4}

4

SA
mo - - - - de ren - - - tur

TB

G: IV IV₇ vi_{4/2} IV ii₆

Figure 27. Movement V Reduction

5 B

SA B
ex e - o - - - - rum ta - - - men com - - - mu -

TB

e: i _____ v₆ VI v^o₇

6

SA
- - - ni so - - - ci - e - ta - - - te mul - - - - to

TB

C: vii^o_{4/2} I_{6/4} ii₆ IV iii ii I iii IV₆ vi₆ (F/G)

7

SA
plu - - - ra com - mo - - - da quam dam - - - na se - - - quun - tur

TB

F: IV ii vi V iii_{4/2} ii_{4/2} V₇ IV₇ V

8

SA
Qua - - - - - re sa - - - - - ti - - - - - us

TB

Bb: ii vi₆ V IV₇ vi _____ V IV

Figure 27 (continued)

9

SA

est e - - - - - o - - - - -

TB

Eb: vii^o V ii₆ I₆

10

SA

rum ju - - - ri - - - as ae - - - - quo

TB

Ab: ii₆ V₇ vi iii₆ I ii V₆ IV₆

11

SA

a - - - - ni - - - - mo fer - - - re

TB

IV I

A'

12

SA

et stu - - - di - - - - - um

TB

Db: IV vi_{6/4} ii I vi₇ iii IV

Figure 27 (continued)

13 14

SA i - - - is ad - ho - - - be - - - re quae

TB

(Db) iii₆ IV iii₆ vi₇ ii vii⁰_{6/4} ii_{6/4} Gb: V₇ I_{6/5} ii₇ IV

15

SA con - - - cor - - - di - - - ae

TB

I₆ ii ii_{6/5} V_{6/5}

16 et a - mi - ci - ti - ae con - ci - li - an - dae in ser - vi - unt

SA a - mi - ci - ti - ae

TB con - ci - li - an - dae

a - mi - ci - ti - ae

B: V IV iii V/vi vi₆ V₆ vi ii_{6/4} I_{6/4} IV

C

17

SA an - ni - mi ta - - - men non ar - mis - sed A - mo - re

TB

IV₇ V V₆ IV₇ vi_{4/2} vii⁰₇ V₆ IV₇ vii⁰₇ V₆ IV₇ I_{6/4} vii⁰₇ V₆

Figure 27 (continued)

et Ge - ne - - - si - ta - - te vin - - - cun - tur

(B) IV₇ V vi₆ I_{6/4} I vii⁰_{6/4/3} V₆ IV₇ V V₆

Figure 27 (continued)

The reduction once again illustrates the composer's preference for sub-dominant chordal structures, particularly to begin each key work. Eight of Movement V's twelve key areas begin this way, compared to ten of thirteen keys areas in Movement I.

The sectional divisions are also clearly marked with chord structures as with Movement I (Figures 28-30). Section B of both movements ends with satisfying cadences (Figure 29).

mo - - - - de ren - - - tur

G: IV IV₇ vi_{4/2} IV ii₆

Figure 28. Movement V Reduction Segment 4, end of Section A

a - - - - ni - - - - mo fer - - - re

Ab: IV I

Figure 29. Movement V Reduction Segment 11, end of Section B

16 et a - mi - ci - ti - ae con - ci - li - an - dae in ser - vi - unt

SA
a - mi - ci - ti - ae
con - ci - li - an - dae

TB
a - mi - ci - ti - ae

B:	V	IV	iii	V/vi	vi ₆	V ₆	vi	ii _{6/4}	I _{6/4}	IV
----	---	----	-----	------	-----------------	----------------	----	-------------------	------------------	----

Figure 30. Movement V Reduction Segment 16, end of Section A'

These sectional endings follow the pattern established in the first movement: A - incomplete (Half or incomplete); B - Satisfying (Authentic and Plagal); A' - Ambiguous (ii or IV). Section C contains similar patterns established in Movement I. Differences are subtle and create slightly different chords, but the rotational principle and primary motion remains similar (Figure 31).

17

SA
A - - - ni - mi

TB

A:	IV	vi _{6/4}	ii _{6/4}	V _{4/2}
----	----	-------------------	-------------------	------------------

Movement I

17

SA
an - ni - mi

TB

B:	IV ₇	V	V ₆
----	-----------------	---	----------------

Movement V

Figure 31. Movements I and V Comparison, Section C Patterns in Reduction

Figure 31 shows a remarkable similarity between the soprano and alto parts of each movement. In Movement I, the basses and tenors move essentially together in similar motion; however in Movement V they move in contrary motion and even cross. In each instance, there is a basic harmonic progression from IV to V.

There are two other significant differences worth examining. Near the end of Section B, Franssens splits each soprano part in two, creating a ten voice texture matched also by the louder corresponding dynamics. Examining the actual score, the rejoining of chord structures within this climax is noticeable as it moves towards its plagal cadence (Figure 32).

Sopranos divide, crescendo to *ff*.

↑

The image displays a musical score for Movement V, measures 92-104. The score is written for four vocal parts: Soprano (S.), Alto (A.), Tenor (T.), and Bass (B.). The Soprano part is divided into two staves, with a red box and arrow pointing to the first staff indicating 'Sopranos divide, crescendo to *ff*.' The Alto, Tenor, and Bass parts are each written on a single staff. The score includes various musical notations such as triplets, dynamic markings (*f*, *ff*), and lyrics. The lyrics for the Soprano part are: 'as - ac - - - - - quo - a - - - - ni - mo -'. The lyrics for the Alto part are: 'ac - - - - - quo - a -'. The lyrics for the Tenor part are: 'ri - - - - as - ac - - - - quo - a -'. The lyrics for the Bass part are: 'ju - - - - ri - - - - as - ac - - - - quo - a -'. The score is in a key signature of two flats (B-flat and E-flat) and a 4/4 time signature.

Figure 32. Movement V, mm. 92-104

Sopranos, tenors, basses holding against alto movement;
basses serve as pedal point elongating IV.

96 *sempre tenuto*
S. *ff* *sempre tenuto*
A. *ff* *sempre tenuto* ni - mo - fer -
T. *ff* *sempre tenuto* ni - mo - fer -
B. *ff* *sempre tenuto* ni - mo -

Plagal cadence

100 *dim.* *pp*
S. *dim.* *pp* et
A. *dim.* *pp* re,
T. *dim.* *pp* re,
B. *dim.* *pp* re,
pp non cresc.
pp non cresc.
pp non cresc.
pp non cresc.

Figure 32 (continued)

Figure 32 illustrates a rare change in the style established in Movements I and V. It is the only instance of additional divisi (sopranos, m. 94) as well as the only moment where an individual part is isolated against the other three (altos, mm. 96-99). This striking moment is not the only altered musical idea though.

Moments later, as Section A' comes to a close, Franssens gives the full text to the sopranos while the other parts voice only “amicitiae” (friendship).

16 et a - mi - ci - ti - ae con - ci - li - an - dae in ser - vi - unt

SA a - mi - ci - ti - ae con - ci - li - an - dae

TB a - mi - ci - ti - ae

Figure 33. Movement V Reduction, end of Section A'

This final declamation of friendship prepares the work's concluding section. Movement I's concluding text is reprised along with the rotational concept, though the patterns are slightly different as already described. In measure 158, the dynamics indicate for each voice to “fade out, little by little.” Franssens ends as he began, with a final ethereal cluster (Figure 34). The music therefore does not end so much as disappears. Given the circular aspect of the overall work and theme, it is an appropriate close. By not ending in a concrete or harmonically satisfying way, Franssens permits the idea of the work to linger and persevere in the listener's ear. While the music itself must inevitably stop, the idea does not close, and Franssens' ending allows what he previously described as “giving space to infinity.”



Figure 34. Movement V, mm. 170-end.

Free and Individual Action

Compared to the vastness of Movements I and V, Movements II and IV are more compressed on several levels: fewer modulations, shorter in length (both in measures and real time), and additional vertical chord structures. The primary key areas (G and F) for these movements are both prominent in Movements I and V, ending Section A in both movements, respectively.

Both movements are in a neo-Renaissance motet style and share exact three part ABA' forms. The A sections of each movement have three circle-of-fifths modulations, the eighth note as the fundamental pulse, and a contrapuntal organization. The B sections are a homophonic presentation juxtaposing two key areas a third apart and using the quarter note as the base pulse. The A' sections reprise the opening materials but without modulation.

Movement	II			IV		
Scoring	SSAATTBB Occasional divisi			SSAATTBB Occasional divisi		
Length	59 measures			62 measures		
Form	A	B	A'	A	B	A'
Key Areas	G, C, F	G, Bb, G	G	F, Bb, Eb	Db, F	F
Style Traits	Horizontal counterpoint. Pulse of eighth-note. Compression of texture.	Homophonic Pulse of Quarter-note.	Similar to A without modulation.	Horizontal counterpoint. Pulse of eighth-note.	Homophonic Pulse of quarter-note.	Similar to A without modulation.
Text Form	A	A	B	A	B	A'
Text Synopsis	The idea of “free” and its action.			The action and outcome of the individual.		

Figure 35. Movements II and IV Comparison

Movement II

After the intense exploration of relationships expressed in Movement I, Franssens turns more esoteric in expressing Spinoza’s idea of “free” in Movement II. Yet, order and symmetry still reign as the most compelling elements (Figures 36 and 37).

Form	A	B	A'
Time & Tempo	x/8 <i>♩ = 56 sereno</i>	x/4 <i>♩ = 48 come un corale</i>	x/8 <i>♩ = 56 sereno</i>
Measures	1-26	27-41	42-59
Keys	G (1-7) C (8-17) F (18-26)	G (27-34) Bb (35-38) G (39-41)	G (42-59)
Dynamics	<i>pp-ppp-f-pp</i>	<i>pp-ppp</i>	<i>pp-f-pp</i>
Thematic Ideas	Modulation through circle-of-fifths (three key areas) Overlapping lines. Use of appoggiatura to create dramatic melodic climaxes in phrases.	Completely homophonic (and indeed homorhythmic). Ends on IV (C major), setting up next section to continue in G.	Similar to A, but without modulation.
Text	Free is called that which exists from the necessity of its nature alone	<i>Repeat of Section A Text</i>	and is determined to act by itself alone.

Figure 36. Movement II Analysis Chart

A	Ea res libera dicitur, quae ex sola suae naturae necessitate existit <i>That thing free called, that from solely its nature necessity exists</i>
B	Same as A
A'	et a se sola ad agendum determinatur. <i>and by itself alone to act determined</i>
Poetic Translation	Free is called that which exists from the necessity of its nature alone, and is determined to act by itself alone.

Figure 37. Literal Translation of Movement II Text

The repetition of the text for the B section is intriguing. By using different music to express the same text, Franssens reinforces the idea of “free” existing beyond any set parameters or boundaries. It is its own force, not dependent on anything else. One of the significant differences between the structures of Movements II and IV is this repetition of the opening text for the B section. In Movement IV, the text changes along with the music for the B section (Figure 42). However, the texts do relate to each other. Each examines what causes a person to take action and whether or not that action is free and wholistic, or restricted and partial. Spinoza suggests the former is more positive.

Musically, Movement II initially carries forward some important concepts from Movement I. The three key areas in Section A present an abbreviated circle-of-fifths progression: G-C-F (Figure 36). The opening entrances occur in a similarly displaced style, though they are compressed in time and without their phased counterparts (Figure 38). Where the divisi in Movement I served to add another layer of texture, the divisi sections of Movement II are fewer and function to fill out harmony. The second phrase, beginning on “Quae” at the end of measure 9, uses paired voices to further compress the texture (Figure 38).

Staggered entrances similar to Movement I.

Divisi for harmonic filler.

Escape to upper descent.

Paired voices, further compression of texture.

Figure 38. Movement II, mm. 1-11
Similarities to Movement I

There are also similarities to the first movement in melodic writing for each voice. The prevalence of step-wise movement is still strong, as is the dramatic escape of the soprano to an upper descent.

Without the phased divisi and extreme displacement, the harmony is much clearer in score form in Movement II than in Movement I, clearly outlining G major in the opening

7

S. *dim. et rit.* a tempo *ppp cresc.*
 di - - ci - - tur, quæ ex so - - la - so

A. *dim. et rit.* a tempo *ppp cresc.*
 - ra di - - ci - - tur, quæ ex - so -

T. *dim. et rit.* a tempo *ppp cresc.*
 di - - ci - - tur, quæ ex -

B. *dim. et rit.* a tempo *ppp cresc.*
 ra di - - ci - - tur, quæ ex -

C: F(IV) G(V6/4/3)

[illegible]

The plagal cadence in measure 25-26 finally brings all the parts together, marking the end of Section A and preparing the listener for the homophonic entrances of Section B at measure 27 (Figure 40).

The B section is divided into three phrases of music clearly marked by the key signatures: G, Bb, G. The first phrase elaborates on the chordal movement from G (I) to D (V). The second phrase in Bb begins with another subdominant chord (ii) and moves through F major (V) to Bb (I). Measures 37-38 repeat this idea with some expansion, then shifting the F major into an altered dominant to cadence finally in C major. The third phrase returns to G and is similar to the first phrase initially. However, it too cadences on C Major (Figure 41).

The B section represents the culmination of the compression trend begun in the first measure of Movement II. However, the compelling homophonic declamations of the text are also significant, and they perhaps explain why Franssens chose to repeat the opening text. Here each word, or small group of words, is uttered by themselves with substantial pauses in between.

As shown in Figure 41, Section A' does not modulate but remains steady in G major. Measure 7 and 47 are the different points between the two sections. In the latter, Franssens chooses to repeat the opening thematic material with climatic results, the soprano escaping to a high G in measure 52 before beginning her final descent. The movement ends with an authentic cadence (Figure 41).

For continuity, a few key features of the second movement are worth examining as they prepare the way for Movement III. The Bb tonal area in Section B may seem out of place with the circle-of-fifths progressions, but this music does highlight C minor and Bb major, the two opening (and repeated, in minimalist style) chords of Movement III. Second, the "Come un corale" idea will appear again towards the end of the first section of Movement III as another point marking the end of a long compression section.

40 $\text{♩} = 56 \text{ sereno}$

S. *pp* $\frac{3}{4}$ $\frac{2}{4}$
 - - - - - tit, et a se so - la ad a - gen-dum de - ter-mi -

A. *pp* $\frac{3}{4}$ $\frac{2}{4}$
 - - - - - tit, so - la a - - - - - gen - dum de - - - - - ter -

T. *pp* $\frac{3}{4}$ $\frac{2}{4}$
 - - - - - tit, so - - - - - la a - - - - - gen - dum de - - - - - ter -

B. *pp* $\frac{3}{4}$ $\frac{2}{4}$
 - - - - - tit, ad a-gen - - - - - dum a - - - - -

G: I₆ V V/IV IV I (recap)

47 *cresc.* *mf*
 S. - na - tur. et a se so - la ad a - - - - - gen - - - - - dum

A. *cresc.* *mf*
 mi - na - tur. so - - - - - la a - - - - - gen - - - - -

T. *cresc.* *mf*
 - mi - na - tur. so - - - - - la de - - - - - ter - mi -

B. *cresc.* *mf*
 gen - - - - - dum de - - - - - ter - - - - -

Shifted to C in Section A, here repeats opening theme and soars to climax.

54 *cresc.* *f* *decresc.* *mp* *p* *pp*
 S. - de - - - - - ter - - - - - mi - na - tur.

A. *cresc.* *f* *decresc.* *mp* *p* *pp*
 dum de - - - - - ter - - - - - mi - na - tur.

T. *cresc.* *f* *decresc.* *mp* *p* *pp*
 - - - - - na - tur.

B. *cresc.* *f* *decresc.* *mp* *p* *pp*
 mi - - - - - na - - - - - tur.

Figure 41. Movement II, mm. 40-59

Movement IV

From Movements I to III, Franssens explores thematically the concepts of community, free action, and the nature of the divine. Movement IV introduces the final thematic idea of the work, since the final movement is a textual and musical parallel of Movement I. The work turns introspective in investigating the outcomes of individual action in Movement IV.

A	<p>Nos tum agere dico, cum aliquid in nobis, <i>we moreover to act say, when something in us</i></p> <p>aut extra nos fit, cujus adaequata sumus causa, <i>or outside us happens which adequate sum cause</i></p> <p>hoc est cum ex nostra natura aliquid in nobis, aut extra nos sequitur, <i>this is when out of our nature something in us or outside us follows</i></p> <p>quod per eandem solam potest clare, <i>because through advance flows only to be able clearly</i></p> <p>et distincte intelligi. <i>and distinct understanding</i></p>
B	<p>At contra nos pati dico, cum in nobis aliquid fit, <i>but conversely we suffer say when in us something happens</i></p> <p>vel ex nostra natura aliquid sequitur, <i>or out of our nature something follows</i></p> <p>cujus nos non, nisi partialis, sumus causa. <i>of which we not struggle part sum cause</i></p>
A'	Nos tum agere dico.... cujus adaequata sumus causa (reprise)
Poetic Tranlation	<p>I say that we take action when something comes to pass, in us or outside us, of which we are the adequate cause, that is, when something in us or outside us follows from our nature, which can be clearly and distinctly understood through it alone. On the other hand, I say that we suffer when something comes to pass in us, or something follows from our nature, of which we are only a partial cause.</p>

Figure 42. Literal Translation of Movement IV Text

Spinoza again suggests a paradigm that promotes a beneficial outcome if one can achieve the holistic principle described. The theme of IV is directly related to the theme of II. If a person can achieve free action, and is thus completely non-dependent on another force, then the individual might take positive action rather than suffer.

Musically, Franssens' three part structure works very well. The beautiful A section, full of diatonic counterpoint, is contrasted with the stark homophonic declamations of the B section (on the other hand, we suffer...).

Also important is the timing of the text. Although it is the longest of all the movements, it takes the shortest amount of actual time to perform.⁷⁴ Thus, the movement contains the fastest delivery of text and is perhaps the only one which the text can be understood aurally. The other movements largely reinforce the notion that Franssens is content with setting the idea of the text rather than the text and its individual words.

This attribute, as well as the neo-Renaissance style of the movement, presents a needed contrast to the dense, though joyful, minimalistic repetitions of Movement III. The scoring returns to only voices with few divisi. The three-part organization is shown in Figure 43.

The A section is divided into three phrases, each representing another sequence in the circle-of-fifths modulation. Similar to Movement II, this section is full of diatonic counterpoint underlined by structural harmony. The first six measures repeat completely at measure 7, followed by a two-measure transition modulating to Bb (Figure 44).

⁷⁴ I - 34 words (c. 10 minutes), II - 18 words (c. 8 minutes), III - 19 words (c. 24 minutes), IV - 61 words (c. 7 minutes), V - 47 words (c. 14 minutes)

Form	A	B	A'
Time & Tempo	x/8 ♩ = 138-144 <i>con moto</i>	x/4 ♩ = 48 <i>reliosamente</i>	x/8 ♩ = 69-72
Measures	1-31	32-44	45-62
Keys	F (1-14) Bb (15-21) Eb (22-31)	Db (32-38) F (39-44)	F (45-62)
Dynamics	<i>mp-ff-pp</i>	<i>mf-ppp</i>	<i>mp-f-pp</i>
Thematic Ideas	Modulation through circle-of-fifths (three key areas). Repetition of first phrase of music, which is extended second time.	Completely Homophonic (and indeed homorhythmic). Mostly four-part men until m. 42.	Similar to A, but without modulation.
Text (Translated)	I say that we take action when something comes to pass, in us or outside us, of which we are the adequate cause, that is, when something in us or outside us follows from our nature, which can be clearly and distinctly understood through it alone.	<i>At contra...</i> On the other hand, I say that we suffer when something comes to pass in us, or something follows from our nature, of which we are only a partial cause.	I say that we take action when something comes to pass, in us or outside us, of which we are the adequate cause.

Figure 43. Movement IV Analysis Chart

Exact Repeat of opening phrase.

Transition

S. - bis, aut ex - tra nos fit, cu - jus

A. li - quid in no - bis, aut ex - tra nos fit, cu -

T. - quid in no - bis, aut ex - tra nos

B. - bis, aut ex - tra nos fit, cu - jus a - dae - qua -

S. a - dae - qua - ta - su - mus - cau - sa, hoc est cum - ex - nos -

A. jus a - dae - qua - ta su - mus cau - sa, hoc est cum ex nos -

T. fit, cu - jus a - dae - qua - ta su - mus cau - sa, hoc est cum ex nos -

B. ta - su - mus cau - sa, hoc est cum ex nos -

Figure 44. Movement IV, mm. 7-14

The melodic contour continues similarly in the style established in the first movement with step-wise movement, usually descending, with returning leaps to reestablish another descent.

Harmonically, the composer continues to show his preference for sub-dominant chords, particularly at the beginning of a new key area (Figure 45).

Note increasing use of triple divisions in conjunction with crescendos leading to phrasal climaxes,

Bb: IV

Continued prevalence of IV chords to bridge modulations.

Eb: IV

Figure 45. Movement IV, mm. 15-25

The composer also uses meter quite well to propel the music towards climactic moments, such as in measures 18-19 and 26-27, the latter rising to Ab in the soprano. The increased use of triple divisions, as well as the crescendos in the dynamics, drive the music towards these climaxes. Following the climax in measure 27, Franssens elongates to rhythms and slowly decrescendos to pianissimo to bring section A to a close (Figure 46).

Another unifying feature of Movements II and IV are their ending cadences to close their respective A sections, as each ends with a plagal cadence (Figure 46).

26

S. *ff* *non dim.* *dim.* *f* *mf* *mp* *p* *pp*
 dis - tinc - te in - tel - li - gi.

A. *ff* *non dim.* *dim.* *f* *mf* *mp* *p* *pp*
 et dis - tinc - te in - tel - li - gi.

T. *ff* *non dim.* *dim.* *f* *mf* *mp* *p* *pp*
 et dis - tinc - te in - tel - li - gi.

B. *ff* *non dim.* *dim.* *f* *mf* *mp* *p* *pp*
 et dis - tinc - te in - tel - li - gi.

Eb: IV I_{6/4} IV I

Figure 46. Movement IV, mm. 26-31, end of Section A

Section B begins with the homophonic declamations of “At contra ...” (However ...). While the composer chose to repeat the same text in Movement II at this juncture to reflect the independence of free action, the new music and change in style works very well to present the counter explained in the text. The contrast appears in the following ways: duality of key, homophony, quarter-note pulse, softer dynamics, and change of texture (Figure 47).

The first two chords (Db and F) of Section B highlight an interesting duality for this section (Figure 47). Not only do these chords represent the primary tonal areas to be explored, they deepen the sense of “at contra” with something much starker. While the given key signature suggests Db major, the use of F not only tonally refers back to the beginning of the movement, it represents a third relationship similar to the two key areas of Movement II’s B section. Harmonically, F represents V/vi in Db, or perhaps borrows from the relative minor of Bb. The section ends with a surprising cadence to Eb, but this represents another unifying harmonic relationship. Section A also cadenced to Eb (Figure 46).

Duality of Db and F

♩ = 4/8 religiosamente

32

S. *mf*

A. *mf*

T. *mf*

B. *mf*

At con - tra nos pa - ti di - co, cum in no - bis a - - li - quid - fit, vel

At con - tra nos pa - ti di - co, cum in no - bis a - - li - quid - fit, vel

F Major becomes more prominent key.

36

S. *pp*

A. *pp*

T. *pp*

B. *pp*

ex nos - - - - tra na - tu - ra a - - li - - quid se - qui -

ex nos - - - - tra na - tu - ra a - - li - - quid se - qui -

41

S. *ppp*

A. *ppp*

T. *ppp*

B. *ppp*

ni - si par - ti - a - lis, su - mus cau - sa.

ni - si par - ti - a - lis, su - mus cau - sa.

tur, cu - jus nos non, — ni - si par - ti - a - lis, su - mus cau - sa.

tur, cu - jus nos non, — ni - si par - ti - a - lis, su - mus cau - sa.

Cadence in Eb unifies ends of Sections A and B

Figure 47. Movement IV, mm. 32-44, Section B

The change in meter gives breadth to the music, as do the lengthier rhythms.

Dynamically, this section is also very subdued, beginning with a strong mezzo-forte and then dropping periodically though softer dynamics until a final *ppp* is reached. Perhaps the starkest contrast is the use of the four-part male voices solely for the first ten-and-a-half measures (Figure 47).

The recapitulation of A begins with an exact repetition of music and text through the first eight measures. As with Movement II, the recap does not feature any modulation and concludes in its opening tonality. From measure 53 through the end, Franssens pushes towards one more climax in similar style to the opening section, using the increased rhythmic activity of triple divisions and dynamics (Figure 48).

Slightly different than A, remains in opening tonality to the end.

Use of dynamics and increased triple units to push final climax and denouement.

Figure 48. Movement IV, mm. 50-end, end of Section A'

The use of the opening text and music re-affirms the thematic opening argument. This sense of self-exploration is also crucial to the overall arc of the work. Now, as the listener prepares to hear again the ethereal circle-of-fifths progression that inhabits both Movements I and V, exploring the forming of human relationships, this action is not done without the critical lens provided by Movements II-IV. Movement IV, uniquely, provides insights into how one can satisfy both the nature and freedom of individual action and the challenges of building honest relationships that Movement V explores.

The Centrality of the Divine

Movement III is the most substantial movement of the work—the central pillar in the symmetrical arc. It contains the thickest scoring and the greatest tempo contrasts, and at 356 measures, it is nearly as long as the combined 420 measures of the other four movements. Yet, the musical materials show Franssens in his most minimalist style.

The movement is marked by a high degree of repetition and little modulation as opposed to the other movements. The constancy of three flats completes the design of inward compression of modulation. It also is directly related to the textual theme of the movement: the nature of the divine (Figure 49). Spinoza's portrayal of the divine is one of infinity, an essence remaining unchanged despite a myriad of attributes and possibilities. Repetition fosters this sense of infinity and timelessness, as does the sole key signature.

Franssens references the divine with one additional important way—through scoring. Franssens' use of strings to surround the divine in Movement III is a direct allusion to Bach's use of strings to accompany Jesus' recitatives in the *St. Matthew Passion*.⁷⁵ The entrance of the

⁷⁵ Franssens, Interview by author, 12 February 2007.

strings in Movement III is a welcomed contrast to the a cappella movements that preceded it. It is a very special moment in the composer's mind.⁷⁶ Few works withhold this degree of orchestration as long as *Harmony of the Spheres* does. With this eventual appearance, the strings call special attention to themselves and highlight their philosophical reason for existence.

A	Per Deum intelligo ens absolute infinitum, <i>by God I understand a being of absolute infinity</i> hoc est, substantiam constantem infinitis attributis, <i>that is a substance existing infinity of attributes</i> quorum unumquodque aeternam, <i>of which each one eternal</i> et infinitam essentiam exprimit. <i>and infinite essence expresses</i>
B	Textless
Poetic Translation	By God, I understand what is of absolutely infinite being, that is, a substance consisting of an infinity of attributes, of which each one expresses an eternal and infinite essence.

Figure 49. Literal Translation of Movement III Text

Movement III consists of two primary parts, nearly of equal length (Figure 50). Part A references the style of Movements I and V in the following ways: tempo, non-metric rhythmic organization, phased and disjoined parts, denomination of the quarter note, and lengthy note values. It slowly moves toward homophony at the end of this section. Part A also contains the complete text of the movement. Part B is textless and uses the denomination of the eighth note. It progressively increases the rhythmic activity in each part until a joyous arpeggio section is fully realized. It is the only fast section of the entire work.

⁷⁶ Franssens, Interview by author, 12 February 2007.




Scoring	SSSSAAAATTBB Violin Solo Violins 1 [a,b,c] and 2 [a,b,c] Violas [a, b] Cellos [a, b] Bass	SSAATTBB Violins 1 [a, b] and 2 [a, b,] Violas Cellos Bass
Part	A	B
Key	C minor to C major	Eb
Time Signature	4/4 (* one exception is 3/4 measure at 150)	7/8 and 8/8, then 12/16
Tempo	 =48 <i>da lontano</i>	 =168,  =138-144 <i>con anima</i>
Measures	mm. 1-186	mm. 187-356
Sections	11 Sections: 39+30+24+18+12+12+9+6+12+10+14	13 Sections: 8+12+12+24+14+32+12+8+4+4+4+20+16
Stylistic Traits	Phrases of music become increasingly smaller, a point of musical compression. Continuous repetition of musical ideas within each section of music. Phasing in vocal and string parts; exception is solo violin	Two main sections: mm. 187-296 combines a fast underlay in the strings with slow moving parts in voices, while m. 297 to the end contains fast arpeggio writing in all parts. Difficult vocal writing throughout, though doubled by strings.
Text Translation	By God, I understand what is of absolutely infinite being, that is, a substance consisting of an infinity of attributes, of which each one expresses an eternal and infinite essence.	Textless—voices sing on neutral vowel.

Figure 50. Movement III Analysis Chart

Movement IIIa

The first half of Movement III portrays four important musical ingredients: repetition, compression of phrase lengths, scoring, and dynamics. The arc of Part A features the unique duality of both expansion (dynamics, scoring) and compression (phrase lengths, repetition). Figure 51 shows these traits in the gradual progression of this part, from *pp* to *ff*, from partial strings and voices to the full complement of strings and voices, and the increasingly smaller phrase lengths with less repetition.

Measure	1-39	40-69	70-93	94-111	112-123	124-135	136-144	145-150	151-162	163-172	173-186
Dynamics	<i>pp</i>	<i>pp</i>	<i>pp-p</i>	<i>p-mp</i>	<i>mp</i>	<i>mp-mf</i>	<i>mf</i>	<i>mf-f</i>	<i>f-ff</i>	<i>ff</i>	<i>ff</i>
# of Repetitions	16	12	4 & 16	3	4	2	6	2	4	4	3
Scoring	S1 S2 v solo vln 1 a,b,c vln 2 a,b,c vla a,b	S3 S4 v solo vln 1 a,b,c vln 2 a,b,c vla a,b	A1 A2 A3 A4 vln 1 a,b, c vln 2 a,b,c vla a,b	S S A A vln 1 a,b, c vln 2 a,b,c vla a,b	S S S S A A A vln 1 a,b, c vln 2 a,b,c vla a,b	S S S S A A A vln 1 a,b, c vln 2 a,b,c vla a,b	T T B B vln 1 (a,b,) vln 2 (a,b) vla (a,b) vcl (a,b)	S S A A T T B B vln 1 (a,b,) vln 2 (a,b) vla (a,b) vcl (a,b)	S S A A T T B B vln 1 (a,b,) vln 2 (a,b) vla (a,b) vcl (a,b) +Db 156	S S A A T T B B vln 1 (a,b,) vln 2 (a,b) vla (a,b) vcl (a,b) Db	S S A A T T B B vln 1 (a,b,) vln 2 (a,b) vla (a,b) vcl (a,b) Db

Figure 51. Movement III, Part A Analysis Chart

The dynamics play an enormous role in increasing musical tension, as the entire Part A presents one long crescendo from silence to fortissimo. Otherwise, the eleven sections follow scoring and melodic pattern changes. The first and longest section (at 39 measures) begins with a measure of rest. This allows the strings to appear out of silence, giving extra meaning to the their importance to dynamics (Figure 52).

♩ = 48 da lontano

Soprano 1

Soprano 2

Violin 1a

Violin 1b

Violin 1c

Violin 2a

Violin 2b

Violin 2c

Viola a

Viola b

Phasing in pairs.

Patterns outlining c and Bb chords; repeat throughout phrase.

The image shows a musical score for Movement III, measures 1-5. The tempo is marked *♩ = 48 da lontano*. The score includes parts for Soprano 1, Soprano 2, Violin 1a, Violin 1b, Violin 1c, Violin 2a, Violin 2b, Violin 2c, Viola a, and Viola b. Two red boxes highlight specific musical patterns. The first box, labeled "Phasing in pairs.", points to the first measure of Violin 1a and Violin 1b. The second box, labeled "Patterns outlining c and Bb chords; repeat throughout phrase.", points to measures 2-5 in Violin 1a, Violin 1b, Violin 1c, Violin 2b, and Viola a. Arrows indicate the repetition of these patterns across the measures.

Figure 52. Movement III, mm. 1-5

The example also illustrates non-metric rhythms, characteristic of Movements I and V, with phasing in pairs as well. Without modulation though, the music takes on a highly minimalist style as each part's pattern repeats throughout the section. Franssens increases the variety of the pattern combinations to amplify the intensity of the music (Figure 53).



Figure 53. Repeated melodic patterns in Movement III, Part A⁷⁷

⁷⁷ Duration of note lengths is true, but the actual entrances vary in any given measure.

Patterns n and o appear only from m.173 to the end; notice similar melodic contours between these two patterns.

Figure 53 (continued)

Note also the increase of rhythmic activity as new patterns are introduced throughout Part A (Figure 53). While the opening musical themes show length and breadth, subsequent patterns are more rhythmically active with shorter note values, another point of musical compression which drives the movement forward. The differences between Pattern *a* and the pattern *m* demonstrate this increase.

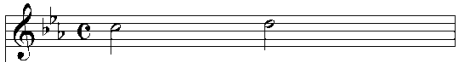
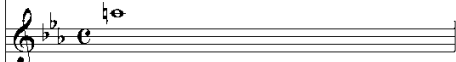
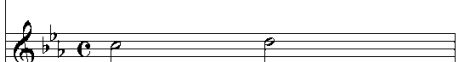



Scoring changes in measure 136 allow Part A to be divided into two substantial sections. Figure 54 not only demonstrates these changes, but also the degree of repetition represented by each instrument or voice, and how the patterns are used in various combinations.

Measure	1-39	40-69	70-93	94-111	112-123	124-135
Section	1	2	3	4	5	6
<i>Dynamics</i>	<i>pp</i>	<i>pp</i>	<i>pp-p</i>	<i>p-mp</i>	<i>mp</i>	<i>mp-mf</i>
Sopranos 1 & 2	a*11			i*3	h*4	l*2
Sopranos 3 & 4		d*12			g*2	[a]*4
Altos 1 & 2			g*4	j*3	[a]*4	[f]*2
Altos 3 & 4			[a]*16		[a]*2	j*2
Tenors 1 & 2						
Basses 1 & 2						
Violin solo	X	Y	Z			
Violin 1a & 1b	a*16	d*12	h*8	k*3	h*4	l*2
Violin 1c & 2a	b*16	e*12	g*4	i*3	g*2	[a]*4
Violin 2b & 2c	c*16	f*12	[a]*16	[a]*4	[a]*4	[f]*2
Viola a & b	a*16	d*12	[a]*4	j*3	[a]*2	j*2
Cello a & b						
Double Bass						

Measure	136-144	145-150	151-162	163-172	173-186
Section	7	8	9	10	11
<i>Dynamics</i>	<i>mf</i>	<i>mf-f</i>	<i>f-ff</i>	<i>ff</i>	<i>ff</i>
Sopranos 1 & 2		l*2	m*4	[a]*4	n*4
Altos 1 & 2		[a]*4	[a]*8	1/2o*4	o*4
Tenors 1 & 2	[a]*6	[a]*2	[k]*8	[a]*4	[o], pedal e, [o], pedal e
Basses 1 & 2	pedal Bb	[j]*4	[j]*4	pedal C	B1: [a]*8 B2: pedal g
Violin solo					
Violin 1a & 1b	[a]*6	l*2	m*4	[a]*4	n*4
Violin 2a & 2b					o*4
Viola a & b	[a]*6	[a]*2	[k]*8	[a]*4	[o], pedal e, [o], pedal e
Cello a	pedal Bb	[j]*4	[j]*4	pedal C	[a]*8
Cello b & Double Bass	pedal Bb	[j]*4	[j]*4	pedal C	pedal g

Figure 54. Movement IIIa, Section and Pattern Chart by Scoring
Brackets indicate a derivative of the original pattern,
either in transposition, inversion, or fragmentation.

When a similar reductive procedure as applied to the outer movements is used here, the patterns align to show a degree of harmonic underpinning. For example, the first section of music (mm. 1-39) combines the opening patterns as follows (Figure 55):

	Patterns	Entrance	Repetitions
Soprano		m. 16	11
Solo Violin		m. 12	3 (periodically)
Vln 1a&1b		m. 2	16
Vln 1c&2a		m. 2	16
Vln 2b&2c		m. 2	16
Vla a&b		m. 2	16

c:	i	V/III
	c	Bb

Figure 55. Movement III, mm. 1-39 in Reduction; patterns not shown in real time.

The above example illustrates again the construction buried below, and these basic harmonic movements continue to propel the music forward. C minor reinforces the key signature, while the movement to Bb foreshadows the eventual prominence of Eb major in Part B. However, the dominating feature of Movement III is repetition, and the patterns themselves reinforce the tonality collectively; a complete reduction, similar to the reductions applied to Movements I and V, is not necessary due to lack of modulation.

The solo violin adds a unique layer to the opening three sections before it vanishes altogether for the rest of the movement. Appearing periodically, it seems to serve as a culminating musical event to several repetitions. The A natural strengthens the musical tension of each chord by either adding a major seventh to the Bb chord or turning c minor into a diminished chord.

It also serves a higher textural reason (Figure 56). With the amount of sustained repetition contained in the first two phrases, the solo violin's entrance helps break the monotony and offers a musical landmark within these sections. As the scoring thickens and the phrase lengths shorten, this aspect becomes unnecessary and probably explains its disappearance after measure 93.

Violin Solo appears periodically to increase tension.

The musical score for Movement III, measures 12-16, features a variety of instruments. The Soprano parts (S. 1 and S. 2) have long, sustained notes. The Violin Solo part enters at measure 12 with a piano (pp) dynamic and a melodic line, which then shifts to mezzo-forte (mf) and becomes more active. The Violin sections (1a, 1b, 1c, 2a, 2b, 2c) provide harmonic support with sustained notes and rhythmic patterns. The Viola sections (a and b) also provide harmonic support with sustained notes and rhythmic patterns. The score is written in a key signature of two flats and a common time signature.

Figure 56. Movement III, mm. 12-16

One important modulation does exist in Part A. While the tonality has referenced c minor most often throughout the opening section, with an occasional preview of Eb major (the primary key area of Part B), the composer shifts profoundly into the parallel key of C major in measure 163 (Figure 57).

Modulation to C Major.

Figure 57. Movement III, mm. 161-166; voices only.

While the keys are related, the move is still striking in its presentation, after the repetitive aspects dominated by the three flats. It is another important moment that surges the music to yet another level for its final important evolution to the final sections of Part A.

The culmination of all these attributes of compression and expansion occurs in measure 173, where Franssens denotes *come un corale*. As in Movement II, this designation refers to a homorhythmic texture as each part aligns. Here, Franssens completes the text, but the fermatas on rests operate as rhetorical pauses, allowing each phrase of words to make their own declaration (Figure 58).

come un corale

173

S. 1
...ter-...nam, et in-fi...ni-tam es-

S. 2
...ter-...nam, et in-fi...ni-tam es-

A. 1
...ter-...nam, et in-fi...ni-tam es-

A. 2
...ter-...nam, et in-fi...ni-tam es-

T. 1
...ter-...nam, et in-fi...ni-tam es-

T. 2
...ter-...nam, et in-fi...ni-tam es-

B. 1
...ter-...nam, et in-fi...ni-tam es-

B. 2
...ter-...nam, et in-fi...ni-tam es-

come un corale

Vin 1a
Vin 1b
Vin 2a
Vin 2b
Vla a
Vla b
Vcl. a
Vcl. b + Db

I IV₇
(Harmony repeats throughout)

G pedal point

Figure 58. Movement III, mm. 173-179

The chorale section alternates C and F major chords, demonstrating the composer's fondness for plagal relationships. However, the lone exception to the homophonic texture can be found in the bass voice, cello B, and double bass parts, all of which sustain a pedal G. This alters all the C-major chords to second-inversion chords and hints at a possible $I_{6/4} - IV - V - I$ cadence. It never happens, since the section concludes by stacking both chords together against the pedal G, offering no closure but rather anticipation for the next section (Figure 59).

180

S. 1 sen - ti - am ex - pri - mit.

S. 2 sen - ti - am ex - pri - mit.

A. 1 sen - ti - am ex - pri - mit.

A. 2 sen - ti - am ex - pri - mit.

T. 1 sen - ti - am ex - pri - mit.

T. 2 sen - ti - am ex - pri - mit.

B. 1 sen - ti - am ex - pri - mit.

B. 2 nam,

Stacked F major and C major chords

Figure 59. Movement III, mm. 180-186; voices only.

Movement IIIb

In the second half of Movement III, *Harmony of the Spheres* moves at last into its single fast part of the work. Constantly churning and revolving in Eb major, Franssens presents what he calls the “heart” of the work:

The first reason I inserted this fast movement was just from a psychological point of view. I thought that in the heart of the piece something completely different had to be done. That’s also the way I experience it. The fast part was the last one to be written.⁷⁸

Part B contains two primary sections (Figure 60). In the first section, measures 187-300, Franssens presents another gradual evolution of the music based on repetition, orchestration, and dynamics. The second section realizes this destination with a full arpeggio section, where quick rhythms dominate the writing for each instrument and voice.

Scoring	SSAATTBB Violins 1 [a, b] and 2 [a, b,] Violas Cellos Bass	Same
Section	A	B
Time Signature	7/8 and 8/8	12/16
Tempo	$\text{♩}=168$ <i>con anima</i>	$\text{♩}=138-144$
Measures	187-300	301-356
Phrasing	9 phrases: 8+12+12+12+12+14+32+8+4	13 Phrases: 8+4+4+4+20+16
Stylistic Traits	Continuous repetition of musical ideas within each phrase of music. Fast underlay of sixteenth-notes against slow-moving texture in voices and low strings.	Continuous repetition of musical ideas within each phrase of music. Fast arpeggio and/or melismatic writing in all parts. Difficult vocal writing throughout, though doubled by strings.
Text Translation	Textless—voices sing on neutral vowel	Textless—voices sing on neutral vowel

Figure 60. Movement III, Part B Analysis Chart

⁷⁸ Franssens, Interview by author, 12 February 2007.

While there is an immediate sense that the music has shifted into something new, Franssens also cleverly combines the timelessness of Movement I with the metrical style of Movement II and continues the musical theme of repetition from the first half of Movement III (Figure 61).

The image displays a musical score for Movement III, measures 187-194. The score includes parts for Soprano 1 (S. 1), Soprano 2 (S. 2), Bass (B.), Violin 1a (Vln 1a), Violin 1b (Vln 1b), Violin 2 (Vln 2), Viola (Via), and Violoncello/Double Bass (Vcl. + Db.). The tempo and mood are marked as *♩ = 168 con anima molto legato*, and a performance instruction states *all voices apply choral breathing*. The dynamic is *mp*. Three red annotations highlight specific features: 1) A box at the top states "Slow-moving vocal parts, similar to Movements I and IIIa." with an arrow pointing to the vocal staves. 2) A box in the middle states "Repeated melismatic patterns in strings, reinforcing metric organization." with an arrow pointing to the string staves. 3) A box at the bottom states "Harmony implies a general progression from C minor to Bb major, similar to the beginning Movement IIIa." with a double bar line symbol to its left.

Slow-moving vocal parts, similar to Movements I and IIIa.

Repeated melismatic patterns in strings, reinforcing metric organization.

Harmony implies a general progression from C minor to Bb major, similar to the beginning Movement IIIa.

Figure 61. Movement III, mm. 187-194

191

S. 1

S. 2

B.

Vln 1a

Vln 1b

Vln 2

Vla

Vel. + Db.

7/8 and 8/8 meters alternate throughout Section A.

Figure 61. (continued)

The second violins and violas enforce the meter while the voices primarily move in long notes in a seemingly free style. The shifting and alternating meters of 7/8 and 8/8 provide the framework for this dualism, providing an energetic pulse while maintaining metrical tension particularly with the application of 7/8, a meter often used in anticipation. This tension creates a sense of unsettled prolongation until resolving into Section B in measure 301. The independent lines create a variety of vertical harmonic sonorities, but a general progression from C minor to Bb major occurs, referencing the opening of the movement yet also continuing the simplicity of Movement III's harmonic design.

Just as in IIIa, Franssens uses scoring and dynamics to expand the musical texture and increase its intensity (Figure 62). Gradually more voices adopt the fast sixteenth-note patterns until the section fully evolves into the arpeggio section in measure 301 (Figure 63).

Measure	187-194	195-206	207-218	219-230	231-242	243-256	257-288	289-296	297-300
<i>Dynamics</i>	<i>mp</i>	<i>mp-p</i>	<i>p-mp- p-mp- p-mp</i>	<i>mf</i>	<i>p-mf- p-mf- p-mf-p</i>	<i>f</i>	<i>pp-f</i>	<i>f</i>	<i>f-ff</i>
Scoring	S1 S2 B vln 1a & b vln 2 vla vcl db	S1 S2 A1 A2 B vln 1a & b vln 2 vla vcl db	S1 S2 A1 A2 B vln 1a & b vln 2 vla vcl db	S1 S2 A1 A2 B vln 1a & b vln 2 vla vcl db	S1 S2 A1 A2 B vln 1a & b vln 2 vla vcl db	S1 S2 A1 A2 B vln 1a & b vln 2 vla vcl db	S1 S2 B vln 1a & b vln 2 vla vcl db	S1 S2 A T B1 B2 vln 1a & b vln 2 vla vcl db	S1 S2 A T B1 B2 vln 1a & b vln 2 vla vcl db

Figure 62. Movement III, Part B, Section A

Sustained notes in top voices. Altos and tenors have merged with strings' fast rhythmic patterns.

Bb pedal prepares cadence to Eb in m. 301

Tenors and cellos designated as sectional soli.

Full arpeggio section realized in all voices. Harmonically, each measure moves I – V or I – IV. Voices doubled by strings. Two and four measure cycles of repetition throughout section.

Figure 63. Movement III: mm. 297-305

Measures 297-300 present the last gasp of the dual ideas of long sustained notes against the fast undercurrent of rhythmic passages in the other voices. The second basses and double basses sustain a Bb pedal, the dominant of Eb and a chord prominently displayed throughout Movement III in anticipation. Finally, in measure 301, the tension and anticipation is resolved: the harmony gives way to Eb, the sopranos and violins abandon their sustained activity, the meter shifts permanently to 12/16, the dynamic surges to *ff*, and all parts seem to embrace a rapid-fire, kinetic pure joyfulness.

Minimalism's kinship to baroque music is on full display after measure 301. Constant churning rhythms supported by diatonic harmonies repeat ceaselessly. The harmonies are usually outlined by root movements in the bass (voices and strings) and arpeggios in the upper voices, complemented by step-wise melismas. No additional attempts at harmonic disguise exist: Eb, Ab, and Bb chords dominate.

The phrasing is constructed in series of two and four measure passages that repeat with and without written repeats, as each voice (doubled by the strings) rotates through various iterations of the arpeggiated harmonic material. Each voice also exhibits moments of division based now on range and harmony. The exception is the tenors, doubled by the cellos, whom Franssens designates as a sectional soli to the end of the movement. Because of the upper range involved for the tenors, this solidification helps their part to be a more prominent feature in the exuberant texture, yet not necessarily a dominating element.

Though the tempo, range, and style create a thick texture with substantial difficulty of performance, the musical ideas are quite simple, not unlike those of the minimalist style of Estonian composer Arvo Pärt. Lyn Schenbeck writes that Pärt:

Appears easy to perform—simple triads, mostly conjunct melodic lines, uncomplicated rhythms, and a great deal of repetition... Pärt's choral compositions depend on a continuous, expressive flow of music, which is difficult to maintain... Moreover, his reliance on simple octaves, unisons, and arpeggios (particularly in his tintinnabuli style) demands correct intonation and consistent blend.⁷⁹

The textless voices create an interesting dynamic. The doubling of the voices by the strings makes clear that Franssens has intentionally merged these textures together, probably to facilitate the performance. Without a text to sing, the voice parts are treated like instruments for this final section. This feature not only makes it easier for the voices, it also contributes to the philosophical “heart” that the composer mentions. The expression is stripped to its most pure essence. The music is joyful and exuberant. The intellectual aspects of the text are removed and the “heart” remains.

The end of the movement is surprising since the entire work thus far has employed gradual processes as a means of building towards events, or conversely bringing sections or movements to a close. In measure 341, Franssens marks a *subito pianissimo* and subsequent crescendo until the end of the movement, a final dynamic push towards climax. And though Movement III had begun imperceptibly out of silence, the composer ends in the opposite manner (Figure 64).

By abruptly ending on the implied dominant, the movement lacks closure but this also aligns it to the openness that the endings of Movements I and V presented. Only Movements II and IV conclude with authentic cadences.

⁷⁹ Lyn Schenbeck, “Discovering the Choral Music of Estonian Composer Arvo Pärt,” *The Choral Journal* 34, No. 1 (Aug 1993): 26.

346

S.

A.

T.

B.

Vln I

Vln 2

Vla

Vcl.

Db.

351

S. stop suddenly

A. stop suddenly

T. stop suddenly

B. stop suddenly

Vln I stop suddenly

Vln 2 stop suddenly

Vla stop suddenly

Vcl. stop suddenly

Db. stop suddenly

Implied V7.

Figure 64. Movement III, mm. 346-end

Movement IIIb is the test for a choir's ability to perform the entire work. It contains the most difficult vocal writing. While choirs regularly achieve the caliber of melismatic writing required by works like Handel's *Messiah* (step-wise movements with few leaps repeated in patterns or sequences), arpeggios written in complex rhythms at a quick tempo are substantially more difficult for the voice. Without a text to help make the patterns concise or manageable, the singer must acquiesce to the idea of being a mere instrument. The difficulty is compounded by singing on an open vowel: "eh" and "ah" are used throughout. These vowels make it more difficult to focus the pitch for the correct accuracy required, as mentioned by Schenbeck in his discussion of Arvo Pärt's music. The vowels also have no percussiveness, which potentially creates rhythmic and precision issues.

To combat this dilemma, a choir must absolutely learn this section on "doo" or "di." The closed vowels give the pitch focus while the consonant helps precision. Even so, the movement is a daunting challenge best tested by a choir of trained voices. After conquering these musical challenges, repetition of these elements aids in success but also taxes a singer's stamina.

Despite these considerable challenges, Movement III serves nobly *Harmony of the Spheres* as its central pillar. The music is philosophically compelling, adding a complex intertwining of the antiquity of the spheres and deity to the theme of the work.

Conclusion

Harmony of the Spheres is a unique composition that has a substantial chance to enter the international repertoire as a complete work, though several of the movements can stand alone effectively. Few compositions suggest such profound connections between science, music, philosophy, religion, and human bonds. It succeeds in part due to its timeless and ethereal

quality, a mysteriousness that belies its detailed construction. Franssens' love of J. S. Bach is apparent in his contrapuntal style as well as in the "internal logic" present in the composition's organization. The mystical atmosphere derives largely from the composer's other musical influences, much of which consist of a combination of American and "Holy" minimalisms. Repetition of elements, lengthy sustained pitches, and diatonic harmonies all reveal these influences. The dichotomy of the intellectual processes and the atmospheric aural, or indeed emotional, experience are critical and complementary features in the composer's style. It is his final hope that while the music is both intellectual and emotional, it in the end misses the point altogether if it does not touch the heart.⁸⁰

The work is organized on symmetrical and circular principles. Franssens uses textual theme, musical style, form, and modulation as the primary ingredients to create symmetry. Movements I and V relate by exploring human relationships, atmospheric style, four-part form, and modulating through the circle-of-fifths. Movements II and IV explore action, consist of a more metrical musical style, three-part form, and feature an abbreviated sequence of modulation through the circle-of-fifths. Movement III explores the nature of the divine while referencing the musical style of the other movements in a highly minimalist manner with only a two-part form and little modulation.

The composer balances two primary musical styles throughout the work. One, present in Movements I, IIIa, and V, is intentionally non-metric with independent voice lines presented in a pan-diatonic presentation. Underneath this surface however, functional harmony exists in propelling these respective movements onward. The second style is metric and consists of more

⁸⁰ Putten, *Joep Franssens*, 3.

homophonic orientations. Functional harmony is more apparent in this style. He calls this dualism “music of the heavens” and “music of the earth.”⁸¹

The philosophical nature of the work, as well as its compelling musical design, presents a worthy offering to gifted and experienced choirs. The work requires substantial technical demands of singers in areas of stamina, pitch accuracy, and rhythm. Excerpting movements from the work as independent selections is a viable option.

Analysis confirms the composer’s statements that he wishes to present his own idea of the tradition of the *music of the spheres*. These ideas, however, are not presented in any concrete fashion. Certainly an organization exists that is fascinating and direct, but the composer also allows the listener to explore his musical world with a diverse and timeless musical style. Harmony becomes not merely an abstract notion of the motion of heavenly bodies but an exploration of human relationships. It is cleverly mirrored in musical principles, harmonies that modulate and explore new tonal spheres. And, just as Gustav Holst’s great orchestral suite *The Planets* fades into the distance in its final movement (“Neptune”), *Harmony of the Spheres* subsides more than it concludes, allowing silence to be its continued exploration.

⁸¹ Franssens, Interview by author, 12 February 2007.

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Appendix
Complete Works List by Genre and Date (as of 2010)⁸²

Chamber Ensemble/Solo

Between the Beats (1979)
for 2 pianos

Turn (1980)
for 2 oboes and cello

Solo for Flute (1980)

Ellipsis (1983)
for harpsichord

Consort Music (1984)
for 2 flutes, oboe (English horn), bass clarinet, French horn, bassoon, violin, viola, cello,
double bass and piano
(also available in a version for four violins , two violas , two cellos, bass and piano)

Low Budget Music (1986)
for flute, oboe (English horn), clarinet (bass clarinet), French horn, bassoon, piano,
violin, viola, cello, double bass, and piano

Old Songs, New Songs (1988)
for 2 pianos

Floating (1989)
for 2 vibraphones and 3 marimbas

The straight Line (1991)
for saxophone quartet

The Gift of Song (1994)
for 2 pianos

After the Queen's Speech (1995)
for brass ensemble

New Departure (1996)
for cello and piano

⁸² Works list compiled from the following sources: Joep Franssens,
<<http://www.joepfranssens.com>> Accessed 10 October 2006, and Stanley Sadie, ed.,
Grove Music On-Line. S.v. "Joep Franssens" by Bas Van Putten, <http://www.grovemusic.com>,
(accessed 15 December 2006).

Winter Child (1996)
for piano

Entrata (1997)
for cello and 2 pianos

Intimation of Spring (2001-2004)
for piano

Tales of Wonder (2004)
seven pieces for piano; for two and four hands

Solo for Violin (2004)
(arrangement of *Solo for Flute*)

Song of Release (2006)
for piano

Blue Encounter(2006)
for viola

Orchestra/Large ensemble

Echoes (1983)
for orchestra

Taking the Waters (1990)
for soprano solo and orchestra

Primary Colours (1992)
for saxophone orchestra

Sanctus (1996)
for orchestra

Roaring Rotterdam (1997)
for Orchestra

Bridge of Dawn (2006)
for orchestra

Harmony of the Spheres (2004)
(arrangement for flute orchestra)

Grace (2008)
for soprano solo and orchestra

Vocal/Choral

Phasing (1985)

for womens choir and orchestra

Dwaallicht (1989)

for 2 sopranos and orchestral ensemble (flute, oboe, clarinet, French horn, bassoon, trumpet, synthesizer, violin, viola, cello and double bass)

Harmony of the Spheres (1994-2001)

for mixed choir (SSAATTBB) and string orchestra

Sarum Chant (1997)

for vocal quartet and gamelan

Magnificat (1999)

for soprano solo, mixed choir, and orchestra

Vita

David Hobson began directorship of the Centenary College Choir in the fall of 2007, becoming only the fourth conductor in the choir's 70 year history and the second to hold the prestigious A.C. Cheesy Voran Chair. Under his leadership, the choir annually sings over 35 performances. In June of 2009, Hobson and the choir made their Sydney Opera House debut as part of an Australian and New Zealand concert tour. He also serves as full-time faculty in the Hurley School of Music, heading the Sacred Music program among other teaching responsibilities.

Hobson is a 1998 alumnus of Centenary College, earning a Bachelor of Music degree with honors. His tutelage under Dr. Will Andress while in the Centenary Choir as well as church music classes helped shape his career upon leaving Centenary. He later finished the Master of Sacred Music program at Emory University, studying conducting with Dr. Eric Nelson. Hobson completed the Doctor of Musical Arts in choral conducting at Louisiana State University, where he was a student of Dr. Kenneth Fulton. As a student conductor, Hobson directed such groups as the Emory University Wasczek Choir, the Louisiana State University A Cappella Choir and Chamber Singers, and the Louisiana State University Philharmonia Orchestra; additionally, he served as guest orchestral conductor for doctoral voice recitals.

He remains active in church music ministry, having served churches in Shreveport, Atlanta, and Baton Rouge, directing vocal and handbell choirs of all ages. His youth choirs have toured extensively across the south and midwest regions of the United States. Most recently, Hobson staged and directed church productions of *Joseph and the Amazing Technicolor Dreamcoat*, *Godspell*, and *Fiddler on the Roof* at University United Methodist Church in Baton Rouge. He has also led several seminars in the area of music and worship for various churches

and is available as a guest choral clinician in both academic and religious settings. Hobson joined the music staff at Broadmoor United Methodist Church in Shreveport in 2007.