OCKEGHEM AND LIGETI

THE MUSIC OF TRANSCENDENCE

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ABSTRACT

This dissertation examines the music of contemporary composer György Ligeti and 15th century composer Johannes Ockeghem who have in common the musical construction of an invisible framework upon which they built undifferentiated progressions of massive counterpoint. The result of their musical output stands in stark contrast to "classical" musical ideals which have held dominion over musical culture since the 16th century.

As the reader will observe during the course of this paper, both composers' works notably avoid the pillars of "classical style" through the avoidance of cadence and sublimation of self reference. The works examined in this dissertation have much in common: all can be analyzed in a "reverse Schenkerian-like method[1]"; all can be heard to capture the "higher plane" through negation, or the sublimating of the structural content; all are non-referential of individual narrative; all strive for a transcendent experience through music; and all thwart the potential for linearly directed structure by dissociated, seemingly free-floating musical lines, through which the listener may experience unanticipated, transcendence

The Introduction, briefly, outlines how early music (14th & 15th c.) in general, and Ockeghem in particular, may have directly, or indirectly, influenced new (20th & 21st c.) music and the development of Ligeti's style. It also briefly mentions the

[1] refer to Chapter 1; 26/73

possible influence of 14th century composer Guillaume de Machaut on Ockeghem and Ligeti.

Chapter One examines One can perhaps conclude that *Requiem*, and other music by Ligeti, notably *Atmosphères* and *Lontano,* compiles multiple sources of inspiration derived from Machaut to Ockeghem to Mozart to Wagner to Bartók to Charles Ives to Messiaen to Stockhausen to electronic music to Earle Brown to Colin Nancarrow. However what emerges from this “Hungarian goulash” is distinctly “Ligetian” -- unique hybrid music like no other before.

TABLE OF CONTENTS

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INTRODUCTION

"In a healthy culture differing musical philosophies would be coexistent, not mutually exclusive; and they would build from Archean granite, and not, as our one musical system today builds, from the frame of an inherited keyboard, and from the inherited forms and instruments of Europe's eighteenth century. And yet anyone who even toys with the idea of looking beyond these legacies for materials and insight is generally considered foolhardy."[2]

Harry Partch (1949)

"Musicians have come to realize that the cult of Classicism is nothing more than a narrow conformation of taste, a mere fashion."[3]

György Ligeti (1978)

Composer György Ligeti (b. 1923) has spoken of his admiration of the 15th century Dutch composer, Johannes Ockeghem, and to some extent Guillaume de Machaut of the 14th century.[4] Beyond that, there appears to be even more significant correlations between the Early Music and New Music since the mid-20th century.[5] The more one listens to Early Music, the more profound the overall similarities to New Music become, however, this dissertation will limit itself to the examination of Ligeti's *Requiem* and Ockeghem's *Intermerata Dei mater.* In doing so I hope to illuminate not only an esthetic and sonic connection between Ligeti and Ockeghem, but also perhaps to shed some light upon common esthetic ideals of late 20th-century music and the early masters (14th -15th c.).

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[2] Partch, Harry. *Genesis of Music. An Account of a Creative Work, Its Roots and Its Fulfillments*. 2nd edn ed. New York: Da Capo Press, 1974; xvii.
[3] Péter Várnai, Josef Hausler, Claude Samuel, György Ligeti. *György Ligeti in Conversation with Péter Várnai, Josef Häusler, Claude Samuel, and Himself*. London: Eulenburg, 1983;
[4] Ibid;
[5] Early Music refers, throughout this dissertation, to Western "art" music through the 15th Century. New Music refers to Western "art" music from the 1950s until the present.

If you include Machaut, these three composers, six centuries apart, arguably had comparable musical objectives. Ligeti's clusters of sound or waves of (sound) color, along with diatonic, chromatic and microtonal pitch experiments, Machaut's experimentation in creating long sections of dissonant polyphony, and Ockeghem's use of seemingly endless overlapping phrases without cadence seem mysteriously similar. As an example, Machaut often used a plainchant melody in the Tenor voice (*color*) set to a repeating and original rhythmic pattern (*talea*[6]), along with a complementing Contratenor voice (*color*), being uniquely brought together with the much more inventive (and freer) upper vocal parts - the result being a unique, colorful and singular sonic event that postpones closure to the final moment. In Machaut, even the *talea* (isorhythmic scheme) was often treated flexibly in order to add to the tonal ambiguity; additionally, Machaut's use of hocketing (rapidly alternating voices), combined with a resolute use of veiled sonorities and continuous recycling, created a 'soundscape' of indisputable transcendence. Ockeghem's influences on New Music, and Ligeti in particular, were even more substantial, because he treated musical line in such an independent and free-flowing style that there may have been little, or no, historical follow-up[7] until the advent of 20th-century experimentations, and particularly Ligeti's micro-polyphonic creations. Ockeghem extensively used non-imitative counterpoint to disseminate material evenly over all voices in order to form free flowing, matrix-like sonic events. Perhaps most telling of all is

[6] Machaut's periodic departures from set rhythm were unique.

[7] Except for the "purple patches" or transcendent musical sections by composers, such as Mozart, when the music seems to veer off from its stated structural purpose and create a sense of otherworldliness outside of the expected musical material ("purple patches" in the classical/romantic music eras, and its transcendent purpose, will be discussed later in the dissertation).

Ockeghem's almost obsessive avoidance of cadence. In order to elicit an endless quality to his music, Ockeghem used numerous contrapuntal methods to produce a relentless cascade of overlapping phrases.

It is not generally surprising that Ligeti's music would share values with that of Machaut and Ockeghem; experimental late 20th-century composers were often looking outside the Classical/Romantic tradition for inspiration. Among his peers, György Ligeti, like the American composer Earle Brown[8], appeared to have peeked around, and outside, the edges of classical form to find stimulus and regenerate the conceptual intent of music, post "classical style". In an interview with Peter Várnai, Ligeti said:

> "In the late '50s and early '60s my music moved within harmonic fields filled out with chromaticism, whereas ten years later I composed diatonic and microtonal music. I felt that chromaticism had been exhausted: the choice was between going 'back' to diatonic music and going 'forward' outside the sphere of tempered music."[9]

If we suspend disbelief for a moment and imagine that five subsequent centuries of "musical development" never existed, we find that the 14th-century music by Machaut, and 15th-century music by Ockeghem, connects unswervingly to the most radical and forward thinking musical creations in the late 20th century. Though the music that lies between these two eras - classical, romantic and modern - surely figures in the way we tend to talk about any music, this dissertation will not spotlight a rejection or a pre-knowledge of such music.

[8] Born December 26, 1926, in Lutenberg, Massachusetts.

[9] P. Varnai, et al; 30, 31.

Instead it will look at the music itself, with the hope of discovering, through in-depth analysis (both comparative and individual), the actual sonic similarities (and/or differences) that are thus evoked.

While searching for the right tools for comparing and analyzing the music herein, I have tried to keep in mind that the objective of this study is to illuminate the listening experience of the music and find natural (not theoretical) connections, primarily between Ockeghem and Ligeti[10]. By this I mean I am not bent on proving that these connections exist by forcing the music to conform to self conceived notions. Rather, the theoretical methods used here are meant to allow the music to reveal the reasoning beneath its elusiveness. These methods may include line by line descriptions, Schenkerian charts, comparative study, or even traditional harmonic analysis if it applies. It doesn't matter, "as long as the shoe fits."

My first efforts, apart from complete absorption of the music through recordings (to give significant musical context to the written score), will be to set aside preconceived ideas in the historical sense. What I mean is, at first, I intend to purge, to some extent, the process from historical context, clear my mind of any prior knowledge of the compositional process, and delve into the music as though it simply dropped "out of the blue." If I find that some historical clarification become necessary, it was be considered, but for the most part the

[10] Not only because of the obvious similarities in musical intent and scope of these two composer's development of the musical intent to be examined here, but because Ligeti himself referenced Ockeghem much more extensively throughout his career and mentioned Machaut's influence rarely.

music will be examined without historical prejudice, to the extent that one can do so. I hope to discover how early music in general, and Ockeghem in particular, may have directly, or indirectly, influenced new music and the development of Ligeti's style. Perhaps the result of this study may also shed some light on the musical obsession with non-linear music, indeterminacy, musical congruence with visual art, and "performance art" composition by other 20th and 21st-century composers, though any such elucidation is not premeditated.

CHAPTER I

GYÖRGY LIGETI

> "Musicians have come to realize that classicism is nothing more than a narrow conformation to taste, a mere fashion. Going back to the cooled expressionism of my own music, I want to remove great, whirling passions, all grand expressive gestures, far away and view them at a distance."[11]

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György Ligeti has been recognized as one of the outstanding composers of the 20th century. His many distinguished works, such as *Requiem, Atmospheres, String Quartet #2, Aventures, Ramifications, Lontano, Piano Concerto, Continuum, San Francisco Polyphony,* and *Lux Aeterna,* have been highly influential on the direction of music since the 1960s. Besides being one of the most respected composers in the world of music, he also became internationally known when film director Stanley Kubrick used his choral work, *Lux Aeterna,* in *2001, A Space Odyssey.*

The question I would like to propose is, to what extent is Ligeti's musical signature a product of his own design, or an amalgam of exterior influences on the composer himself? By analyzing the earliest work, *Requiem*, which uses musical techniques that have become synonymous with Ligeti, and looking carefully at his references to early music composers, such as Ockeghem and Machaut, as well as 20th-century masters, we might be able to determine the extent to which Ligeti actually earned his stature by creating an entirely new

[11] Péter Várnai, Josef Hausler, Claude Samuel, György Ligeti. *György Ligeti in Conversation with Péter Várnai, Josef Häusler, Claude Samuel, and Himself*. London: Eulenburg, 1983; 18

musical form, or how he may have utilized existing ideas to develop a hybrid (albeit an ingenious one).

Born May 28, 1923 in Discoszenmarton (Transylvania), Ligeti moved to Budapest in 1945 and began studies with Sándor Veress, at the Liszt Academy of Music.[12] Many of his earliest compositions in Budapest are arrangements of folk music for chorus, which was the prevailing fashion for young composers. Ligeti later was critical of works adapted from folk sources. Richard Toop writes: "For him (Ligeti), the process of harmonization involves a distortion, a pseudo-sophisticated 'alienation' of the original music…" Later piano works were more Bartókian, post-Bach like inventions "lying on the edges of tonality."[13] Later, during the Soviet cultural crackdown in Hungary, Ligeti was in and out of trouble with the communist authorities for writing 'progressive' and 'non-acceptable' forms of music. However, Zoltán Kodály, an early influence, protected Ligeti, an academy student, from persecution by communist authorities. In the early 1950s Ligeti was able to pick up a few broadcasts from German radio and heard for the first time the music of Messiaen and his student's Boulez and Stockhausen. Ligeti later said:

> "It was a huge shock to me – perhaps the best of my whole life – to suddenly be able to study and hear things I had previously only dreamed of… it was like being set free."[14]

[12] Because of Bartók's sudden death the composition class with taken up by Veress "The composition class at the academy was taken by Sándor Veress, who turned out, in many respects, to be a worthy substitute for Bartók, offering the same sort of left-wing idealism and moral leadership, and a commitment to the same writers that his students admired. In this class Ligeti learned harmony and counterpoint…" Toop, Richard. *György Ligeti*. London: Phaidon, 1999; 25/26

[13] Ibid; 28

[14] Ibid; 43

Following the revolution of 1956, Ligeti fled from Hungary to live in Vienna and subsequently Cologne. Upon arrival In Cologne he was taken in for several weeks by composer Karlheinz Stockhausen and soon became part of a high-powered group of composers at the Cologne Electronic Studio, which included Stockhausen, Pierre Boulez, and Luciano Berio. About his first direct exposure to the Cologne scene he said:

> "I did not have the least idea of what electronic music was, nor what had occurred in the field of the composition in the post-war period of Western Europe. (...) Suddenly finding myself in the Studio of electronic music (Cologne) in the basement of the WDR, and meeting with Stockhausen, Koenig, Evangelisti, Helms, Kagel and others, was a shock for me, perhaps the most beautiful shock of my life, just as was the discovery in a few weeks of all the new music, including that of Webern which I practically did not know before"[15]

In spite of this alliance, Ligeti was always somewhat of a loner. He had his own vision of the future of music, and in that sense he could be more esthetically identified with John Cage, Earle Brown, Mauricio Kagel, and other colleagues who were insiders working as 'outsiders' and who failed to adopt the polemical structural standards imposed by Boulez and Stockhausen for "real" modern music.[16] Whereas Cage experimented in removing romantic influences by using chance procedures and structured improvisation, Ligeti, Brown and Kagel had something else in mind: a music which removes structuralism in the "classical-style" sense (as adhered to by Stockhausen and Boulez), but does not turn its

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[15] Cf. G. Ligeti: "Auswirkungen der Elektronischen Musik auf mein Konpositorishes Scahffen", *in Experimentelle Musik, Raum Musik, Visuelle Musik, Medien Musik, Wort Musik, Elektonik Musik, Computer Musik*, (Internationale Woche für Experimentelle Musik); 73-74, Berlin, Friyz Winckel, 1968; quoted from Pierre Michel, *György Ligeti, Compositeur D'aujourd'hui*, (Collection MUSIQUE OUVERTE) dirgée par Jean-Yes Bosseur et Pierre Michel, Ouvrage publié avec le concours du Centre national des letters, Minerve, 1985; 30 Translation by Carson Kievman, Princeton University

[16] Germanic unity (explain)

back on personal expression; individually, Ligeti also retained his use of traditional forms of notation:

> Graphic notation was very fashionable at the time. The Americans were the first to use it, Feldman, Brown and Cage, in Europe. Bussotti also adopted it. I had some reservations. On the whole, I need to take a good look at innovations and if I do not find any need for them I leave them well alone." [17]

However Ligeti did compose at least one entirely graphic score, *Volumina* for organ, for as he goes on to say:

> "…an exact indication of pitch is of no importance as the texture consists of clusters, therefore all I needed to do was to define the limits of clusters and indicate how the limits change both in space and in time."

However, most of his major compositions, like *Atmospheres*, use exacting notation in order to achieve the precision, control and detail he was seeking.[18]

During Ligeti's early years in the west, while he worked at the Cologne Electronic Studios, however he created only one important electronic piece, *Artikulation*. Nonetheless, Ligeti's immersion in electronic music during this period had an important impact on his later music. His preferred medium became orchestra, voices and chamber ensembles, but his ability to create new 'soundscapes' with traditional instruments sprang from his electronic experiments and a desire to achieve a new sonic experience and methodology. Subsequently, Ligeti became even less involved in the very 'public' agenda of Boulez and Stockhausen. Ligeti was much less dogmatic about his musical philosophy and was open to new

[17] Várnai, et al; 40
[18] Much more about Ligeti's structural procedures used in *Requiem* are covered later in this chapter.

things, including limited participation in the Fluxus movement of the 1960's.[19] He has also shown a genuine interest in early Renaissance Music, World Music, the New York School (Brown/Cage), the maverick American composers Charles Ives, Harry Partch and Conlin Nancarrow, as well as early minimalism. Recalling Ligeti's residency at the Cologne Studios and encounters with Stockhausen and Boulez, Ligeti always seemed capable of absorbing the essence of his colleagues' music, and then moving on in his own way.

In a 1979 interview with Péter Várnai, György Ligeti was asked: "I have noticed in the last seven or eight years, or so, that some traditional features have been appearing in one way or another, and with increasing frequency, in the works of major contemporary composers: the octave, classical forms, music of descriptive power, a fully developed melody line, periodic rhythm. … do you now also feel tied to our classical tradition and if so do you think it is a logical consequence of your development?" Ligeti answered:

> "…I do not think I am much influenced by prevailing fashions. Not that I remain completely unaffected by them. But it never occurred to me, for instance, to join the 'official' serialists of Darmstadt-Cologne. I dislike the idea of being a member of a clique. You can observe a certain alternation of fashions in the history of music in which a more experimentally minded period is followed by one leaning more towards tradition. I do not speak of fashion in a derogatory sense, I simply mean trends. Machaut and Landini started something new, which was very experimental."[20]

[19] Avant-garde Fluxus movement (Nam June Paik)
[20] P. Várnai, et al; 29

Ligeti's interest in Johannes Ockeghem, and to some degree, Guillaume de Machaut, began in earnest with the creation of *Requiem*, an important and key work in his catalogue:

> "The micropolyphony is more accentuated than in Atmospheres and is subjected to stricter rules. The model for this polyphony is Machaut and Ockeghem according to the composer himself."[21]

Requiem (for soprano and mezzo soprano solo, two mixed choruses and orchestra) was composed in 1963/65 after a long period in which the composer was in flux (literally and figuratively). After the completion and great success of *Atmospheres* at the Donaueschingen Festival in 1961, Ligeti became embroiled in a period of controversy. Always an artist of surprise, Ligeti began working with the Avant guard Fluxus movement (Nam June Paik), toying with influences from John Cage, and creating the highly radical and controversial *Poème symphonique* (for 100 metronomes).

Ligeti's foray into music-theater with *Aventures* was followed by *Requiem*. It was in this mini-opera (*Aventures*) that Ligeti began making humorous references to early music. However it was only with *Requiem* that Ligeti's interest in (and influence from) early music was going full tilt (followed hard upon by *Lux Aeterna* and *Lontano*). While Ligeti was familiar with the Mozart and Verdi Requiems, these works seemed to have no bearing on his *Requiem*. Rather, It was

[21] En ce qui concerne Machaut, voir les equisses du Requiem. Ct. Erkki Salmenhaara: Das musikalische Material…. Op. cit., p 188 (Skizzenmaterial zum Requiem). A ce sujet et a propos du Requiem en general. voir aussi Entretiens p. 150 as quoted from Pierre Michel, *György Ligeti, Compositeur D'aujourd'hui,* (Collection MUSIQUE OUVERTE) dirgee par Jean-Yes Bosseur et Pierre Michel, Ourage publie avec le concours du Centre national des letters, Minerve, 1985; 71 Translation by Carson Kievman, Princeton University, 2000

Machaut and Pérotin that he had in mind.[22] He had toyed with archaic styles while creating *Aventures*, and then became fully engrossed in pre-classical ideas while composing *Requiem*, ideas which he adheres to, to this day. "I composed a lot of organum music, not based on fourths or fifths, of course, but using, say, a tritone progression. I was aiming at very 'tight' parallels and also used the cogwheel device."[23] Ligeti's *Requiem* was also influenced by his admiration of the 15th century Dutch composer, Johannes Ockeghem. This is not a surprising revelation considering that much of Ockeghem's music has long sequences, of up to two minutes in length, that are without resolution, or resting points. In his book on Ligeti, Richard Toop points out that in Ockeghem's music:

> "Just as a pair of voices seem ready to call a temporary halt, another pair has slid into action, resulting in what is often called a 'seamless' texture. One can see the appeal of such music to a composer fascinated by continuity, whose preferred method of ending is not the carefully prepared close, but an abrupt and unexpected halt, 'as though torn off.'"[24]

Since Machaut's (b. approx. 1300) work predates Ockeghem (b. 1420) by over a century, and since Machaut carefully documented and archived all his work, one could reasonably assume that Ockeghem was aware of Machaut's experiments in extended polyphony (more about this in the following chapter). We know for sure that Ligeti was aware of both composers.

This section will focus on how György Ligeti approaches closure and ambiguity in two of the "microcanonic" sections of *Requiem – Introitus* and *Kyrie*. Ligeti's

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[22] Várnai, et al; 48
[23] "Various versions of the twelve note series, moving at various speeds, tore into the bass line like a cogwheel." Ibid; 48
[24] Toop, Richard; 100, 101.

works have been described by Jane Piper Clendinning[25], and others, as falling into two contrapuntal categories: "microcanonic" (like *Requiem für Sopran-und Mezzosopran-solo*, *Atmospheres* and *Lontano für Grosses Orchestra*), works described as "pattern-meccanico" (like *Continuum*, *String Quartet No. 2* (movement 5), and *Ten Pieces for Wind Quintet*. She states,

> "In microcanonic pieces, a melodic line is set against itself in canon in many voices at short time intervals to form the musical texture. I will use the term pattern-meccanico to refer to a group of compositions in which Ligeti employs a technique similar to compound melody. The entire musical texture in the pattern-meccanico pieces is created by the interaction of a few lines, each of which represents several contrapuntal strands".[26]

Ligeti's ambiguous textural techniques, and methods used for reaching closure, will be explored and, then after examining closure and ambiguity in Ockeghem, we may have a better idea of what influences were exerted and what commonalities exist, and to what degree these two composers renounced traditional closure as a means of reaching musical expansion.

Ambiguity

Perhaps, the single most important aspect of Ligeti's music is his interest in micropolyphony.[27] The details of this micropolyphony cannot be heard but generates a textural process, which creates large-scale fluidity. *Requiem* is a work filled with massive clusters of sound (especially in the monumental *Kyrie*

[25] Clendinning, Jane Piper. "*Contrapuntal Techniques in the Music of György Ligeti*." Ph. D, Dissertation Yale University, 1989; 30
[26] ibid;
[27] Micropolyphony is a term used by Ligeti to describe his approach to textural writing through the use of detailed counterpoint on a very dense level. However the way these micro details are woven together, as he says "like a densely woven cobweb" indicate why the polyphony cannot actually be heard and instead we hear the overall sound environment.

section, where such clusters appear to be chained together like a strange and eerie substitute for the traditional protracted melodic lines, or harmonic sequences). One could almost imagine each transference from one cluster of sound to another like the step and leap motion of melody, or an extraordinary version of an extended harmonic transference, one large mass moving to another, always transforming and never coming to rest. All the while, on a local level, instrumental and vocal groupings function as interconnected but separate lines interacting in extreme and relentlessly complex fugal counterpoint. And yet at certain moments of the work, such as the opening *Introitus*, those very same sound clusters can function as chant-like meditations on low voices and instruments, seeming to want to sweep the listener into a conscious meditation. In the *Introitus* Ligeti presents an odd mixture of extreme, almost inaudible, dynamic levels combined with the extreme lower range of instruments and voices. Tightly knit groups of dissonant chromatic pitches weave together to give a physical "ground swell" to the music. The result is unmistakably some unique form of chant declamation. On first glance one can visualize that Ligeti's *Requiem* strategy is to open with an unusual plain chant and develop into a full blown and extreme form of, "aqueous" or multifarious polyphony.

The single most important factor in arguing for conceptual, musical and creative similarities between Ockeghem and Ligeti may be that each composer appears to have had a prevailing interest in using ambiguity (free flowing musical lines which eschew linear direction and closure in favor of surprise and prolongation)

to extend a musical passage without cadential reference. Both of these composers at one time or another has worked within a world of ambiguous musical sequencing (or non-sequencing) as a way of fulfilling one of the most sought-after aspects of composition: 'breadth of line'. In an interview Ligeti, himself, refers to Ockeghem in this regard:

> "I am more interested in Ockeghem than in Palestrina, because his music does not tend toward culminating points. Just as one voice approaches a climax another voice comes to counteract it, like waves in the sea."[28]

Both of these composers, Ligeti and Ockeghem had the ability to stretch the fabric of music over an extended period of time without signaling any particular sonic goal; with great invention, their music can evolve from one sequence to another without indicating cadential direction**.** This, as we will see, is strikingly true of Ligeti. After all, we know from Ligeti's own statements that it is in Ockeghem use of extended musical sequence that Ligeti found his link between electronic techniques explored in the Cologne Studios and those discovered with traditional instrumental forces that lead him into the realm of "micropolyphony." In this regard Ligeti says:

> "(The unceasing continuity of Ockeghem's music, a progress without development, was one point of departure for me to think in terms of impenetrable textures of sound). Also what I learned at the electronic studios in Cologne, the superimposed layers of recorded sound, played its part. You will find that, even though indirectly, such techniques affected my musical language, the orchestral polyphony of *Atmosphères* and *Apparitions*.[29]**"**

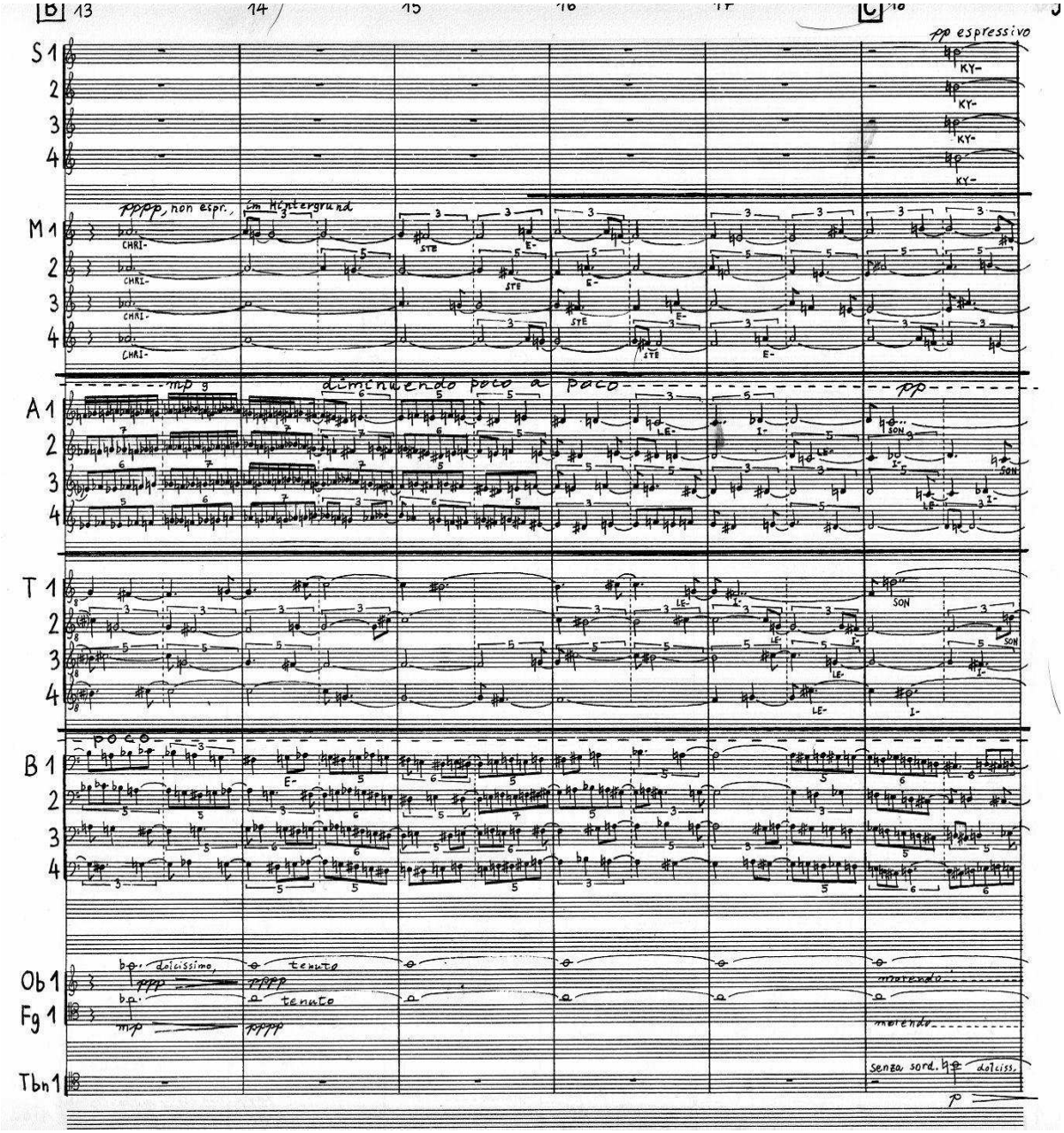
[28] P. Várnai, et al; 26
[29] ibid; 26

Kyrie

Ligeti describes the *Kyrie* section from *Requiem* as being a combination of Flemish polyphony with his own "new" micropolyphony. He stated that although he adopted Ockeghem's 'varietas[30]' principal as his model, the *Kyrie* is a twenty-part fugue divided into five groups, each of them a four-part canon[31]. Since the fugue did not exist in Ockeghem's time, he justified his realization of Ockeghem's 'varietas' principal by noting that the canonic material, while having identical notes is varied in its approach to rhythmic structure: "no rhythmic pattern is ever repeated in a canon." He points out that the rules employed in *Kyrie* are as strict as those of serialism. (See Example 2-1 - Ligeti's fugal-canon):

[30] The voices are similar without being identical.
[31] P. Várnai, et al; 49-50

Example 2-1:



Kyrie – bars 13-18

Ligeti never hesitates to point out that composition is fundamentally intuitive and that the details of his compositions, starting with *Requiem*, are not actually intended to be heard:

> "The polyphonic structure does not actually come through, you cannot hear it; it remains hidden in a microscope, under-water world, to us inaudible. … The technical process of composition is like letting a crystal form in a supersaturated solution. The crystal is potentially there in the solution but becomes visible only at the moment of crystallization. In much the same way, you could say that there is a state of supersaturated polyphony, with all the 'crystal culture' in it but you cannot discern it. My aim was to arrest the process, to fix the supersaturated solution just at the moment before crystallization"[32]

Although the details of Ligeti's composition are fascinating, and the stuff of interesting localized analysis, it will be the intent of this section to look only at those details as they pertain to the overall sense of ambiguity within the composition. This study is primarily focused on what aspects of the micropolyphony and orchestral texture specifically produce harmonic ambiguity.

The following pages contain an analysis of *Kyrie* from *Requiem* with which I intend to illustrate methods used by Ligeti to create…

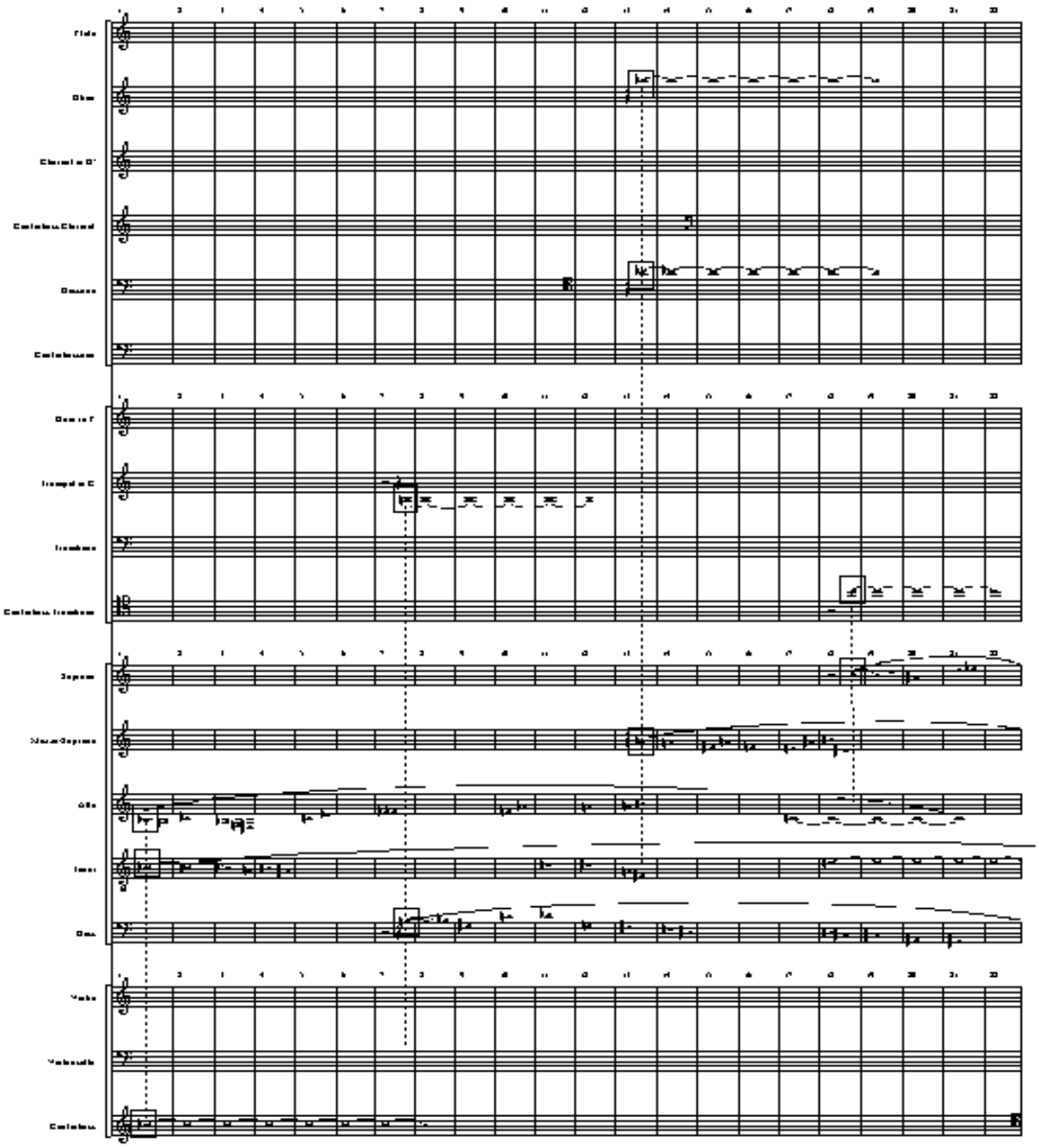
> "…a kind of musical aura. It is music that gives the impression that it could stream on continuously, as if it had no beginning and no end; what we hear is actually a section of something that has eternally begun and that will continue to sound forever."[33]

So, for Ligeti, harmonic ambiguity is the absence of a feeling of beginning and ending. This is in keeping with an expressed interest, on Ligeti's part, to fashion a new music inspired by Ockeghem's 15th century creations. Remember Ligeti's impression that Ockeghem's music does not have culminating points, "Just as one voice approaches a climax another voice comes to counteract it, like waves in the sea." This inspiration from the past, weighed, perhaps, against knowledge

[32] ibid; 15
[33] ibid; 84

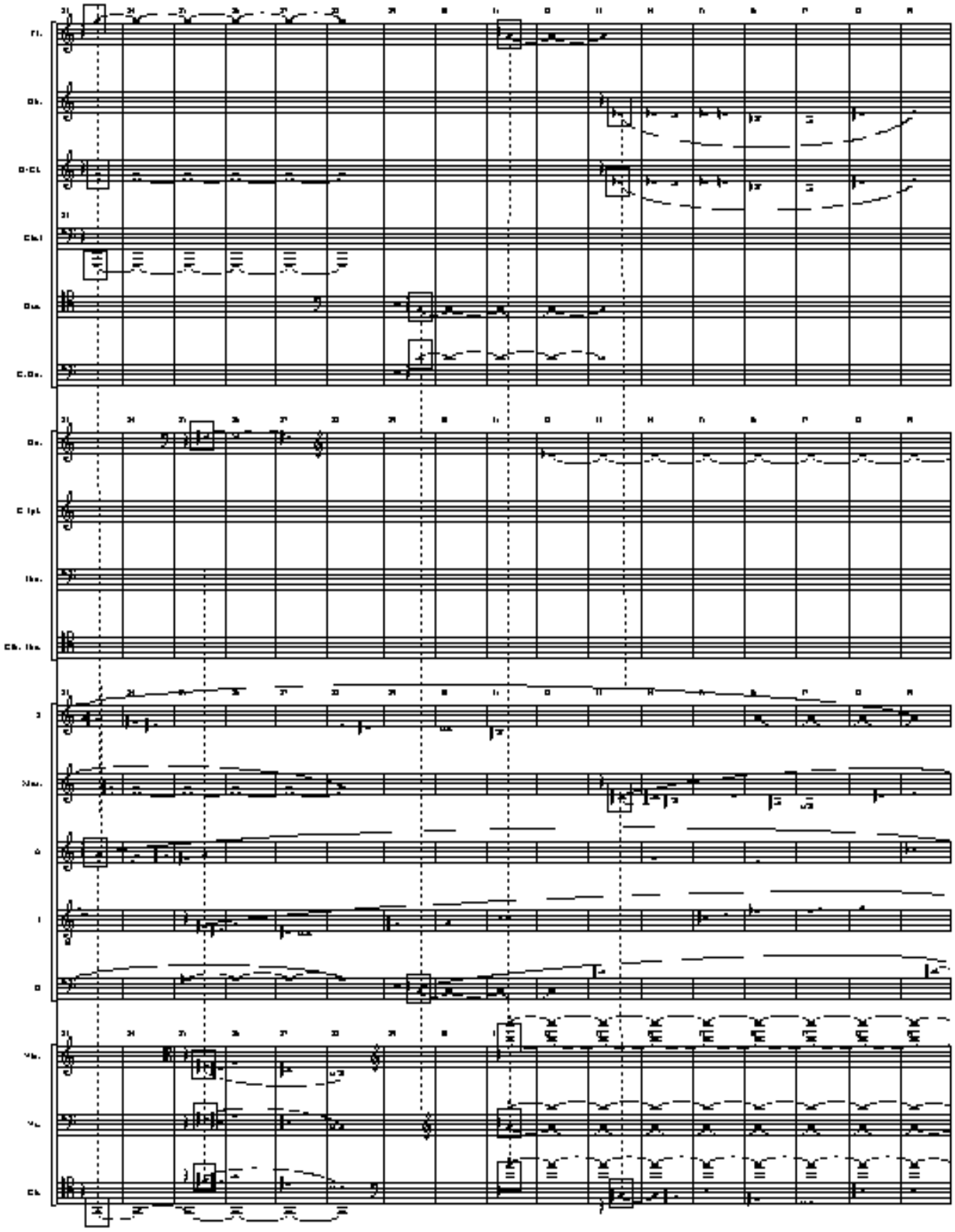
of Charles Ives's use of orchestral clusters (albeit in a different way), Ligeti invoked a unique and imaginary musical language.

Example 2-2a:



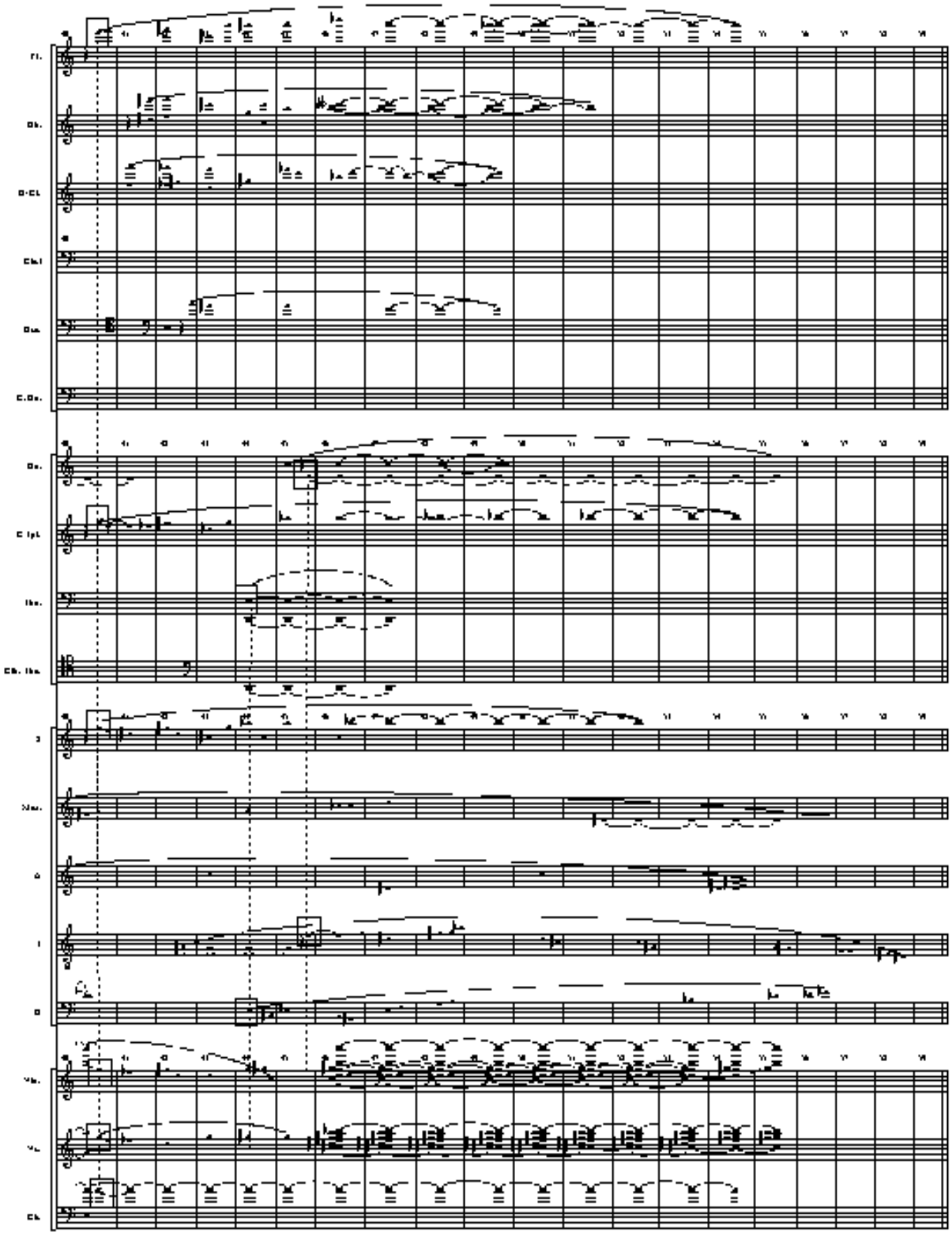
Kyrie - Analysis of Measure 1 –22

Example 2-2b



Kyrie - Analysis of Measure 22-39

Example 2-2c



Kyrie - Analysis of Measure 39-59

Within the complex polyphonic material of *Kyrie* there are distinct places where chords are to be heard. In the middle of a specific chord a "parasitic" note gradually appears which begins to transform that "harmony" into another.[34] One could almost look at this in a traditional harmonic sense of using secondary dominant chords, or a dissonant note, in order to slip into a new key without much preparation, and yet without causing a drastic shift. Or, perhaps this was more accurately described in the beginning of this section (page 8), "One could almost imagine each transference from one cluster of sound to another like the step and leap motion of melody, or an extraordinary version of an extended harmonic transference, one large mass moving to another, always transforming and never coming to rest." For the purpose of this study we will periodically refer to this technique as the 'undifferentiated progression of massive counterpoint.'[35]

Taking a look at bar 1 (Ex. 2-2a), there is an entrance of Alto/Tenor voices and contrabasses on Bb. By bar 2, in the Alto voices, the Bb is surrounded by A and Cb. These notes give the allusion of traditional neighboring tones, and in some ways act like neighboring tones as we are often returned to Bb (see full score). But in fact, these notes are 'parasitic' in that they are already beginning to transform the momentary sense of 'harmonic center.'

Ligeti's harmonic techniques include "Neighbor Formations", "Scale Formations", and "Wedge Formations". Neighbor formations relate both to traditional tonality and "Ligetian" function (used to prolong the "tonal center" by focusing on the

[34] ibid;. 97
[35] A term borrowed from discussions with Professor Rob Wegman, Princeton University 2001/2002

pitch from which the neighbor tones come and go). "Scale Formations" are small melodic formations, of three or four pitches, arranged in ascending or descending order. And "Wedge Formations" have two diverging strands of pitches, which create a more developed melodic configuration of greater proportion than the previous two formations. All of these formations are used by Ligeti to create a contrapuntal expansion, or continuously evolving "clouds" of sound.[36]

Referring again to Example 2-2a, the initial Bb intonation of the initial instrumental and vocal grouping continues to be sounded throughout 10 bars, though with less and less frequency as the piece progresses. Also the "neighboring" tones are surrounded by its own set of "neighboring", or passing tones, and in a carefully worked out contrapuntal scheme these pitches expand ever outward. In some lines, like that of the Alto voices, that expansion passes primarily downward until the end of bar 3 when it reaches A#, then expands upward reaching B (and octave above the original) before finally settling down to middle C by bar 17, and sustained until bar 22 when that group's fugal counterpoint suspends. The Tenor voices sustain the Bb center until bar 3 when an expansion occurs similar to the Altos but with a very different rhythmic scheme (see reference to Ockeghem's "varietas" principal, page -- "no rhythmic pattern is ever repeated in a canon."). All the while the Bb center is sustained and supported by the contrabasses through bar 7. The "cut off" by the contrabasses coincides with the entrance in bar 7 of a new "center" on A, sung

[36] For more on Ligeti's complex contrapuntal details of works beginning with *Requiem*, the reader might look at Clendinning, Jane Piper. "*Contrapuntal Techniques in the Music of György Ligeti*." Ph. D, Dissertation Yale University, 1989

by the Bass voices and played by low trumpets. This new “tonal” center is layered on top of the original Bb center in the Altos and Tenors, which has slowly expanded and is losing its focus. The new “center” on A (in canonic style) also begins to expand, by first alluding to neighboring pitches Bb and G# in the Bass Voices at bar 8-9, and then continues down to its apex on G# (octave below), reaching sustained finality in bars 25-28. As the original group on Bb reaches an apex in bar 13 and the second group expands out from A, they are joined by a third group of oboe, bassoon, and Mezzo voices entering on Ab (the entire center, in essence, stepping down). Not surprisingly, as the second group on A nears its peak on bar 19, a fourth grouping enters on B. Each group in turn expands outward using “neighboring” tones and a temporarily sustained “center” in adjoining instrumental groupings. The tonal implication of this layering technique is by design as described by Ligeti himself: “The whole tradition of tonal music is present, but always hidden.“

This layering of harmonic groupings and their subsequent expansions continues to develop in and of itself, with more voices and instruments applied with each new incoming group. More intense internal rhythmic activity forms between bars 40 and 47, tailoring off through bar 59, when it begins to build anew until bar 108 as the final layers peel off until the end of the work in bar 120. In short, as one group “center” loses focus, another “center” makes a dramatic, albeit quiet (sometimes not so quiet), entrance on unisons and octaves and, as is in the previous group, further looses focus while the entering group becomes clearer

and clearer. Each new group's power is circumvented by the entrance of yet another group, and so on. Before any one group can fully establish itself, it is overcome by a new harmonic "center". Ligeti describes this process as a harmonic plane which clouds over and expands until the original clear harmonic structure dissolves into an opaque, or neutral, plane. He states that in the middle of his opaque plane, signs of a new constellation of pitches enter, becoming more and more dominant.[37] The gradual in and out of various "neutral" and "dominant" planes with a multitude of complex rhythms, and a variety of orchestral colors, creates a rich musical sensory experience often referred to as Ligeti's "cluster style". Of course, Ligeti does not allow those moments of harmonic clarity to stand for long, there is always another group entering the fray, and as the entire fabric of the sonic experience develops, and more groups are operating simultaneously, there is less harmonic clarity. It is in this way that Ligeti achieves his stated goal of Ockeghem inspired elusiveness.

In *Kyrie*, there are two major sections; one is shown in Example 2-2a & 2-2b, bars 1-29 and the other in bars 60-120 (not shown). Both sections function in similar fashion with the second having, arguably, more intensity than the first. Each section builds up to a sonic climax and then quickly peels away layers, leaving one clear harmony, the final ending being even clearer than the first section. The climax, and then peeling away of multiple layers, is, of course, analogous to a traditional cadence,[38] although it is not signaled in advance and therefore comes without standard cadential preparation. Additionally, in the final

[37] P. Várnai, et al; 97
[38] All secondary harmonic implications are stripped away leaving only the primary tonal center.

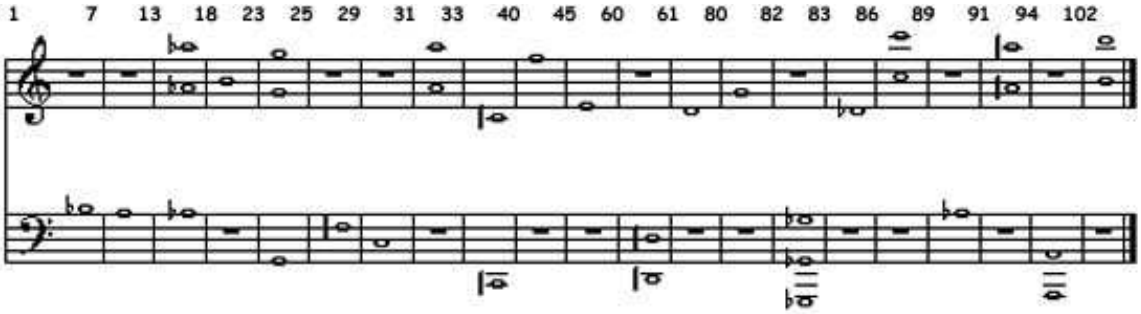
section, perhaps to heighten the tension and preparation for a final climax, Ligeti uses two other semi-cadential techniques ascribed to composer Charles Ives; the "aufgerissen" effect (see Example 2-5b): building to an intensity through layering orchestration with a strong crescendo and then suddenly, without warning, cutting off most of the sound, leaving only a few groupings to carry on at much lower amplitude levels. This "ripping off"[39] occurs at bar 78, following by another quick build up and then "ripping off" again at bar 84, before the music begins its final climactic journey. In the two main climaxes of section one, bar 41-47 and section two, bar 102-107, the intensity of contrapuntal activity is joined, not only by an expanded orchestration, but also by stronger articulations in the sopranos and lower voices.

While some reference to traditional harmony is hinted at in this music, it is not a return to classicism, but rather an extension on the concept of ambiguity through tone coloring - often referred to as timbral composition.[40] However, the uniqueness of Ligeti, as opposed to many others creating "timbral composition", is his intense devotion to making ambiguity and free-flowing sonorities out of excruciatingly detailed polyphonic organization -- the effect being the reverse of a Bach Fugue, for example. Instead of hearing the individual lines interacting with one another, in Ligeti the lines are blurred into the background, and in the foreground we hear the overall sonic effect and one comprehensive unit.

[39] A term used by Ligeti – meaning to suddenly, and without warning, cut off the music.
[40] Composition which uses timbre in a central role usually taken by harmony, melody or rhythm

Another point of interest in *Kyrie* may be the overall construction of the “tonal” centers. Example 2-3 shows (in order) the”tonal” center pitches as they arrive in time.

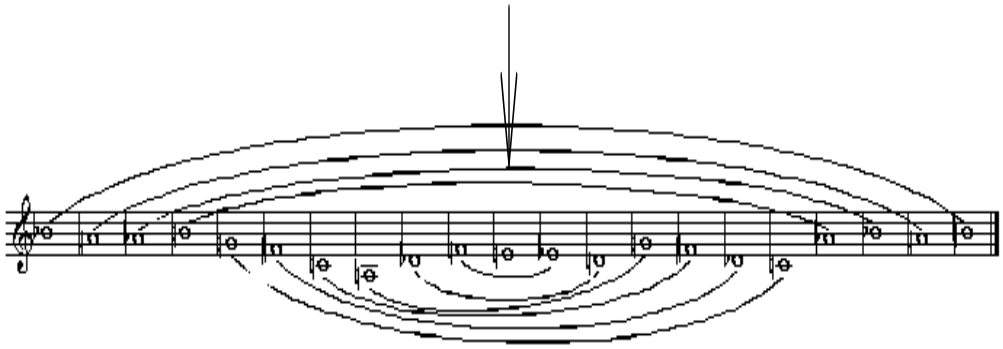
Example 2-3:



By flattening out pitch class to a close formation, it appears that a symmetrical construction is at work hear, however imperfect. Each “tonal” group enters on pitches as follows:

Bb (bar 1) - A (bar 7) - Ab (bar 13) – B (bar 18) – G (bar 23) - F# (bar 25) – C (bar 29) – A (bar 31) – C#/Db (bar 33) – F (bar 40) – E (bar 45) – D# (bar 60) – D (bar 61) – G (bar 80) – Gb (bar 82) – Db (bar 83) – C (bar 86) – Ab (bar 89) – A#/Bb (bar 91) – A (bar 94) – B (bar 102) [see Example 2-4]

Example 2-4:



Example 2-4 illustrates the entry points of each “tonal” grouping. While not exact (as nothing is in Ligeti’s work – see below), there appears to a proportioned

overriding organization at work here. Also the center point of the structure (D at measure 44) comes at the climax of the first section and just before the start of the second section. However, I am less interested in pointing out the semi-proportional structure at work here, as I am the fact that it is not perfectly organized. I have learned through this study that musical configurations, slightly or terribly askew, are a distinct trademark of Ligeti's work since 1966. In several interviews, published reports and reviews, Ligeti has been asked, or even admonished, about the difficulty level of his scores, particularly his complex vocal writing. He always responds that he is calculatedly making music in which the performers are forced to stretch beyond their human capability in order to achieve a strange kind of microtonality. The pitch material may be tonal, chromatic or otherwise, but the result of performers making mistakes produces a kind of result, that he calls "dirty patches"[41] (ironically in opposition to "purple patches", a term used to describe composers prescribed attempts to achieve an otherworldly transcendence within a "classical" structure – see final summary). For Ligeti, mistakes of intonation are an essential part of his compositional method. On the other hand he expects a serious effort to attempt exactness; he sees that playing or singing the score insecurely is also wrong in the opposite direction. He writes the pitches, intervals and scales with great detail and precision, but as he expects mistakes in performance he is not interested in the listener actually perceiving that structure. This method of composing is the ultimate agent of his desired ambiguity.

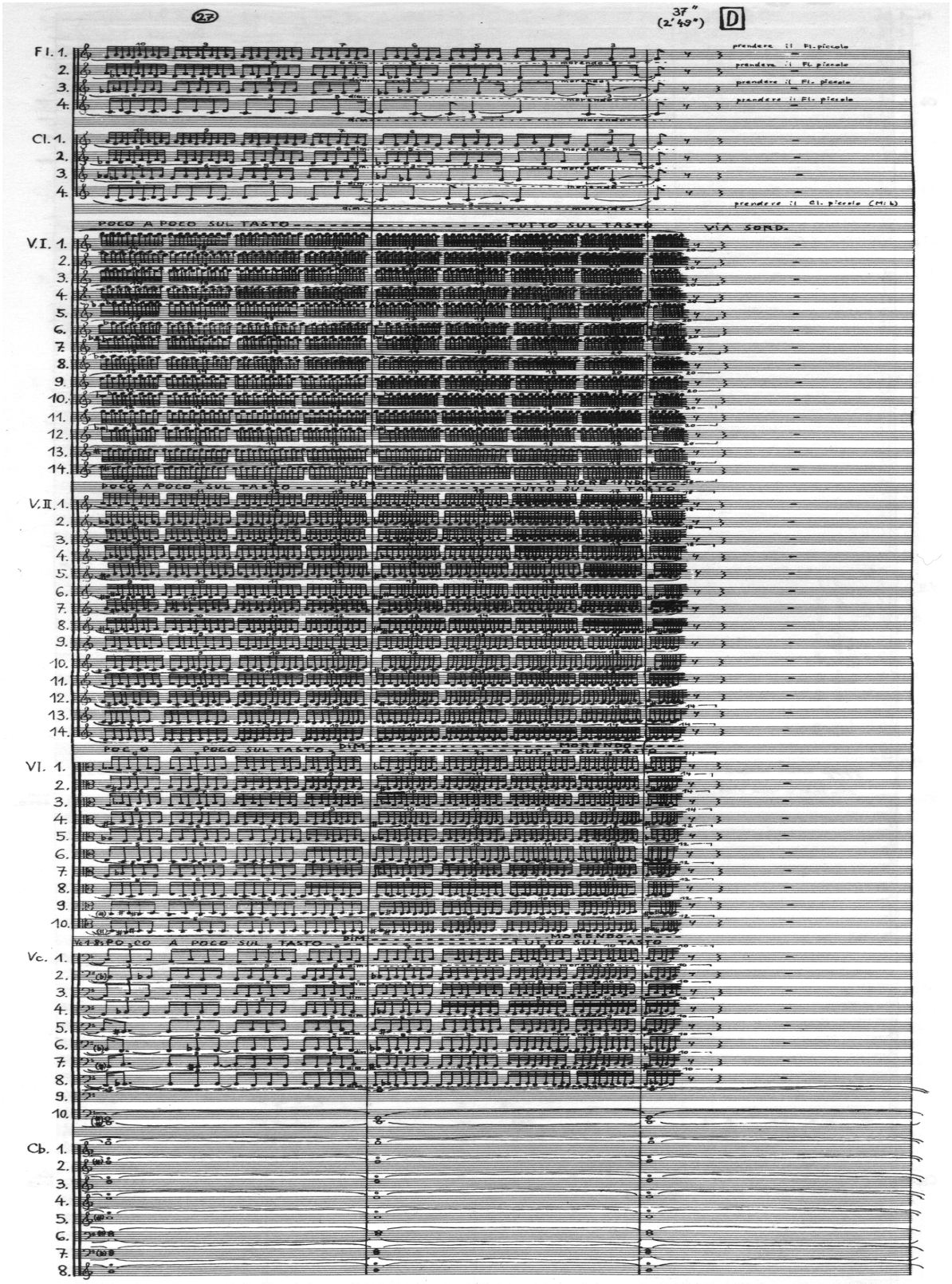
[41] P. Várnai, et al; 53

Closure

Aside from intuitive supposition (albeit an well-informed listener) through listening experiences, one systematic way to evaluate the conjecture, that purposeful ambiguity is a viable connective link between Ockeghem, Machaut and Ligeti, is to take a closer look at the techniques they used to create musical resolution. Paramount in the discovery of the composer's prevailing objective is to understand how the listener is, or is not, led by the composer to a musical conclusion. The hypothesis is that the way a composer approaches closure may signal their primary musical objective. The compositional intricacies that manage closure distinguishes, or at least identifies, the importance the composer has placed on sequencing music in order to drive the listener through a predetermined narrative. Additionally to assign a value placed on ambiguity by composers, we must not only explore closure, but how much weight may have been applied to it.

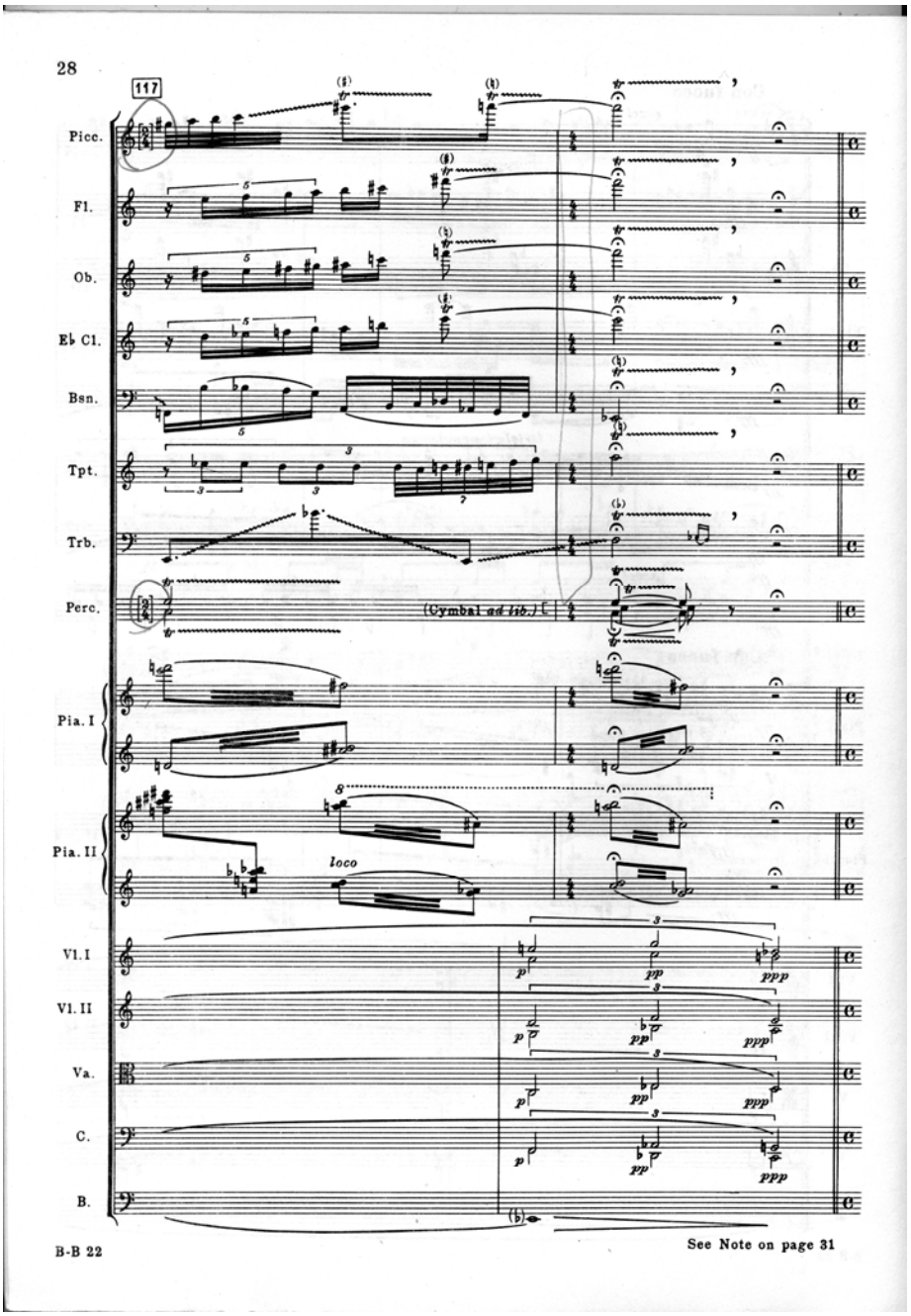
On first look it certainly appears that closure may not have been the major factor in Ligeti's musical thinking during the composition of *Requiem*. When one thinks of Ligeti's music the first thing that usually comes to mind is the textual, timbral and gestalt processes that are set into motion as a tightly coherent universe without teleological cadential sequencing; 'it comes from whence it came, it is over, when it is over.' His predilection toward suddenly "ripping off", when an instrumental group in the foreground cuts out suddenly leaving another background group to resonate, serves to support the common perception as previously described*. Example 2-5 shows this "ripping off" technique:

Example 2-5:



Atmosphères (1961) (page 5) György Ligeti © 1963 Universal Edition A.G. Wien

Upon first hearing this type of closure I was immediately reminded of a very similar technique associated for almost a century with the American experimentalist composer Charles Ives. Example 2-6 shows this type of closure used by Ives: Example 2-6:



Central Park in the dark (1906) (Page 28) Charles Ives © 1973 Boelke-Bomart, Inc.

At first, I assumed that it was a coincidence given Ligeti's background, i.e. his lack of access to western music while living in Budapest, and his immersion into the European in his post Hungarian years. However, a statement provided by Ligeti himself supports the idea of his being influenced by Ives, with this, and other, techniques, calling originality into question:

> "In the past few years I have been very interested in the music of Charles Ives, which you could see as a musical process resulting from the random superimposition of several independent layers."[42]

Based on this "ripping off" technique, which has always been attributed to Ives, as well as Ives's layering of sound to create textural musical fabric (among other Ivesian procedures), I would speculate that Ligeti's familiarity with Ives is more than just a "few years" before 1978, which was when the Peter Várnai interview took place. According to Pierre Michel in his book in Ligeti:

> "…premieres of orchestra works of composers written in Western Europe after 1956 could be characterized by the 'non use' of contemporary compositional procedures: for example, the adoption of the orchestral clusters. (…) Ligeti specified that Charles Ives, in his opinion, was the first to have employed the orchestral cluster (he always refers to *The Fourth of July* of 1904-1913 and *Three Places in New England* of 1903-1914) and that Xenakis also used a form of clusters in *Metastasis* (1953-54). But, excluding Ives and Xenakis, the Hungarian composer is one of first to use orchestral clusters systematically."[43]

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[42] ibid; 25

[43] Pierre Michel, *György Ligeti, Compositeur D'aujourd'hui*, Collection Musique Ouverte dirigee par Jean-Yves Bosseur et Pierre Michel, Ouvrage publie avec le concours du Centre national des letters, Minerve, 1985 [Translation mine] . Also in light of Ligeti's ability to absorb the best of other composer's innovations and use them uniquely, the Ives connection becomes even more probable. On this account I remind the reader of Ligeti's student years studying Bartók and Kodály, and his post student years of absorbing Messiaen and Stockhausen through radio broadcasts, his Cologne Electronic Studio experiences, and new musical freedoms expressed by the New York School of Brown and Cage, and his expressed and enthusiastic interest in the music of Machaut and Ockeghem

In the “ripping off” technique, Example 2-5, from Ligeti’s *Atmospheres*, the densely active larger group of winds and upper strings suddenly cut off leaving the contrabasses, and a couple of cellos, to resonate alone (*pppp*). While the Ives (Example 2-6) is less texturally dense, I believe that the cut off remains essentially the same since the perceptual equivalent of density is arrived at by fifty-four relentless bars (64-118) of building intensity on the winds, brass, percussion and pianos culminating with a *con fuoco* descriptive marking from bar 113 to the end, leaving the strings to carry on into an adagio at bar 119 (*ppp*).

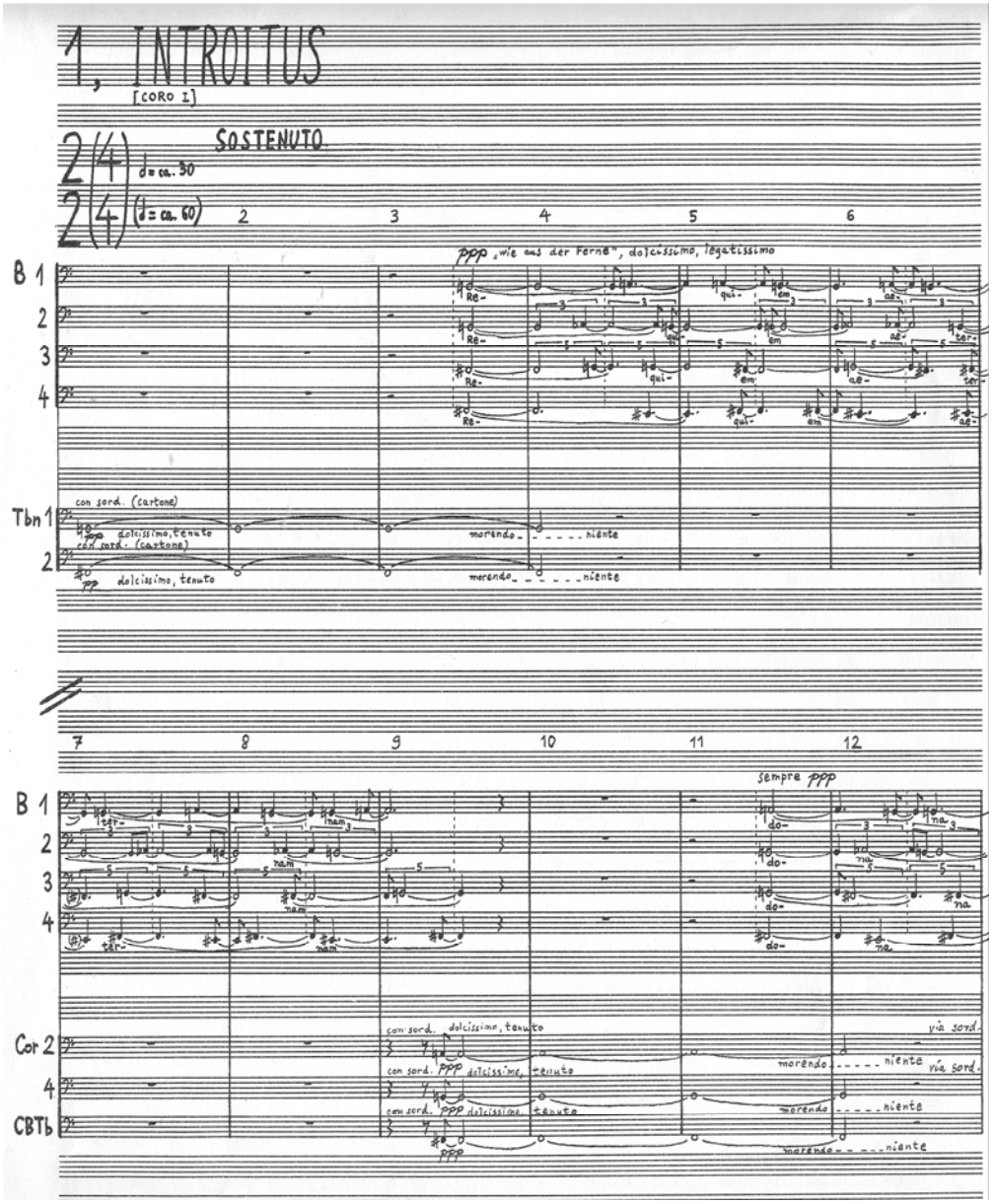
Introitus

Pitch Range:

The opening of *Introitus* suggests an unusual mixture of a Buddhist chant and Christian liturgy. The subtle suggestiveness of earlier music will permeate the entire *Requiem*: from stretching formal techniques of Palestrina, to non-cadential fugal writing suggestive of the roaming polyphonies of Ockeghem’s Marien motets (*Intermerata Dei mater*), to hints at classical and romantic choral works. However, one would have to scrutinize the movement with a toothpick to find any obvious references; the work projects itself as pure “Ligeti” - in other words chordal clusters, extremely dense counterpoint, Ivesian-like events, sudden cutting off of endings, etc.

Take a look at Example 2-7, bar 1: Two trombones sound (con sord… doltissimo - tenuto) a minor second interval (low F# and G natural) reminiscent of the low Tibetan horns that prepare the monks for their vocal entrance. Not surprisingly,

this is followed by the bass voices all singing the same interval, suggesting the chant of the monks in preparation of meditation. The sound is overwhelmingly mysterious and spiritual in nature, immediately recalling a ceremonial chant, whether Buddhist or Gregorian. Example 2-7:



Introitus – first bars

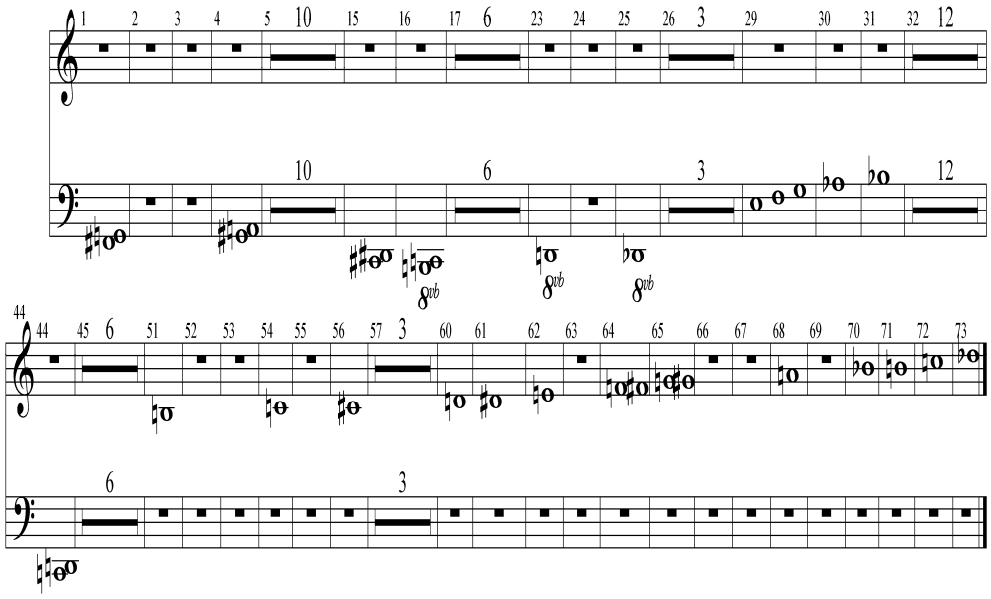
Just what are the primordial implications of the semitone used extensively by Ligeti in this opening section? What is its visceral impact on the ear? What

religious connotations does it culturally retain? Why would Ligeti focus on this interval as its basic sound source and material of movement, particularly in this work, which is a “mass for the dead”?

The initial entrance of a semitone interval has, perhaps, deep cultural and historically codified meaning, having been utilized extensively by the earliest music of most world civilizations. The Buddhists, early Medievalists, Japanese Gagaku, Kabuki and Noe music used the semitone to set the stage for a meditative experience. The semitone (or minor second) is both the smallest interval and yet the most “dissonant” in the tempered tuning system. Falling out of favor during the more “consonant” periods of western music, late renaissance to early romantic, as a significant and natural sound, the minor second began to be used primarily as dissonance in order to provide motion back to consonance, or to support tonicization. Perhaps the use of this semitone intervallic sound was meant by Ligeti to represent the multifaceted and complex nature of life, emergence and meditation.

It is noteworthy that seen in this context, Ligeti chose to begin his Requiem by a haunting declaration of the semitone in the trombones, followed the lowest bass voices. Throughout the opening “Introitus” he continues to exploit the semitone through incremental movements up and down, with the tessitura slowly rising through the movement until it reaches the sopranos on a comfortable Db when the piece ends. The semitone is prevalent throughout what can only be described as a slowly rising prayer (the overall effect).

As for closure - the chant-like material in the voices is suddenly cut off.[44] There is an immediate reiteration in the lower brass, followed by a re-entry of voices chanting with the same neighboring pitch technique as before. This process is continued, without symmetry,[45] until reaching the soprano voices with the movement's highest pitches. Example 2-8 displays the slow upward movement of pitches throughout the movement and the measured rate at which they ascend (I have included the lowest and highest notes as they occur). Example 2-8:



Introitus – Pitch Range to end of movement

The pitch movement starts with F#/G, moves to G#/A by bar 4, but then, strikingly, does not move up again until bar 29 when it jumps to E/F. However, note that the pitch range does move down during that time to reach a low extended B/A in the contrabasses and Contrabass Trombone at bar 16. From that point to the end, the pitch range only ascends, with an occasional reiteration

[44] "ripping off"
[45] Each vocal chant and brass cluster is of differing lengths

of B/Ab in the lower voices through bar 40, after which the lower parts moves up with the rest of the voices until finally spreading out on the final string chord (and then again never reaching below F).

From bar 29, there is a consistent upward climb in pitch almost one half step at a time spread out over forty-four measures until reaching the upper most note in the sopranos a Db in bar 73. In terms of rate of ascension, bar 29 moves up three pitches E, F & G; bar 30 up to Ab; bar 31 up to Bb. Then there is a rather long stasis (nineteen measures) before dropping down and filling the gap of B natural at bar 51. At bar 54 the ascent continues to Middle C; bar 56 C#; and then, it is important to note that at bar 60 the rate of ascension accelerates: bar 60 D Natural; bar 61 D#; bar 62 Eb/E; bar 64 F/F#; bar 65 G/G#; bar 68 A; bar 70 Bb; bar 71 B Natural; bar 72 C Natural; bar 73 Db. The final chord does not contain the upper and lower range of pitches used. The upper note is C and the lower note is F.

To summarize, there are twenty-eight measures of upper pitch range stasis, encompassing F# to A Natural (the lower range moves down to B Natural at bar 16). We have upward movement between bar 29 and 31 (E-Bb), and then another upper range stasis for twenty additional measures. From bar 51(B Natural) the rate of upper pitch movement accelerates somewhat, especially after bar 60 (D Natural). In thirteen measures we reach the uppermost note of Db in M 73.

The method of rising by half steps may not in itself reveal much about closure. However, the rapid acceleration from bar 60 to the highest pitch at bar 73 suggests strong cadential activity. The fact the Ligeti ends the pitch ascent 2 ½ octaves above F# on Db (C#), or a perfect 5th, may also be revealing. Even though a tonal cadence might end on home pitch F# and not the dominant of C#, here the fact that Ligeti chooses the perfect fifth may be enough to register meaning. Medieval composers often ended works with a indefinite conclusion. Was this then a form of final closure – or a way to punctuate their disinterest in final closure? Before jumping to any further conclusions, let us take a look at some other compositional elements that might be equally revealing of Ligeti's intentions in regards to closure.

b. Orchestral density:

As we learned earlier in the chapter, Ligeti uses differing layers of inaudible complex counterpoint to affect the audible sonic material, both harmonic and textural. He looked for ways to create finely structured music without resorting to the use of tonal systems of functional harmony, as elaborated on by Jane Piper Clendinning:

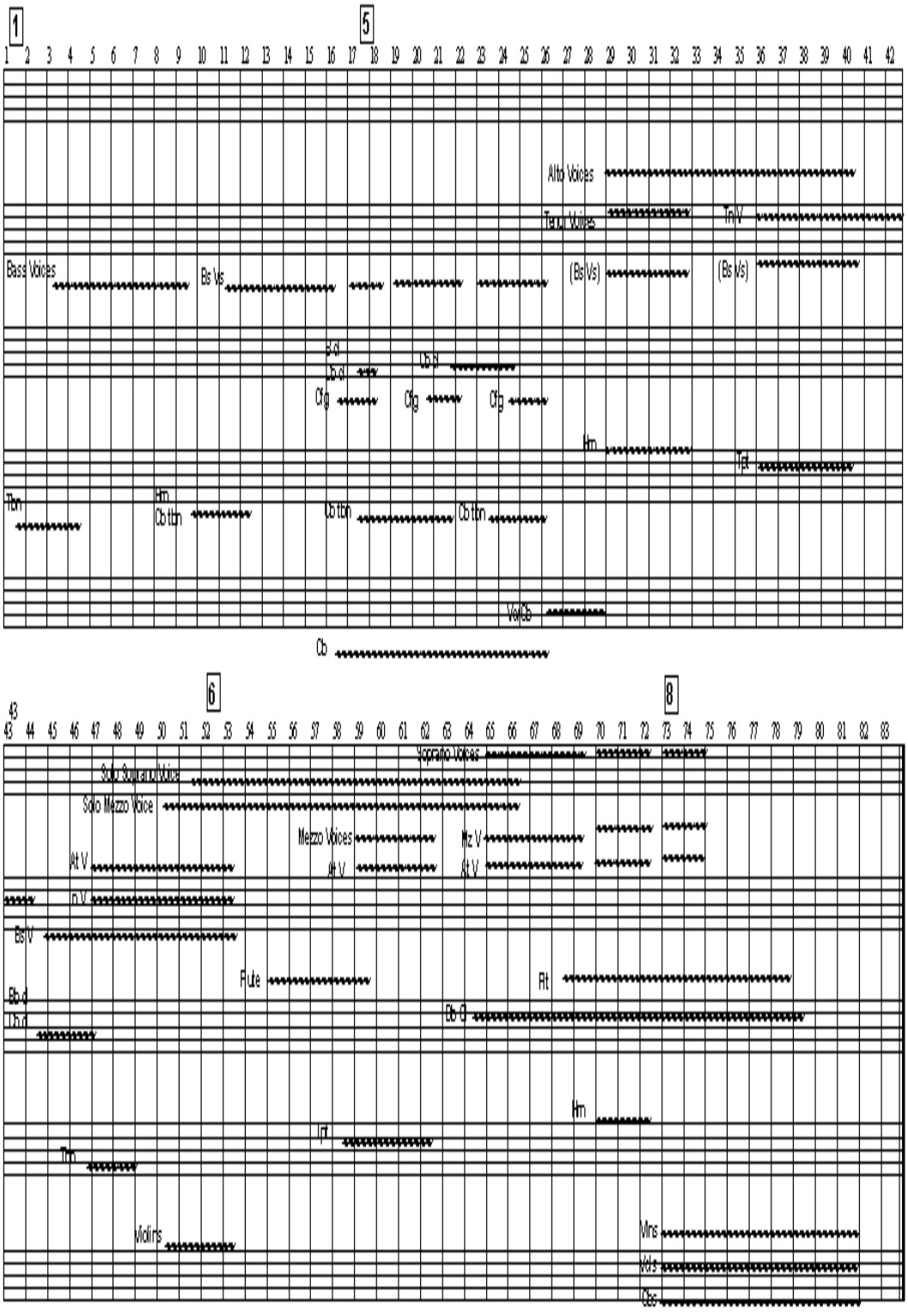
> "In seeking a solution to the problem of the future of music, Ligeti looked to the distant past to the centuries before the institution of the tonal harmonic system. He took his direction from the masterworks of counterpoint--the compositions of Palestrina, Ockeghem, and other Renaissance contrapuntalists."[46]

And as we know from the previous section, Ligeti intends that harmonic content be divined as a result of the voice leading, and not by structured harmonic

[46] J. P. Clendinning; --

movement. In most of Ligeti's orchestra work, one can group the details of this micro-canonic information into larger units of counterpoint between different groupings within the orchestra (i.e. various distinct brass, string & wind combinations, as well as separate vocal groups, i.e., sopranos, mezzos, altos, tenors and basses). To try and get a handle on how orchestral color and density may indicate closure I have chosen to examine these larger contrapuntal units of orchestral color (refer to Example 2-9 throughout this section). The opening sequence in rather sparse in these terms, keeping to a simple group of brass layered, or followed by the bass voices. At any given time within the first sixteen measures there is only one or two of these orchestral units in action:

Example 2-9:



Introitus – Orchestral density & texture

At bar 17 there is a sudden surge that includes five distinct groups; bass voices, bass and contrabass clarinets, contrabassoon, contrabasses, and contrabass trombones. All these groups are the lowest in pitch range, but with their simultaneous use, they should naturally produce a thickened density and a distinct audible impact (we will come back to this moment later). This use of five groups lasts only between 2 bars, and is followed by another drop off that alternates between 2 to 4 simultaneous groups through bar 25. At bar 26 through bar 28 we drop back to only one grouping: cello and contrabass harmonics. When discussing pitch range movement, I did not place much importance on this grouping as it was a unique event and the lightness of timbre, dynamic and articulation did not warrant inclusion in the upward pitch evolution. However, for purposes of looking at orchestration as it relates to closure, this might have some significance. Perhaps careful listening will shed further light on this, in the meantime, I would say that this single grouping might serve a similar function as the opening brass chord: a distant preparation to the reentry of voices.

This notion is borne out by the first entry of the Altos, Tenors and Bass Voices in bar 29 (these three groups are joined by a fourth group - horns). At bar 33 three groups are suddenly cut off leaving only the Altos as the single group for three measures. Again, three other groups suddenly join a single group at bar 36, including the tenor voices, bass voices, and trumpets (their first appearance). The entry of trumpets may have significance, as trumpets are known to pierce

orchestral color and signal something important is about to occur. However, suddenly three groups are cut off again at bar 41 leaving, this time, only the tenors as the single group. Now we have had examples of a single group color from bass voices, alto voices, tenor voices, and string harmonics. From bar 44 through bar 49 we have a layering of groups that build up to the entry of a soprano solo at bar 51. The middle of bar 44 cuts off the tenor group and brings in a group consisting of bass clarinet and contrabass clarinet. Bar 45 layers in the bass voices and then alto voice, tenor voice, and trombone groups at bar 47 (clarinets exit), we are now up to four groups. At bar 50 Violins, sul tasto, replace the trombones, and a Mezzo soprano soloist enters (making five groups), and finally a soprano soloist enters at bar 51, bringing us to a record six simultaneous groupings. At bar 53, the lower groups drop off leaving only the two soloists joined by flutes at bar 55 through bar 58. This reads like earlier single groupings (more about that later). Joined once again by mezzo voice, alto voices, and trumpets groups we have six simultaneous groups anew, leaving five when the flutes drop off at bar 60, and back to our two soloists at measure 63. Joined once again by groups fluctuating between two and six in number, including sopranos, mezzos, altos, clarinets, flutes and a single horn all-playing into the highest pitch registers so far. As recalled from our earlier pitch study between bar 60 and 73 there is a final registeral ascent to the highest pitch Db (C#). Our orchestral analysis does not contradict earlier findings, as we reach a maximum eight orchestral groupings exactly on measure 73, concurrent with reaching the highest pitch. At that point we have for perhaps the first time a fully spread out

orchestral and pitch range. The voices drop out at bar 75, followed in bar 79 by the flutes and clarinets, leaving only a widely spread chord in the Violins, Cellos and Contrabasses, which brings us to a conclusion (see Example 2-9).

Each horizontal line represents an instrumental grouping playing as a unit over a certain number of measures. Sometimes this is a single instrument grouping, like trombones in bar 1-2, and sometimes it is a combinational unit, like horns and contra bass trombones in bar 9-12. The special numbers in boxes about the system represents the number of simultaneous groupings at important moments as outlined in previous paragraphs.

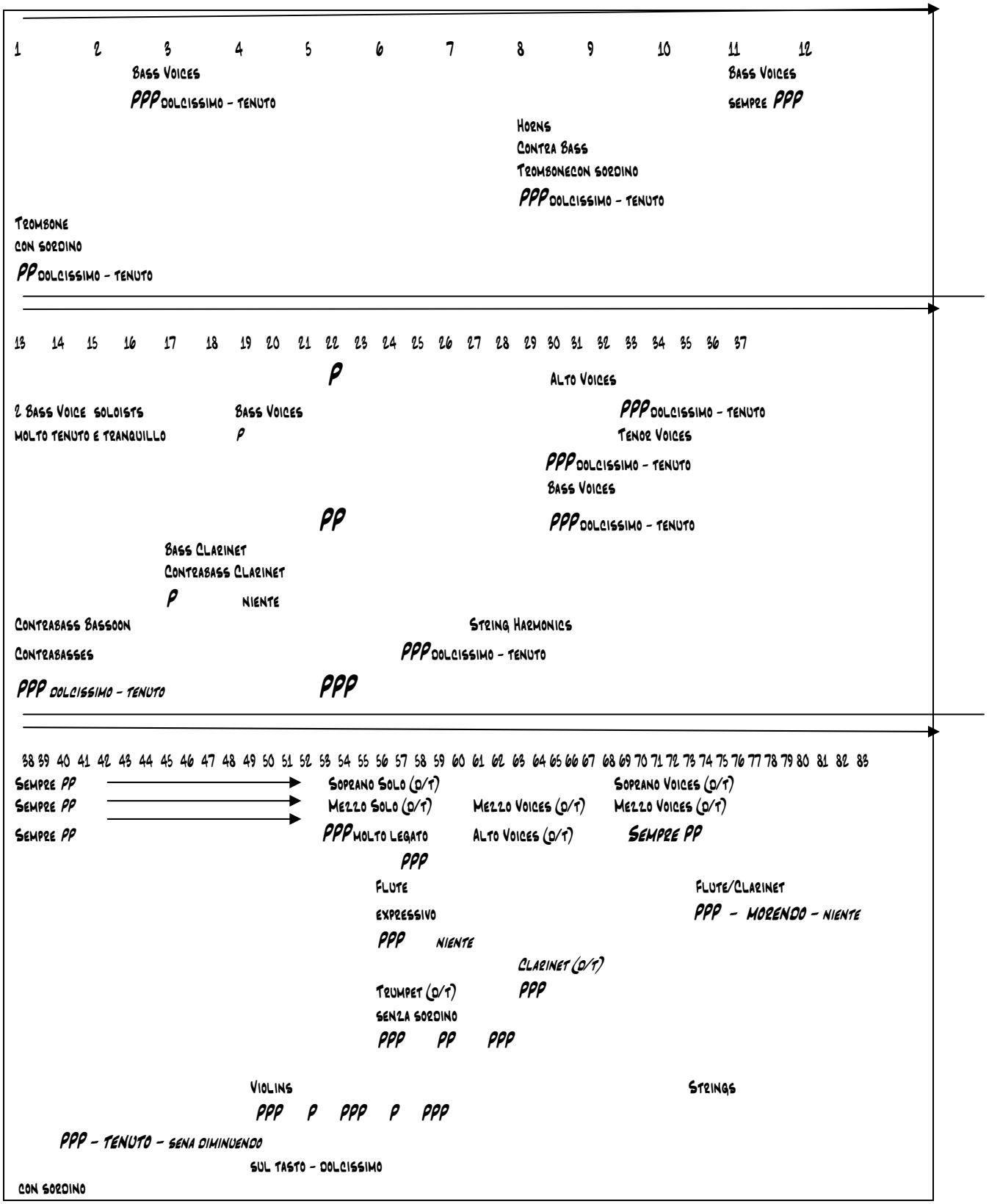
In summary, we have four important points of increasing orchestral density; the entry of Bass Voices at bar 3 adding to the trombones (two groups); bar 17, entry of five low orchestral groups (bass voices, Bass and contrabass clarinets, contrabassoon, contrabass trombone, and contrabasses), bar 29, striking use of alto and tenor voices for the first time (four colors), bar 51, appearance of six colors, including soprano, mezzo soprano, altos, tenors, bass voices and violins; and finally bar 73, with eight groups including sopranos, mezzos, altos, flutes, clarinets, violins, cellos and basses.

C. Dynamics and Articulation

The use of dynamics and articulation consists of a limited number of elements therefore significance in terms of application to closure may be difficult to discern. Dynamic range varies tightly within PPPP to P. Description style instructions

range includes only dolcissimo, tenuto, legatissimo, legato, morendo, diminuendo with quick insertions of tranquillo at bar 13 and expressivo at bar 56. Performance instructions range from con sordino on brass and strings to sul tasto and sul ponticello and harmonics on strings. (See Example 2-10):

Example 2-10:



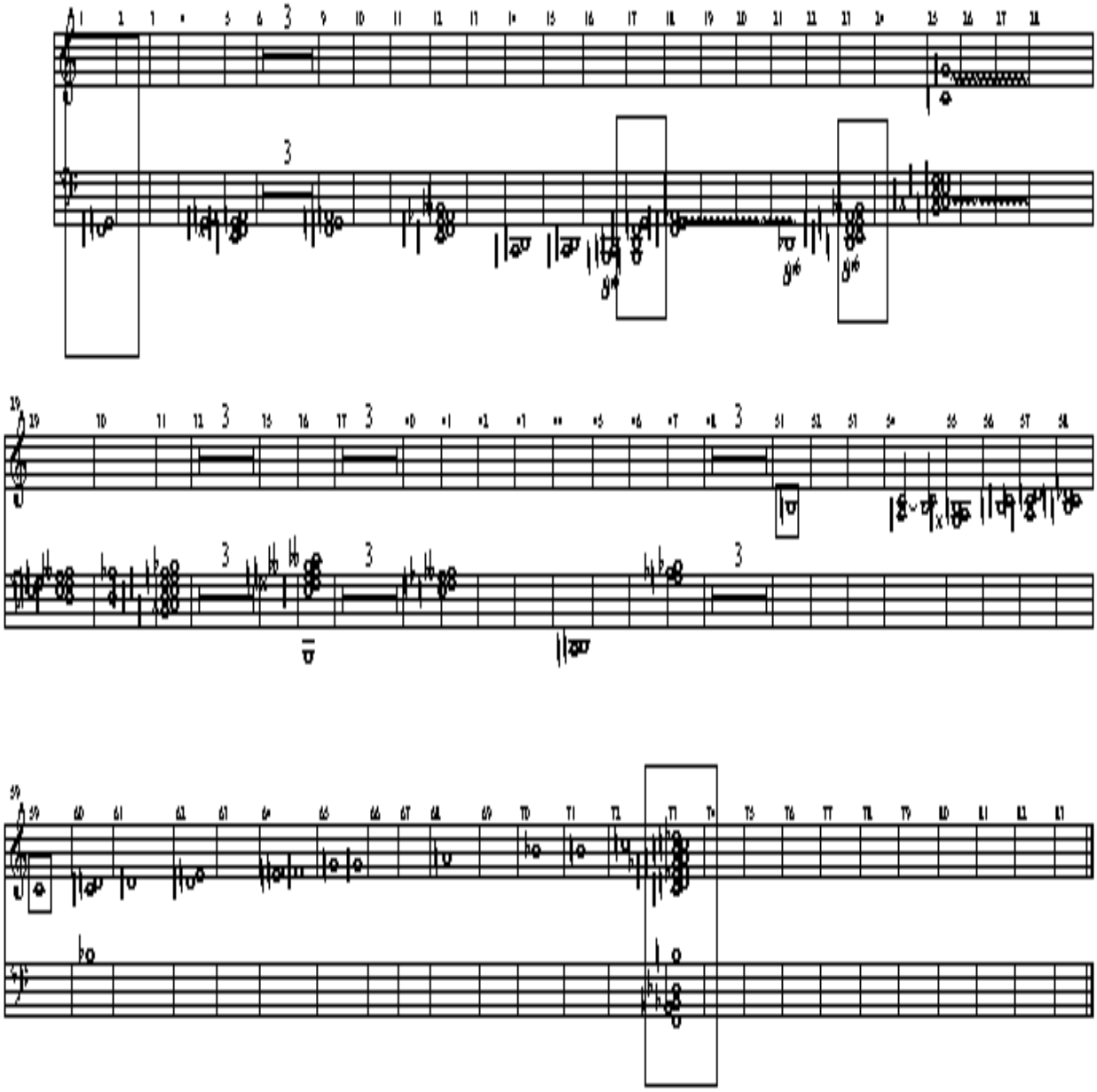
Introitus – Dynamics & Articulation

It appears the overall dynamic intension is *pp*. The overall articulation is dolcissimo-tenuto (d/t). Therefore the general sonic palette appears to be non-intrusive and narrow in scope. It may be interesting to note that the loudest section of *p* comes in bar 17 when five orchestral groupings enter to send the piece forward after seventeen measures of chant moving back and forth between low brass and low voices. Equally interesting to note is that bar 73, which we know has the highest pitch and the highest density of orchestral groupings, also has some of the quietest indications for individual groups; uppers voices are sempre *pp*, flutes and clarinets are *ppp* morendo, and strings are an absolute minimal *pppp* diminuendo. Interestingly, attachment of this kind of minimalist dynamic and articulation range, at the highest pitch and density, indicates an attempt to circumvent its climactic power and potential sense of closure. However, like cadence, the ultimate effect is one of coming to rest without indicating any sense of finality.

Internal Activity: (counterpoint, harmony and harmonic rhythm)

A note about harmony: Naturally in a piece like this, traditional structural harmony has little meaning other than the obvious use of neighboring tones to emphasize one fluid central tone at a time as it slowly moves up in range. It should be noted that as the tonal (and I use that word loosely) center moves upward it is always presented in close, or even closed, harmony. The final chord however, is contains every note used throughout the piece and spread throughout the orchestra. (See Example 2-11)

Example 2-11:



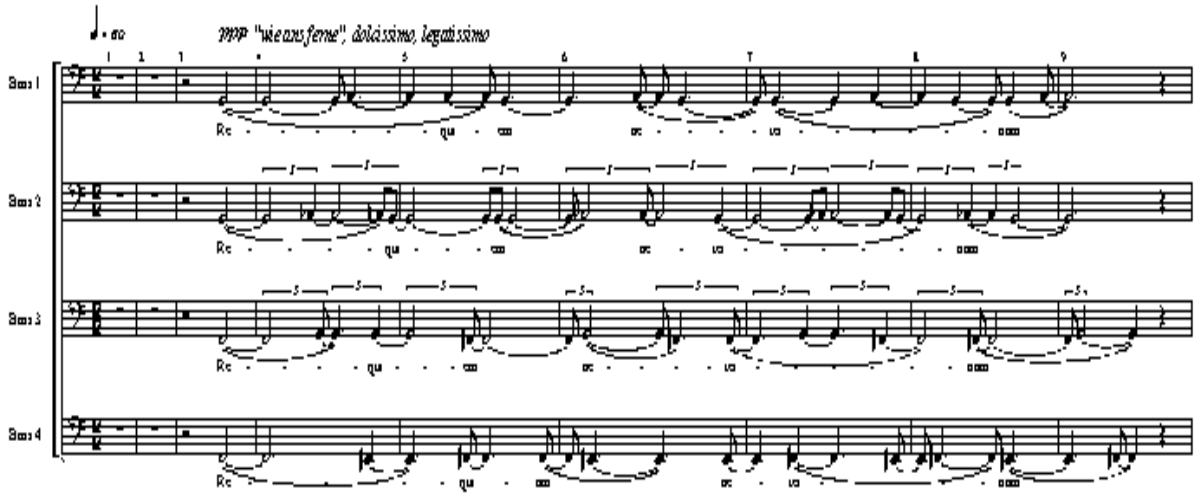
Introitus – Harmony

One could construe that this presentation of every note spread out for the first time does indicate something like a classical recapitulation denoting closure. For Ligeti, harmony seemed to have been an albatross around his neck. He has often spoken of his struggle to free himself of tonal or atonal harmony and create a new resultant harmony based on early polyphonic principles:

> "I asked myself, how can I work with intervals or with specific pitches without returning to tonal music? That is to say, no chordal development, either in a tonal or in an atonal sense. Can one work completely differently from the way in which one has previously worked with intervals or even harmonies that are really worn-out elements? I tried to do so. The first work that is indeed based on a clearly organized structure of intervals is the Requiem. In the Requiem specific connections between the intervals determine the form of the music, without the intervals or complexes of intervals entering into tonal relationships with each other."[47]

In terms of contrapuntal activity, I have taken a closer look at the sections where there is significant contrapuntal movement, albeit in a narrow pitch range, in certain orchestral groups. While perhaps less of an accurate indicator, this contrapuntal activity does somewhat support the previous findings. At the beginning of the section the entrance of the bass voices present contrapuntal activity that is consistently used throughout by all vocal groups. (See Example 2-12)

Example 2-12:



Introitus – measure 1-9 - counterpoint – bass voices

Ligeti intends that the harmonic content be divined as resulting from the voice leading, and not by structural harmonic movement. In the book *Ligeti in Conversation,* Ligeti declares his adherence to early music practice:

[47] P. Várnai, et al; 97

> "Technically speaking I have always approached musical texture through part-writing. Both *Atmospheres* and *Lontano* have a dense canonic structure. But you cannot actually hear the polyphony, the canon. You hear a kind of impenetrable texture, something like a very densely woven cobweb. I have retained melodic line in the process of composition, they are governed by rules as strict as Palestrina's or those of the Flemish school, but the rules of polyphony are worked out by me."[48]

According to Richard Toop,

> In *Palestrina and the Treatment of the Dissonance*, the text that Ligeti had studied back in the Budapest years, Knud Jeppsen had used his careful analysis of the Renaissance composer's works to extrapolate a whole series of rules for composing in 'Palestrina style'. It is precisely this aspect that Ligeti latches onto in composing his *Requiem*, and retains in later works. But whereas Jeppesen's rules have universal application to all Palestrina's works, and any attempt to emulate them, Ligeti is free to modify or reinvent the rules from one work to the next, always building on the experienced gained so far….it is the composer who makes the rules."[49]

Additionally, Ligeti's declared methodology in his work is pure pre-classical counterpoint as clarified by Edward Aldwell and Carl Schachter in their book *Harmony and Voice-Leading*:

> Many chord progressions of tonal music arise out of voice leading or counterpoint – that is, the chords result from the simultaneous motion of several melodic lines. This principle of organization is older than harmony; composers became aware of the possibility of relating chords to each other after centuries of contrapuntal music in which the chords arose as by-products of the voice leading."[50]

As we have learned, Ligeti intends that the audible aspect of his music be derived as a result of this dense counterpoint; however the details are intentionally not to be discerned. Contrary motion, alternating pitch articulation, upper and lower neighboring tones, leading tones to new pitch all support a traditional approach to voice leading. However, the nature of micro-polyphonic pitch motion and lack of meaningful pitch range change sets up a sense of harmonic ambiguity and therefore forces the

[48] P. Várnai, et al; 14-15.
[49] Richard Toop; 101
[50] Aldwell, Edward, and Carl Schachter. *Harmony and Voice Leading*. 2nd ed. San Diego: Harcourt Brace Jovanovich, 1989; 60

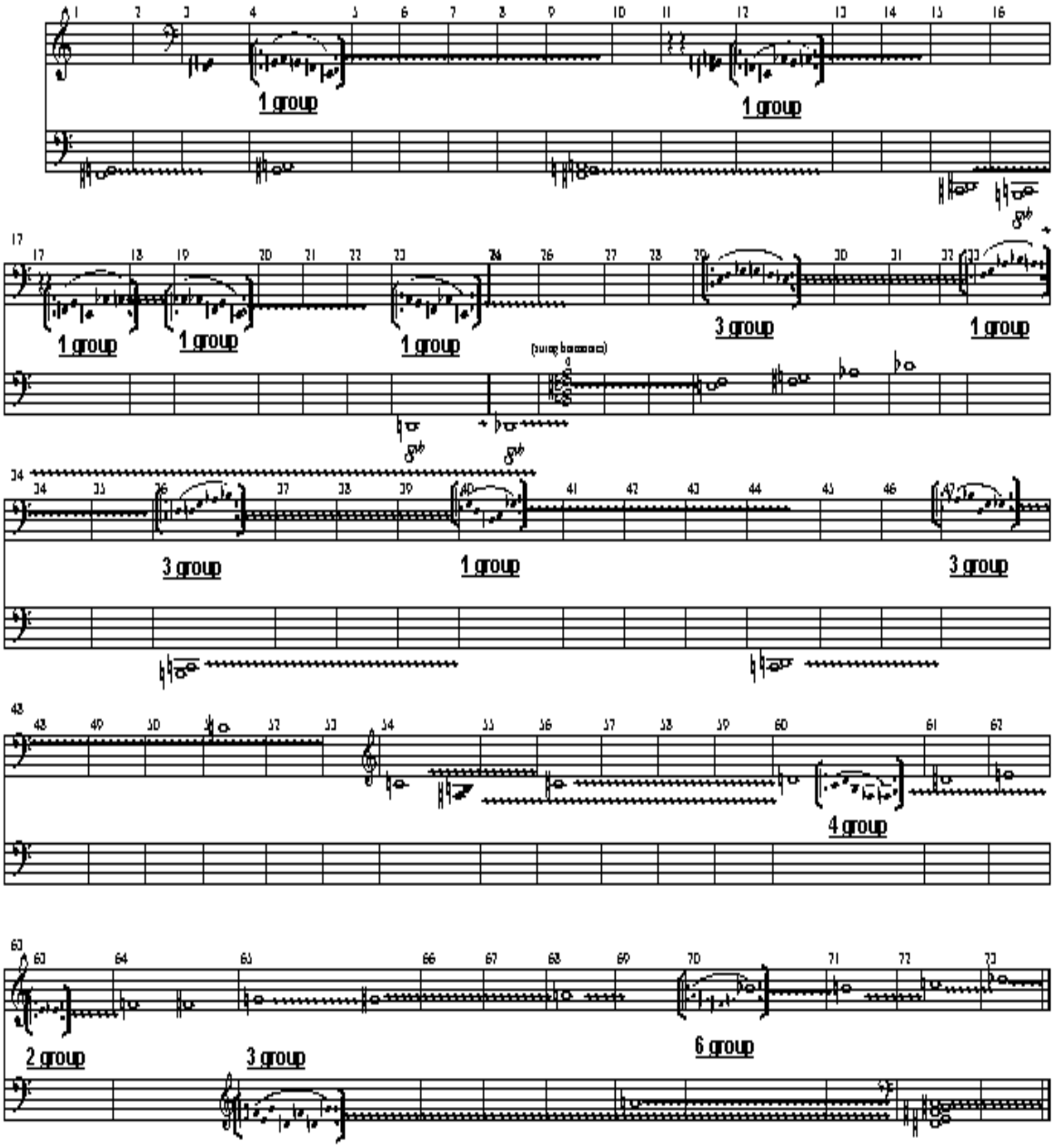
appearance of non-traditional blocks of sound. In other words, the micro level suggests canonic movement, but the macro impact is sonic events without internal motion. In speaking of his unusual use of tightly controlled, detailed contrapuntal and canonic devices, with such precision not actually being heard, Ligeti clarified his idea (re: *Lontano*), which at first may seem a contradiction to the earlier quote:

> "Technically, *Lontano* is a completely and strictly structured polyphonic work: That is to say, there is a definite part-writing, there are vertical relationships between the parts and the individual instrumentalists play their parts as autonomous units. Through the complex overlapping of interweaving of the parts, however, the listener loses sight of them, although perhaps not entirely; that is to say, the traces of this polyphony like that of the Dutch school, or of Palestrina's or Bach's music is not to be found here. I would say that the polyphony is dissolved…to such an extent that it does not manifest itself, and yet it is there, just beneath the threshold."[51]

When speaking of his work *Lontano*, Ligeti could well have been referring to *Introitus* from *Requiem*, though it is not nearly as complex. The point here, as it relates to Ligeti's intentions, is that any harmonic movement contained within these microstructures is suggestive at most and is no indicator of cadence, or closure. However, because the recurring contrapuntal activities in *Introitus* are texturally built up by layering additional groups as the work progresses, this may tell us something similar to our findings on orchestral textures, thickening at key moments as it relates to pitch range, i.e., the densest point occurring at the highest pitch. Significantly, in bar 73 at the highest pitch and thickest orchestral density point, we have the highest number of simultaneous contrapuntal groups (6): (See Example 2-13)

[51] P. Várnai, et al; 99

Example 2-13:



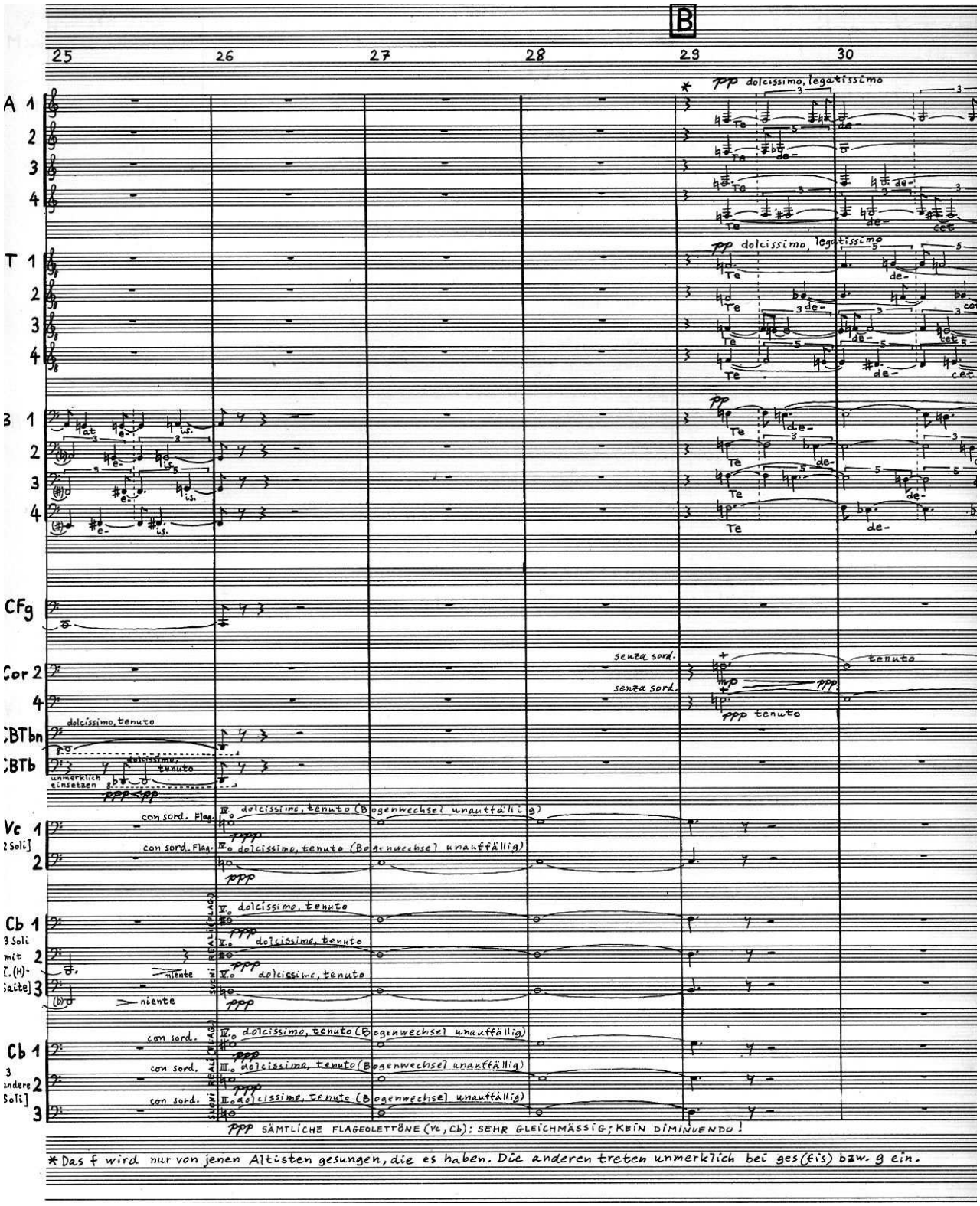
Introitus – Pitch Internal Activity

It should be noted that even when there are six contrapuntal groups playing simultaneously there are no two instruments articulating pitches at any one time. This is an extreme example of carefully laid out complex polyphony.

Aural Examination:

After studying the score in detail and then listening anew there were many revelations. First, there were several moments that struck me as important while listening that I had failed to pick up on in the previous analytical sections. Some of those things I had previously noticed during earlier listening sessions, I failed to notice visually in the analysis. Other impressive moments sprang out at me in this listening that I hadn't even heard before, nor had I recognized during my analysis. One thing I had failed to take note of or, at least, dismissed as insignificant, took on real meaning upon listening. The string harmonics at bar 25 through bar 29 that had failed to impress because of the lightness of configuration, as opposed to the density of other events. I assumed that this pianissimo, dolcissimo attack on the strings upper partials would be perceived more as a pause, and in some sense it does that as well. However, while listening, its sudden jump in pitch range foreshadows both the entrance of the altos and tenors, along with the bass voices, for the first time with the only serious leap of pitch range found in the entire movement. (See Example 2-14)

Example 2-14:

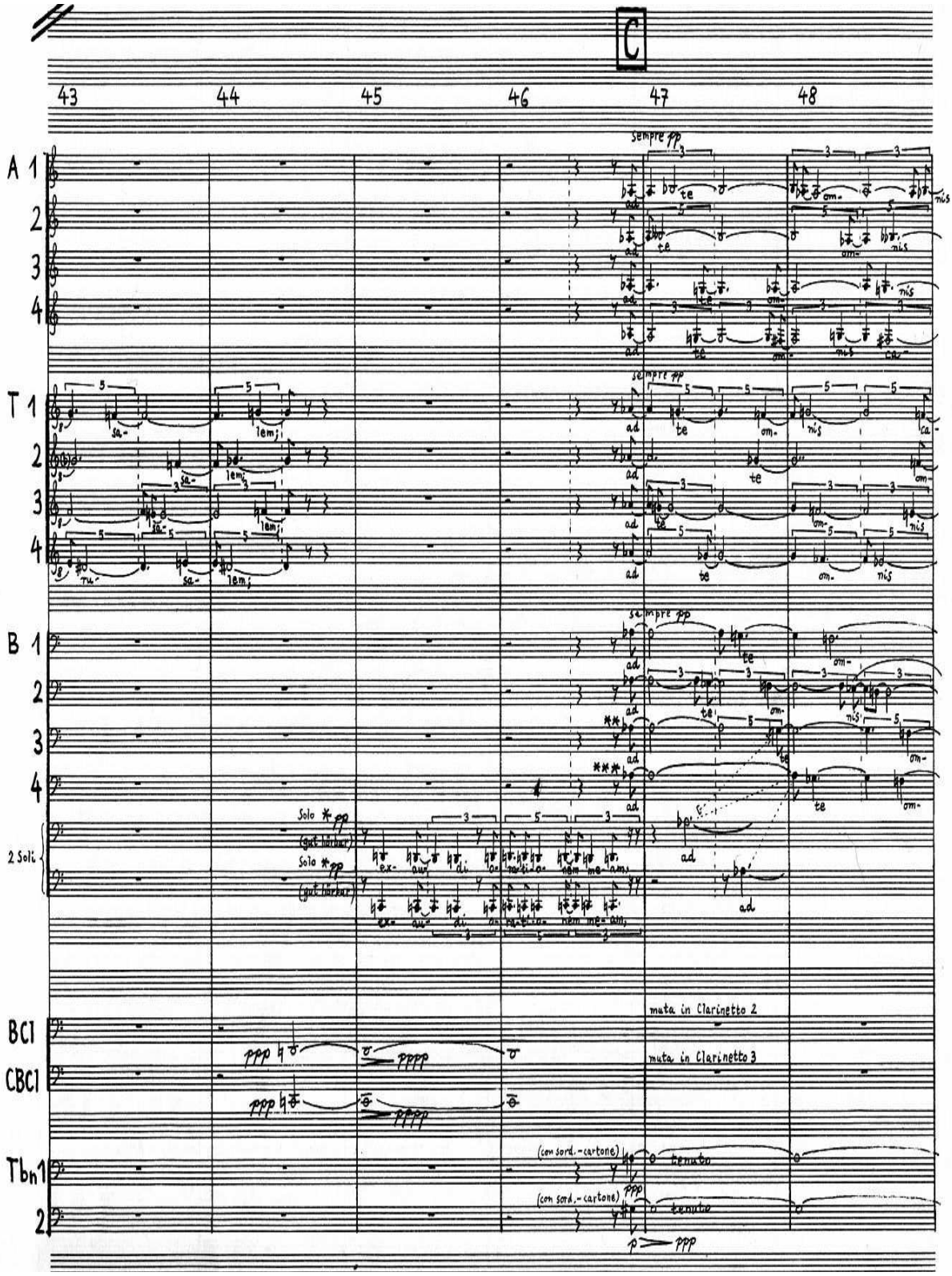


Introitus – String Harmonics

By “foreshadows” I mean that the harmonic timbres and the pianissimo dynamic, together with the wide open pitch range, sounds like listening to a tape recording that has been corrupted, i.e., when you get a few seconds of ghost sound, not meant to be there, and repeated in full force by the actual recording. This moment goes farther in that it also presents, albeit in ethereal form, pitches that we will not hear again until bar 65 when nearing the end of the ascent.

Another significant audible moment arrives just before the entrance of the sopranos and mezzo-sopranos, in bar 44 through bar 46. We have the entrance of the bass clarinet and contrabass clarinet on low C and B, and suddenly the bass voices enter on the lowest pitches they have yet sung: C and B. Besides being the lowest notes for the voices, this is the first time we have heard any low voices since bar 15; it comes as quite a shock. So what we have is a sudden re-test of the lowest pitch range, before the final ascension to the highest**.** (See Example 2-15):

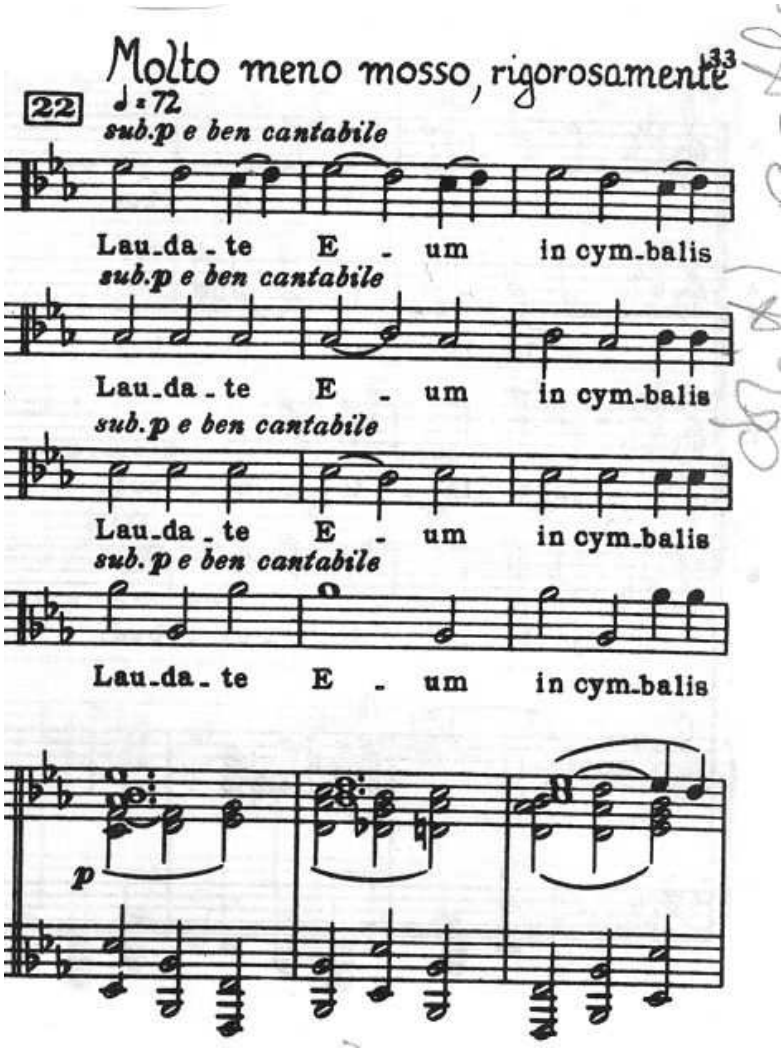
Example 2-15:



Introitus – Sudden re-entrance of Bass Voices

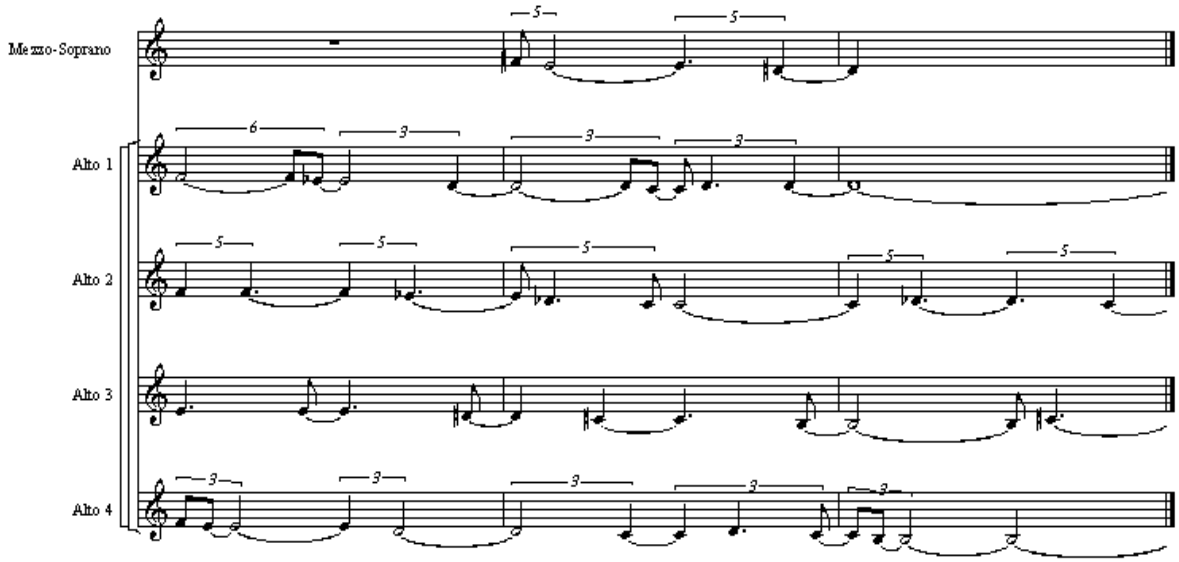
One final note, which may be only my own subjective perception, as related to the listening experience: There is a moment in the Alto voices bar 66 –67 where, for the first time, I hear something clearly resembling a traditional and familiar melody. That melody, cut off before confirming its intentions, is reminiscent of the *Hymn of Praise* at the end of Igor Stravinsky's *Symphony of Psalms*. (Part III). *(*See Example 2-16)

Example 2-16:



Symphony of Psalms – Hymn of Praise

Example 2-17



**Introitus* – "Stravinsky quote" bar 66-68

In Ligeti's *Requiem* (see Example 2-17) the canonic melodic fragments jump out while listening….

First we hear it in the violas, starting with viola 1, middle of bar 66 on Eb – D and middle of bar 67 with the combination on C – D before the phrase being picked up in Mezzo 1 and 3 subtly playing the final Eb of the phrase. Viola 1 is followed in counterpoint by viola 2 and at the end of the phrase by viola 4, which spells out the same melodic material that one finds in Stravinsky's hymn, as exemplified in Stravinsky's score in Movement III, bar 22 and 23) (see Example 16). Of course, Ligeti uses the quote subtly and sparingly as would be expected, but not without

being clearly audible to one familiar with Stravinsky's famous hymn. Stravinsky spoke of this section in *Dialogues and a Diary*:

> "The final hymn of praise must be thought of as issuing from the skies, and agitation is followed by "the calm of praise," but such statements embarrass me. What I can say is that in setting the words of this final hymn, I cared above all for the sounds of the syllables, and I have indulged my besetting pleasure of regulating prosody in my own way. I really tire of people pointing out that Dominum is one word and that its meaning is obscured the way I respirate it, like the *Allelujah* in the *Sermon*, which has reminded everybody of the *Psalms*. Do such people know nothing about word splitting in early polyphonic music? One hopes to worship God with a little art if one has any, and if one hasn't, and cannot recognize it in others, then one can at least burn a little incense."[52]

Aside from Stravinsky's delightful vitriolic banter in *Dialogues*, we are informed that the final hymn "must be thought of as issuing from the skies." This, one would assume, would have a inspirational effect on Ligeti as per his own description of how the microcanonic, or inaudible (for the most part), contrapuntal details effect the "intervallic or harmonic plane" which is actually heard:

> "Now this intervallic or harmonic plane gradually clouds over, and this cloudiness expands more and more, until finally the originally pellucid, clear harmonic structure dissolves into an opaque plane."[53]

Stravinsky talked about how he thought of his final hymn from *Symphony of Psalms* as "issuing from the skies," but Ligeti's abstracted musical quote from Stravinsky's hymn may in fact be subtle commentary on what is about to occur in

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[52] Stravinsky, Igor, and Robert Craft. *Dialogues and a Diary*. [1st ed. Garden City, N.Y., Doubleday, 1963.
[53] P. Várnai, et al; 97

Summary:

I think the implied Stravinsky quote and references of music to come directly relates to the issue of closure. The quote comes in bar 67 - 68 just before the final climactic bars 70-73, I think signaling an end of one part and suggesting the beginning of the next, and in this way Ligeti, perhaps, gives us the equivalent of a deceptive cadence. Summarizing, I have determined that Ligeti may have, in fact, put a great deal of thought into closure, albeit with a non-traditional techniques. Instead of preparing cadence with leading classical harmonic movement, he achieves a non-final closure in *Introitus* by utilizing an amalgam of compositional events.

We have a quasi-traditional opening sequence in that it is a groundswell from the lower pitch area sustained at the top for 25 measures while the bottom range expands to bar16. This coincides with guttural ‘bottom feeding' orchestration with lower brass and bass voices. The bottom pitch range at bar 16 announces the first obvious structural column at bar 17; the stacking of multiple low orchestral groups simultaneously, the Bass voices, Bass clarinet/Contrabass clarinet, Contrabassoon, Contrabass trombones and contrabasses. Another important moment comes with the string harmonics in bar 26, followed by the addition of Alto and Tenor voices in bar 29 and the leap up to E expanding the pitch range. First there is a leap to E, and then a gradual movement up to Bb in bar 31, at which point the upper range holds steady until bar 51. During these 20 measures there is another important signpost at bar 44. The sudden drop in the basses, to the lowest pitch area, warns of the entrance of sopranos in bars 50

and 51. One should also point to bar 60, when the pitch ascension accelerates, and measure 67 with the implied Stravinsky quote. And finally our pseudo "deceptive" cadence arrives in bar 73 when we reach the highest pitch and the most open harmony while simultaneously getting the full orchestral array coming from eight separate orchestral groupings. After this point, closure is followed by the Ivesian signature “ripping off”; a simple cut off of the sopranos, mezzos and altos, leaving the flutes, clarinets and strings to resonate on a single harmony. The flutes and clarinets are then cut away leaving the strings to fade out slowly.

The *Introitus* is modeled on several Ligeti techniques. First and foremost is intervallic pitch clustering and micro-polyphony; second, motion from one extreme in range (lowest) to another (into the sopranos). Other techniques included: Sudden cutting off of sound at climaxes and leaving residual softer sounds in its wake (again a technique no doubt extracted from Charles Ives at end of *Introitus*; orchestration that treats entire orchestral sections as individual lines, with each section working in counterpoint to other orchestral sections. i.e. Basses vs. Baritones vs. trombones, etc. (This, of course, helps to transfix the orchestral sound as one living organism, or as free flowing clouds of sound, without cadence); and steady dynamic development over quite a long period of time also from one extreme to another, in this case *ppp* at the beginning and then layering more and more “voices” to expand the dynamic palette without changing dynamics on any one instrument (just by intensifying density).

One can perhaps conclude that *Requiem*, and other music by Ligeti, notably *Atmosphères* and *Lontano,* compiles multiple sources of inspiration derived from Machaut to Ockeghem to Mozart to Wagner to Bartók to Charles Ives to Messiaen to Stockhausen to electronic music to Earle Brown to Colin Nancarrow. However what emerges from this “Hungarian goulash” is distinctly “Ligetian” -- unique hybrid music like no other before.

CHAPTER III

JOHANNES OCKEGHEM

"Unusually clever, but somewhat freakish composer"[54]

"[Ockeghem] has arranged a certain twittering for thirty-six voices"[55]

It is not the intention of this chapter to analyze the music of Johannes Ockeghem in order to understand the musical mindset of the 15th centuries [that is the job of historians]. Rather, I hope to find insight into the work of Ockeghem through understanding his impact on the 20th-century musical mind. Just as in the introduction, this chapter will also brush aside that the music is 500 years old and look to capture the contemporary in it. Looking inward and viewing this ancient music as a 20th-century artifact, I seek to comprehend its power to influence and inspire modern composer/listeners

Having said that, I do believe it is important to point out a few historical facts that may have a bearing on the nature of this study. As previously noted in Chapter 1, in the 1950s Ligeti became aware of music outside his native Hungary and became immersed in many western musical traditions and trends when he fled to the west in 1956. It was pointed out by composer Ernst Krenek, in his 1953 short biography of Johannes Ockeghem,[56] that until the 1950s very little of Ockeghem's music was known, and his art was yet to be comprehended for its

[54] Krenek, Ernst. *Johannes Ockeghem*. Edited by John J. Becker, *Great Religious Composers*. New York: Sheed and Ward, 1953;
[55] Glareanus, Henricus, Clement A. Miller, and American Institute of Musicology. *Dodecachordon*. [n.p.]: American Institute of Musicology, 1965.
[56] Ernst Krenek;

true significance. It was during Krenek's time that some of the great composers of the 15th century were "coming to light in beautiful and carefully edited collections of their complete works." Krenek goes on to observe:

> "The experts – that is, those scholars whose writings are read by hardly anybody but other experts – kept on mentioning and, to some extent, discussing Ockeghem because they were convinced that he had contributed something important to the evolution of music."[57]

But since the majority of his masterpieces were not known, published or performed, Ockeghem's reputation until the mid-twentieth century was based on very few works and was responsible for giving him the unwarranted reputation of being a purely cerebral and highly theoretical composer without any significant aesthetic merit. Even in the 20th century scholars, such as Cecil Grey, in his 1928 book *The History of Music*, mischaracterized Ockeghem's artistry:

> "…Ockeghem is a pure cerebralist, almost exclusively preoccupied with intellectual problems, and the most typical example in music of the kind of artist who, in the hackneyed phrase for which there is no adequate substitute, goes out of his way to create difficulties for the pleasure of overcoming them. Expression was for him a secondary consideration, if indeed it existed for him at all. He seems to have had something of the mentality of Arnold Schoenberg today, the same ruthless disregard of merely sensuous beauty, the same unwearyingly and relentless pursuit of new technical means for their own sake. He is the school master, the drill sergeant of music." [58]

The significance of the historical record of Ockeghem's reputation and the timing of his musical rediscovery is relevant here, as it was during Ligeti's defection to the west that Ockeghem's works were finally made available through detailed publication and performances in the 1940s, 1950s and 1960s. So by historical

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[57] Ibid.

[58] Gray, Cecil. *The History of Music*. London, New York,: K. Paul Trench Trubner & Co. Ltd.; A.A. Knopf, 1928;

coincidence, Ockeghem's (and Machaut's) music was thrust upon Ligeti's consciousness and thus made a profound impact on his work, an impact that he has frequently imparted through his writings and interviews. Perhaps an interesting side note may be the meaningful, if largely coincidental, interaction here between scholarship and creativity, which affected the development of music in the 20th century. One can speculate on how often this convergence has been such a factor in artistic growth. This topic may make an interesting study in itself.

Besides historical convergences, what is it about Ockeghem that resonates so profoundly with composers like Ligeti; and has influenced major musical shifts in the 1960 and subsequently? In order to address this question, I would like to begin my analyses of Ockeghem's music with a simple, non-technical, inter-subjective, listening experiment. I am asking the reader to allow some academic breathing space by indulging my transformation, in the next pages, from an educated listener into something of a neophyte, in order to capture personal perceptions. Having said that, I do predict that there will be some basic agreements as to how this music comes across; there will most likely be a shared subjectivity (hence, my previous description "inter-subjective"). This experiment in subjective perception may, in fact, reveal commonality.

Intemerata Dei mater

Clearing my mind of all that I have already absorbed about Ockeghem's *Intemerata Dei mater,* I listened to the work dozens of times over the course of several months, notating my immediate and subjective reactions. Needless to say, the volume of noted reactions is more than required for this paper, so out of many I have selected four diverse experiences that perhaps best reflect my reaction at different stages over those months of listening. It may be worth noting that my thoughts, and thus written notes, became simpler, less technical, less descriptive and less affected the more I listened. I believe that from the standpoint of a non-critical listener the last and final listening session may perhaps be the most telling.

Listening Experience 1:

The word "Intemerata" (immaculate) is very clear in the opening moments before variant voices blur language and music. In the opening passage an unusually deep voice evokes a visceral response, enhancing the simple canon on the word "Intemerata". Contemplative, melancholic, pleading, dark, and deep are words that can best describe what I'm hearing. Higher voices seem overwhelmed by the sense of depth, both emotionally and sonically, and therefore do not hold the stage that is usually reserved for the highest musical lines (in traditional melody). The first section does seem to have some form of closure, but no preparation for it is apparent. The second part begins with a lighter touch and the emergence of

more prominent lines in the upper range. However, suddenly the bottom drops out at the end of the first phrase and we are back in familiar territory. As we circle around the sonic "campfire" there is a growing meditative, plaintive, almost burning and vital quality to the music. The second part also has a short cadence-like moment, but here again it comes without much warning. The third part, like the second, begins with a focus on the upper voices as light as air. However, soon the entrance of strong middle voices seem to dissolve both the meditation and the 'light as a feather' qualities, drawing us into new territory altogether.

Within this new sonic province at hand, the upper voices now appear as distant echoes emanating from the lowest voices that persist in their meditative journey. Gradually, the upper voices develop more presence as the third section plays out. The final section seems to want to have a cadence but is even less palpable in its offering of clues.

Listening Experience 2:

This time the opening sequence does not come in sections or phrases, but rather seems just to goes on and on until the obvious change into the second section - therefore I am less aware of any attempt at cadence. The music simply stops and then moves on to the second part.

In the second section I am also hearing a more unswerving flow of voices, with the higher voices gaining presence as the section proceeds. The density of

sound thins and thickens in an almost endless pattern of alternating density and delicacy. The second section now seems to end more abruptly than my previous listening experiences.

After the emergence of the middle voices in the third section, I hear things much differently this time through. The middle voices seem less obtrusive and demanding than before. They seem to blend into the established sonorities with a less forceful, and softer, prayer-like pageantry. I also hear the middle voices moving more quickly into the background this time, allowing the higher voices and low voices to retain their power. In fact, the middle voices seem now to take on a wailing or moaning-like nature. The upper voices are more focused here than I remember - still the upper voices seem to echo the lower voices from afar. This time through, the middle voices blend more into the sonic fabric.

I am beginning to get an overall picture of the first section dominated by the lower range, second section by the middle range and the last section by the higher range, and in this regard I am reminded of the range structure of Ligeti's *Introdictus* (see Chapter 1). Something for examination in more technical terms later will be the fact that, other than range, and the coming in and out of density, this music appears to just float on and on with no particular primary focal point, or point of reference, or stand-out climaxes except when the lower or the higher voices demand extra attention from the listener. The ending chord now feels like it is leaving a question mark and not a statement.

Listening Experience 3:

This time I feel less analytical and I am attempting to close that part of my mind that wants to explain what is happening. The music is somehow rocking me back and forth in a very soothing motion. I can't seem to completely close my analytical ear and I am now hearing long vocalizations without any re-articulation of words. It has become noticeable that most of the actual text is presented by the voices in rhythmic unison. I am anxious to look at the score to see what techniques are used to create such effects, but at this point it would defeat the purpose of this experiment. The first quasi-cadence now sounds quite uplifting, whereas before it did not strike me as being out of character with the plaintive quality of the rest of the section. I wonder if I am really hearing the music or if it is just a projection of my own memory from previous encounters.

The second section seems to be much slower than I remember. I also do not remember the higher voices dropping out of the musical texture altogether, at several moments, leaving the lower partition to carry on the plaintive declaration, but that is exactly what I now hear. I notice the upper voices re-entering with a clear statement of the text. The second attempt at a sense of cadence now seems even less conclusive or stable.

This time through, the third section seems calmer before picking up strength. I now hear the music hinting at multiple cadences that are always thwarted by entering vocal lines. While I still hear the third section, like Ligeti's *Introdictus*,

having traversed to the upper range by the end, I notice the strong entrance of the lower voices at the final moment (An “Ivesian moment?”).

Listening Experience 4:

This time I am relaxing and just allowing myself to experience the music without trying to analyze technique at all. I am stunned to realize that I have yet to fully comprehend the essence of this music. This is truly music of the spirit – it is a rendering of the non-literal, otherworldly and transcendent. The music begins softly and solemnly. Low voices are caressing each other as they move about, seeming to wander but not without some veiled intent. Higher voices come out of nowhere, swell forward momentarily, and then drift to the background…all still caressing and warming my spirit. Sonic flares seem to rise and settle again and again. The voices come together for a unified moment and then once again separate to continue a simultaneous journey - the coming together and separating is signaling but not recounting the musical intention. Once again the voices merge softly and solemnly, seamlessly flowing. The outer voices weave to and fro with respect to the middle voices, leading to a moment of silence.

The voices solemnly reenter in a different pitch range this time with a sense of great sadness, something I hadn’t noticed before now. A familiar high voice emerges momentarily leading us to some unknown destination – never quite arriving before being joined by a deep ominous chant and reemerging again only to ebb and flow once again in volume, as well as between the inner and outer

voices. After another moment of silence, the upper middle voices emerge alone, all bass voicing noticeably absent until reentering in parallel movement with the middle voices and not quite as deep. The sound slowly begins to brighten and I sense something, which can only be described as hopeful or emerging from the darkness. A sense of grounded energy develops …fragments of familiar musical motifs sound out in an entirely new context… I do notice that pitch rising up and backing down has become a signature - all ending with a question mark. This time the listening experience has reinforced that this is music of the spirit – music that intends to evoke a non-literal realm beyond human familiarity. And by this I do not mean to imply that this is religious music intended for a service of the church; this much we already know from historical records. Rather, I mean to say that this music goes beyond serving religious ritual and can, in itself , evoke a spiritually invigorating illumination.

Listening Experiment Summary:

Based on this listening experiment I propose that this music may not be fully comprehensible by any traditional analytical yardstick. That is not to say that it cannot be elucidated through technical analytical methods. And while I will, in fact, attempt to analyze its components and functional qualities in the following parts of this chapter, I think that one can only truly understand this work through a deliberate act of losing one's self in the listening experience and dropping all pretexts to understand and quantify the music's effect. This is music that evolves at its own transient pace, not moving away or toward anything specific. There is

an underlying paradox between the fact that the music is densely complicated and yet there appears to be no special standout event or purpose explainable in traditional analytical terms - the music appears very organized and yet without explicit hierarchal events. While Ockeghem clearly positions his notes strategically, he seems to go out of his way to avoid any sense of finality or hard structure in which the listener can engage his own tactile human experiential references. This music reaches for states of consciousness that lie apart from the listening techniques of academics or even laypersons. It is music that seems to strive for a spiritual and non-referential illumination. While the next part of this section will attempt to break down the structural elements that encompass this work, I believe that no amount of technical discovery will shed any further light onto our musical understanding than what we can gain by eliminating all attempts at comprehension and allowing the music to lead us naturally into unfamiliar non-referential and spiritual territory (more about this later in the final summary). This is perhaps the most irrefutable way of describing why this music has the effect that it has. I might also point out that one could easily make a similar claim for listening to György Ligeti's *Requiem*. Does knowing the structural and analytical intent of these works make the listening experience more or less meaningful? I submit that by listening to these works with naïve and unprocessed ears one may be sonically transported to a more appropriate experiential panorama.

Strategies - Why Ask Why?

In what follows I will look for what systematically may account for my listening impressions. Specifically, I will try to focus on the previously noted contradiction of what looks like high density organization vs. the actual listening experience when no one event stands out. Paradoxically, there does appear to be a clear deliberate strategy by Ockeghem to achieve this elusiveness. This deliberate and masterful strategy, relevant to this thesis, is clearly something that would have appealed to Ligeti and therefore would support his declaration of influence. It should be most interesting to discover how Ockeghem avoids any sense of contrapuntal finality within such a dense and clearly developed framework. Perhaps here we might speculate that Ockeghem's strategic legacy may have been already found in our analysis of Ligeti's *Requiem* in Chapter One: Remember that the undifferentiated massive density of counterpoint in *Requiem* reversed the traditional Schenkerian touchstones of foreground/background (see Chapter 1, page 30) -- the complexity and density of imitative counterpoint forces the compositional detail into the background, and the massive resultant sound structures thereby were forced into the foreground as the overriding audible perception.

Ambiguity and the 'Varietas' Principal

> "I am more interested in Ockeghem than in Palestrina, because his music does not tend toward culminating points. Just as one voice approaches a climax another voice comes to counteract it, like waves in the sea."[59] György Ligeti

> "(The unceasing continuity of Ockeghem's music, a progress without development, was one point of departure for me to think in terms of impenetrable textures of sound). Also what I learned at the electronic studios in Cologne, the superimposed layers of recorded sound, played its part. You will find that, even though indirectly, such techniques affected my musical language, the orchestral polyphony of *Atmosphères* and *Apparitions*." [60] György Ligeti

In Chapter 2, page 10, I pointed out that Ligeti described the *Kyrie* section from his *Requiem* as being a combination of Flemish polyphony with his own "new" micropolyphony. He stated that although he adopted Ockeghem's 'varietas[61]' principle as his model, the *Kyrie* is a twenty-part fugue divided into five groups, each of them a four-part canon[62]. Since the fugue did not exist in Ockeghem's time, he justified his realization of Ockeghem's 'varietas' principal by noting that the canonic material, while having identical notes, varied in its approach to rhythmic structure: "no rhythmic pattern is ever repeated in a canon."

Let's take a look at Ockeghem's "varietas" principle (voices are similar without being identical) and how it relates to the elusiveness in *Intemerata Dei Mater*:

---

[59] Peter Várnai, Josef Häusler, Claude Samuel, György Ligeti, *György Ligeti in Conversation*; London: Ligeti, György, Péter Várnai, Josef Häusler, and Claude Samuel. *György Ligeti in Conversation with Péter Várnai, Josef Häusler, Claude Samuel, and Himself*. London: Eulenburg, 1983; 26

[60] ibid; 26

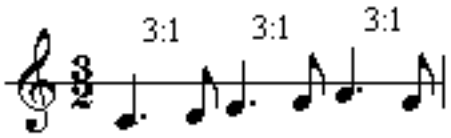
[61] The voices are similar without being identical.

[62] P. Várnai, et al; 49-50

RHYTHMIC STRUCTURE

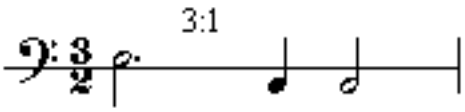
The following examples make it clear that Ockeghem's principal rhythmic tactic was to set up one or two recurring rhythmic motifs and offset them in different voices. The primary motif is a simple 3:1 structure. The majority of occurrences are with a dotted quarter note followed by an eighth note;

Bar 7 Alto Voice:



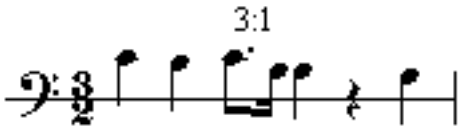
Otherwise there are instances of dotted half notes followed by a quarter;

Bar 1 Baritone Voice:



And smaller units such as a dotted eighth followed by a 16th :

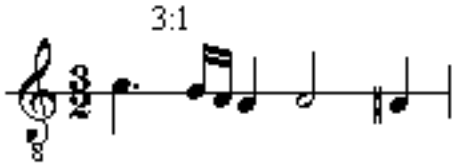
Bar 22 CTenor Voice:



These three primary rhythmic motifs are not always made apparent, which, by now, should not be surprising considering what we already know about

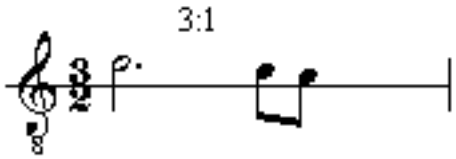
Ockeghem's proclivity towards ambiguous structures, be they rhythmic, harmonic, textural or otherwise. Therefore we've seen many occurrences of motivic variation. The most commonly used variation on the primary motif is a dotted quarter note follow by two successive sixteenth notes:

Bar 6 CTenor Voice:



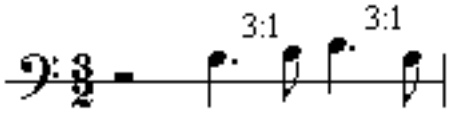
And a dotted half note followed by two successive eighth notes:

Bar 44 CTenor Voice:



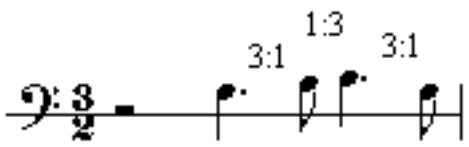
Digging deeper we find instances of further obfuscation of the motif, for example by simply following 3:1 with another 3:1, as in the following simple example, we automatically get a reverse 1:3:

Bar 20 Tenor Voice:



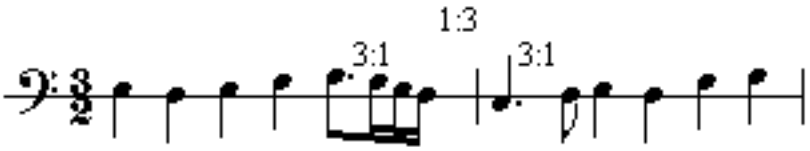
While, perhaps not obvious to the listener, this simple rhythmic line contributes to the textural elusiveness -- for example the same excerpt yields the following:

Bar 20 Tenor Voice:



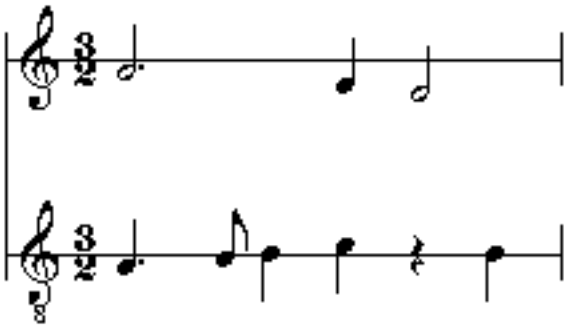
Here is another:

Bars 22 – 23 Baritone Voice:



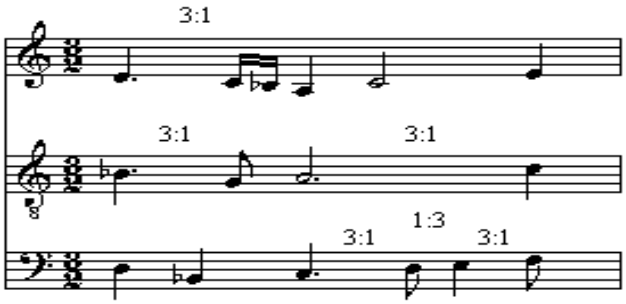
There are instances where Ockeghem creates compound forms of the motif by stacking different rhythmic figures like a short 3:1 under or atop a longer 3:1:

Bar 5 Alto and CTenor Voices:



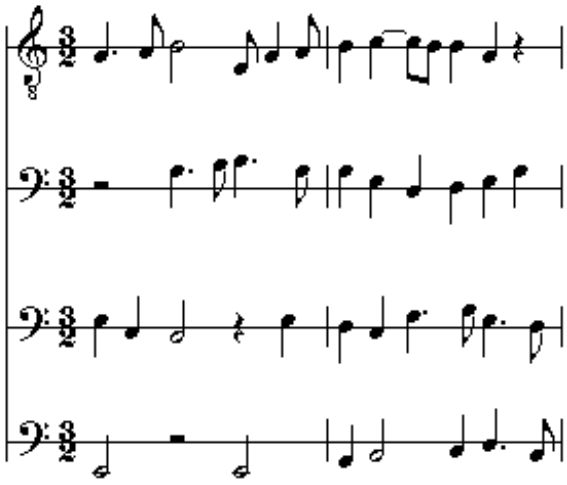
Here is another stacked combination:

Bar 38 Alto, CTenor and Barintone Voices:



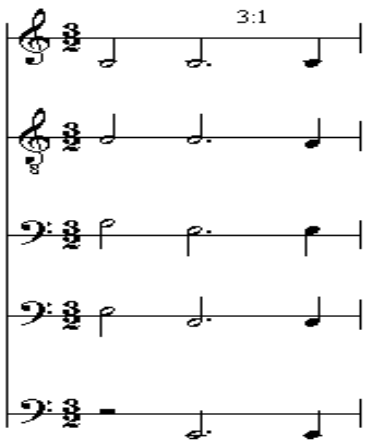
Again, this primary motivic figure is sometimes passed around from voice to voice (a device picked up by Haydn in the 18th century):

Bars 20-21 CTenor, Tenor, Baritone and Bass Voices:



Finally, there are moments where the primary rhythmic figure is stacked in unison, a device Ockeghem most likely used to mark certain moments of "coming together:"

Bar 67 All Voices:

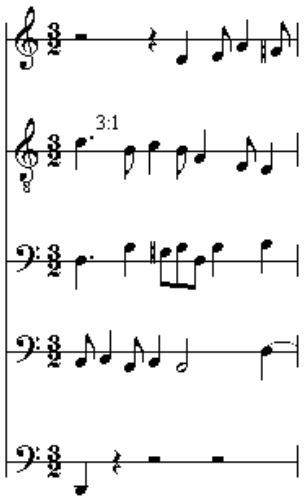


Examining the use of this motif through a wider swath, one is hard pressed to find larger units which repeat at all. It appears that variation of occurrence is Ockeghem's modus operandi. While the rhythmic motivic occurrences are primarily asymmetrical and distinct throughout, Ockeghem is constantly utilizing the same limited number of pitches and intervallic units in a veritable kaleidoscope of variation -- hence Ockeghem's "Varietas Principle" that Ligeti employed so shrewdly.

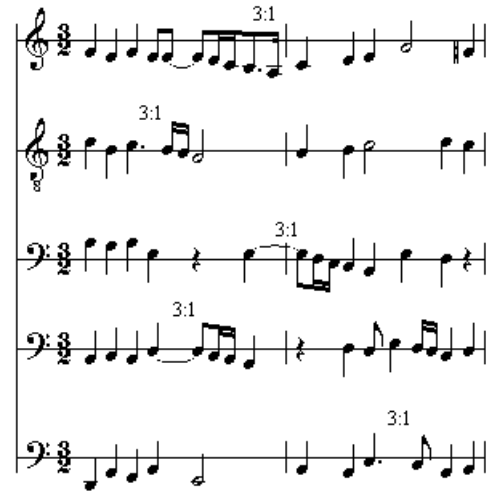
Another important rhythmic factor of "Intemerata Dei mater" is that in large sections of the work, particularly the beginning and the ending, Ockeghem uses his rhythmic devices in an overall complex matrix which supports the theory that Ockeghem was clearly employing an "avoidance strategy" (avoidance of harmonic expectation and multiple cadences) to create the ambiguity that generates in the listener a strong sense of otherworldliness.[63] Notice how

[63] I will explore the connection between ambiguity and otherworldliness below.

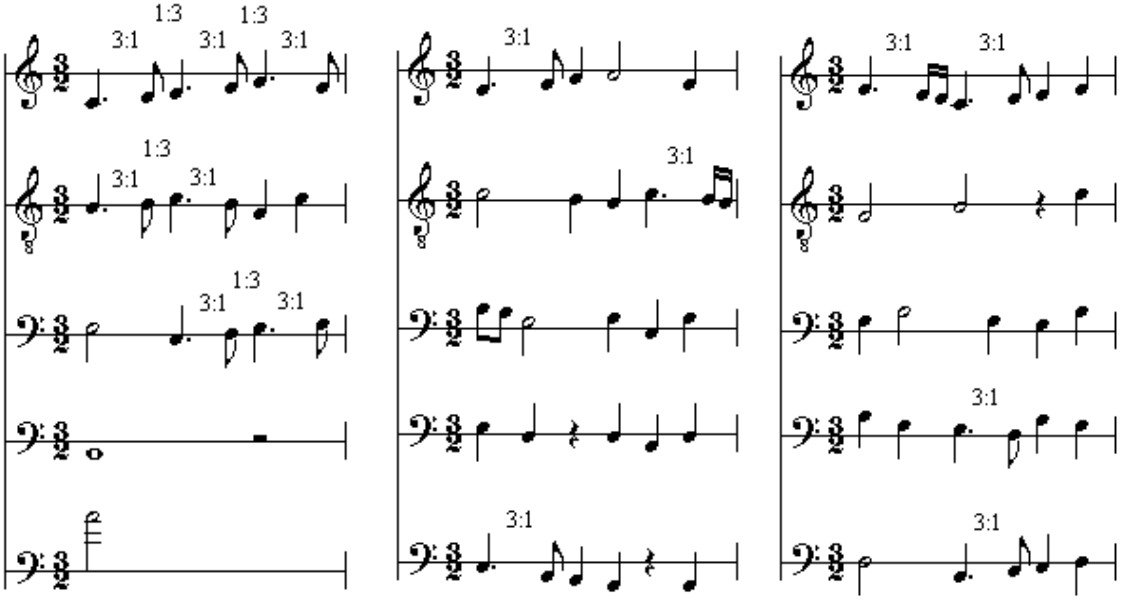
Ockeghem offers an endless supply of non-imitative rhythmic structures out of recycled detail: Bar 129 and Bars 131-132:



Bar 7

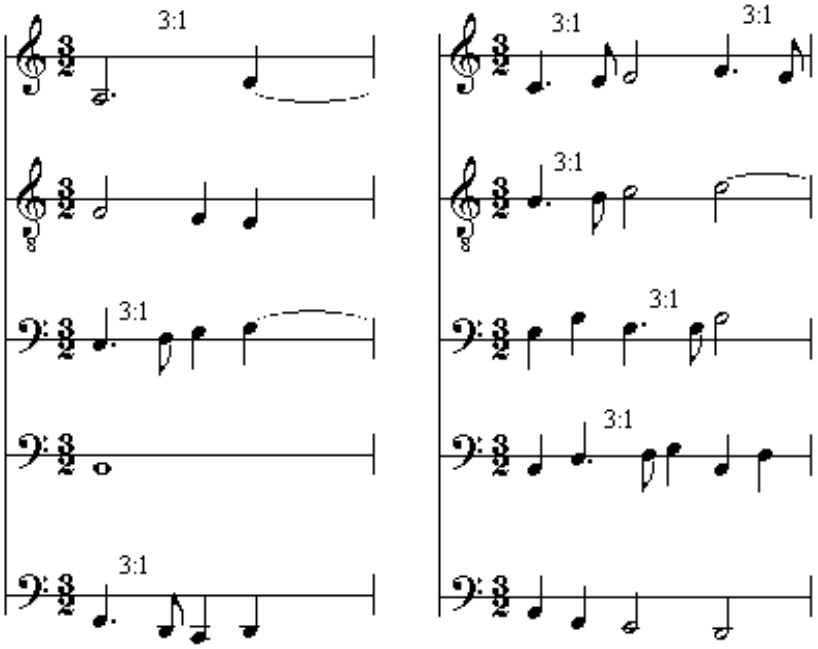


Bar 34



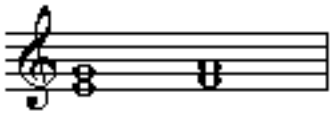
Bar 36

Bar 96 Bar 125

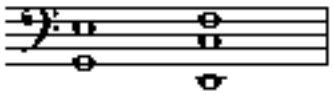


RANGE, TEXTURE, TIMBRE AND CLOSURE

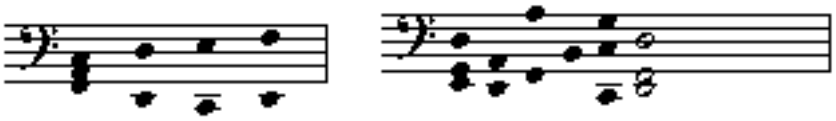
In general, “Intemerata Dei mater” is written in a very low vocal range, which supports Ockeghem’s interest in evoking exotic sonorities by reaching outside traditional ensemble writing and intervallic voice leading and delving into a textural and timbral region relatively unexplored. In fact, the cantus firmus is placed in the bass which was rare in Medieval music. The highest pitch used is only an A above middle c; Bar 2:



The lowest is primarily a D below the bass staff; Bar 4:

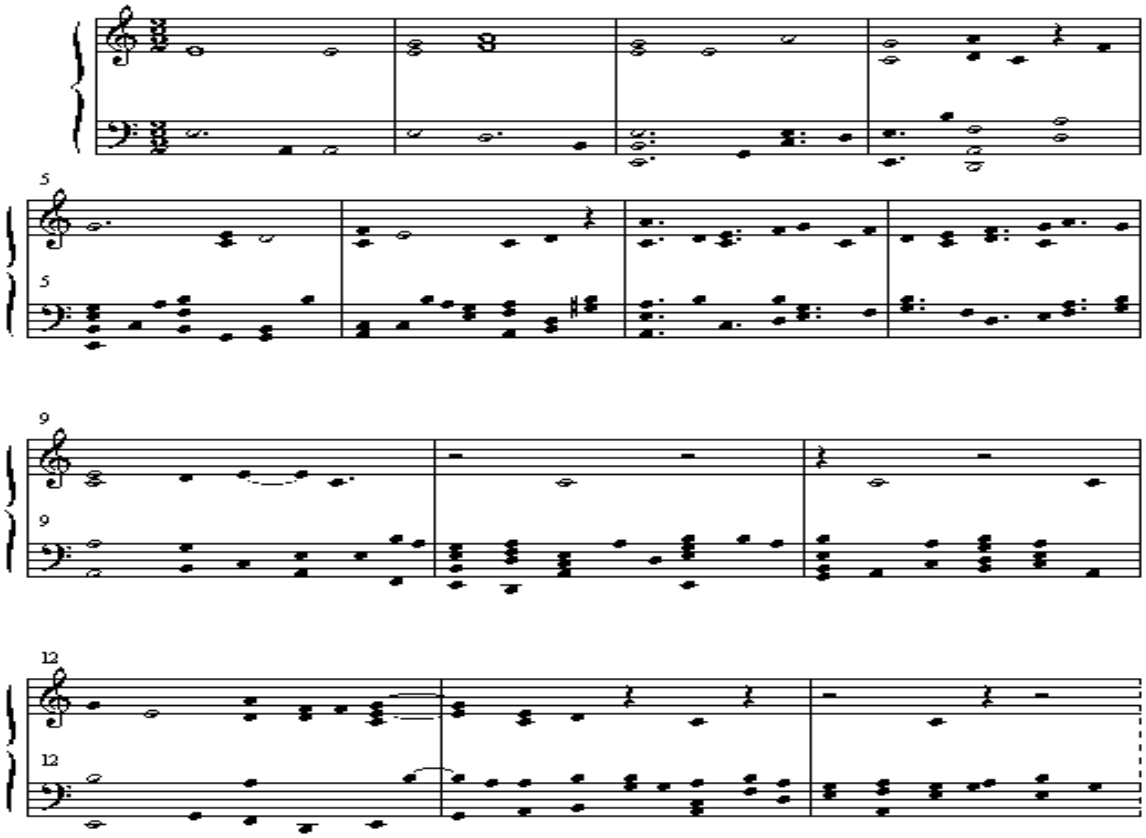


And a rare occurrence of a low c; Bars 96 and 134:

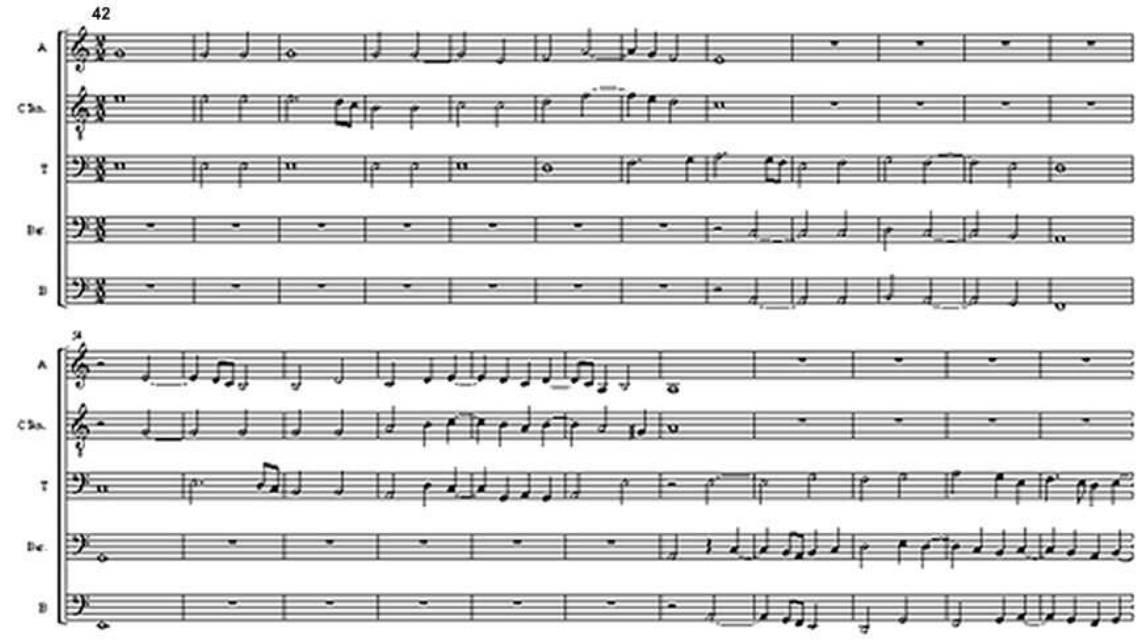


However, within that range there is an interesting axiom: the work, especially in the opening section, has an undulating soundwave-like structure. In other words, if we were to visualize a simple directional pitch pattern, it would spread wide open and then close together in regular patterns.

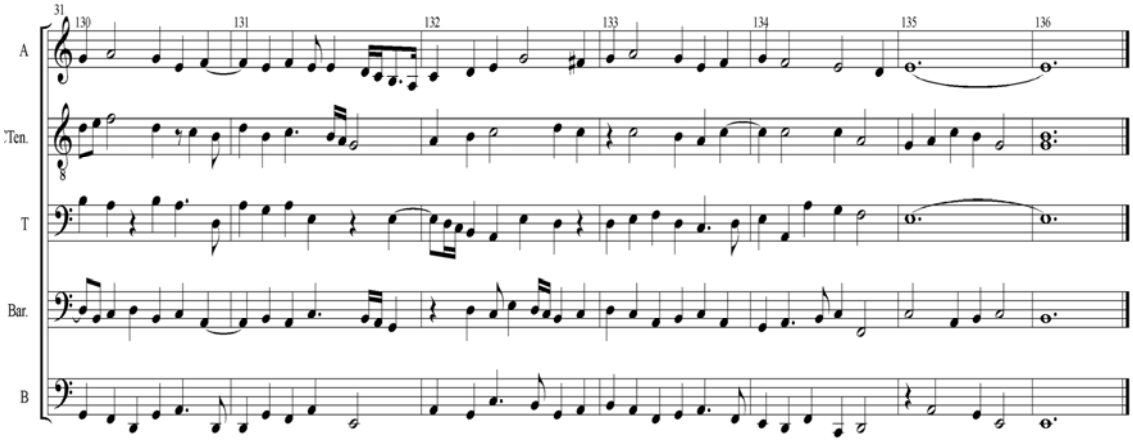
This wave continues throughout much of the piece, save that the overall range of the undulating pattern moves around a bit. First it is in the middle (Bar 2); it then goes lower (in Bars 9-11) and again higher and then lower (bar 12 – 14):



This registeral flux is always opening and closing except in a very few sections, for example in bar 42 it is just high – in bar 49 it is just low – bar 53 just high – etc.



Much of the work focuses on the lowest range area, sometimes remaining at the bottom for relatively long periods of time - See bars 49-54 and bars 60-65 above. More bottom dwelling takes place in bars 75-83, and at the ending bars 131-136:



Ockeghem uses distinct changes of range to create surprise, but also (and mostly) to delineate sections. Recall that this technique was also used effectively by Ligeti to create a sense of resolution or sectional change.

HARMONY AND MELODY

> "By contrast, neither *Ave Maria* nor *Intemerata Dei mater* shows any trace of a borrowed melody… In addition, its syllabic declamation and homophonic textures are much more common in Ockeghem's masses than in his motets. Exceptional, however, even for Ockeghem, who was to become famous for his exploration of modal relationships and possibilities, is the succession of finals to the sections of *Intemerata* from D through A to E (on which all three sections begin)."

In *Intemerata Dei Mater*, and I suspect in many of Ockeghem's works, melody and harmony play a limited role in the overall composition. This is not unusual, as composers of early music had not yet developed a harmonic structural system in the classical/modern sense. This does not prevent us from using the word harmony, as Ernst Krenek observes:

> The term "harmonic" is used here only as an abbreviation for "the aspect of the sounds produced at any given moment by the simultaneously progressing voices." The modern term "harmony" does not really apply to those sounds, for those sounds were not experienced in the Middle Ages as chords, but as combinations of intervals. (The ancient theorists frequently used the term "harmonia," but by that they understood all sorts of things–even melody!–except what we understand as harmony.).[64]

Early music composers understood harmony as intervallic composition in a linear contrapuntal approach. They looked upon intervals in terms of consonance vs. dissonance and in voice-leading implications of each construct. These composers were not thinking in terms of stacked intervals in the classical

[64] Ernest Krenek; 58

structural sense modern composers have come to know as 'harmony.' Thus, while for most early music composers, closure or cadence played an important role in the compositional process, the harmonic content was a result of the voice leading and intervallic considerations related to consonance vs. dissonance. As a rule, early music composers did have an interest in creating rhetorical discourse that we would find with "classical" composers, however, their harmonic understanding was limited to the natural directional pull of intervallic voice leading. I suspect that many early music composers would have used modern harmonic structural form were it to be had. Listening, for example, to the music of Dufay does strongly hint at what is to come, harmonically speaking. In fact in 1950 a case was made by Heinrich Besseler[65], since debunked[66], that Dufay was the "father" or inventor of harmony in the modern sense. In any case, Dufay did strive for punctuation and closure, which was about giving his listeners a sense of where they are in an argumentative sense (giving direction) vs. the intended lack of direction and sense of leading that we find in Ockeghem's music.

For Ockeghem, even intervallic resultant harmony had only a slight bearing on his music; avoidance of linear discourse was clearly his stylistic signature. Ockeghem was interested in setting the listener free in a sea of sound and conveying an unearthly floating experience. He seemingly had no interest in everyday rhetorical discourse or sentence-like structure. Even if classical

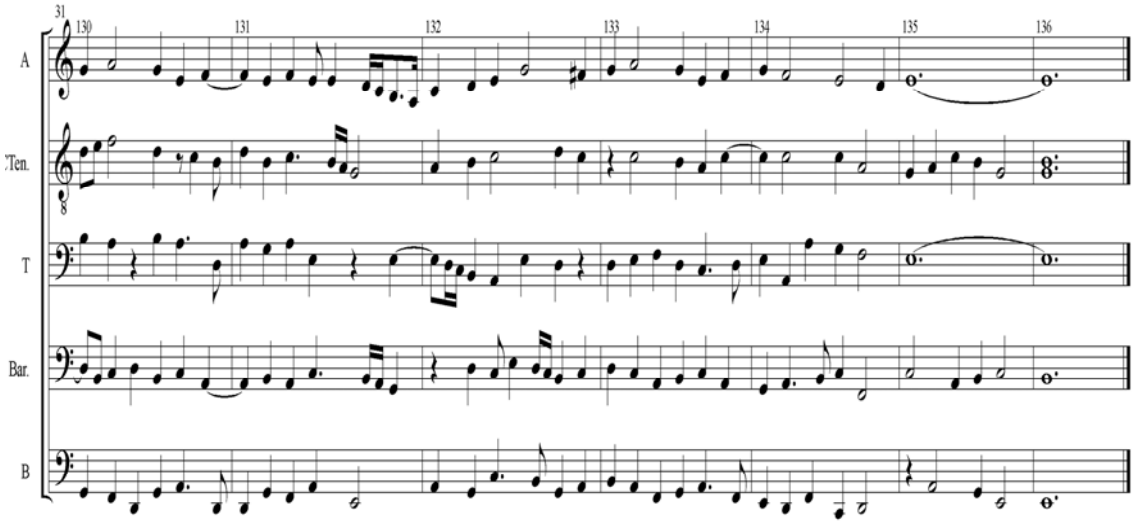
[65] See Besseler, Heinrich. *Bourdon Und Fauxbourdon; Studien Zum Ursprung Der Niederlèandischen Musik*. Leipzig,: Breitkopf & Hèartel, 1950;
[66] See Margaret Bent. Judd, Cristle Collins. *Tonal Structures in Early Music*, *Criticism and Analysis of Early Music ; V. 1.* New York: Garland Pub., 1998;

structural harmonic was already developed and known to Ockeghem, I suggest *periodicity*[67] would not have served his musical intent, that intent being the seamless continuity of flowing musical lines creating a sense of otherworldliness or spiritual transcendence. The structural harmony of classic music is clearly a means to define music in a rhetorical argumentative form, to make itself referential, to make intellectual commentary, or to create ordered linear discourse. These classical objectives are clearly pointed out by Leonard Ratner in his book Classic Music:

> "Structural parallels between music and oratory follow a clear path through music theory of the 17th and 18th centuries. Just as there were rules for organizing an oratorical discourse, so were there explicit prescriptions for building a musical progression. Both language and music had their vocabulary, syntax, and arrangement of formal structures, submitted under the title Rhetoric."[68]

For Ockeghem intervals were almost exclusively a result of the continuous contrapuntal flow of voices (lines), and only used, in the classic structural sense, like a post script to the body of the work, i.e. a form of closure, even then, Ockeghem's use of cadence of minimal and often ambiguous. For example, here are the final bars of *Intemerata Dei mater:*

[67] "Periodicity represents the tendency of classic music to move toward goals, toward points of punctuation Ratner, Leonard G. *Classic Music : Expression, Form, and Style*. New York: Schirmer Books, 1980; 33.
[68] Ibid; xiv. Ratner goes on to cover the multitude of rules formula invented for use in traditional classical music: Topics (poetry, dance, ceremony, the hunt, military march, etc.); Periodicity (cadences, symmetry) – Harmony (systems) – Rhythm (arrangement) – Melody (melodic rhetoric) – Texture (framework) - Form (sonata, etc.) – Stylistic Perspectives (Nationalism, High and low)

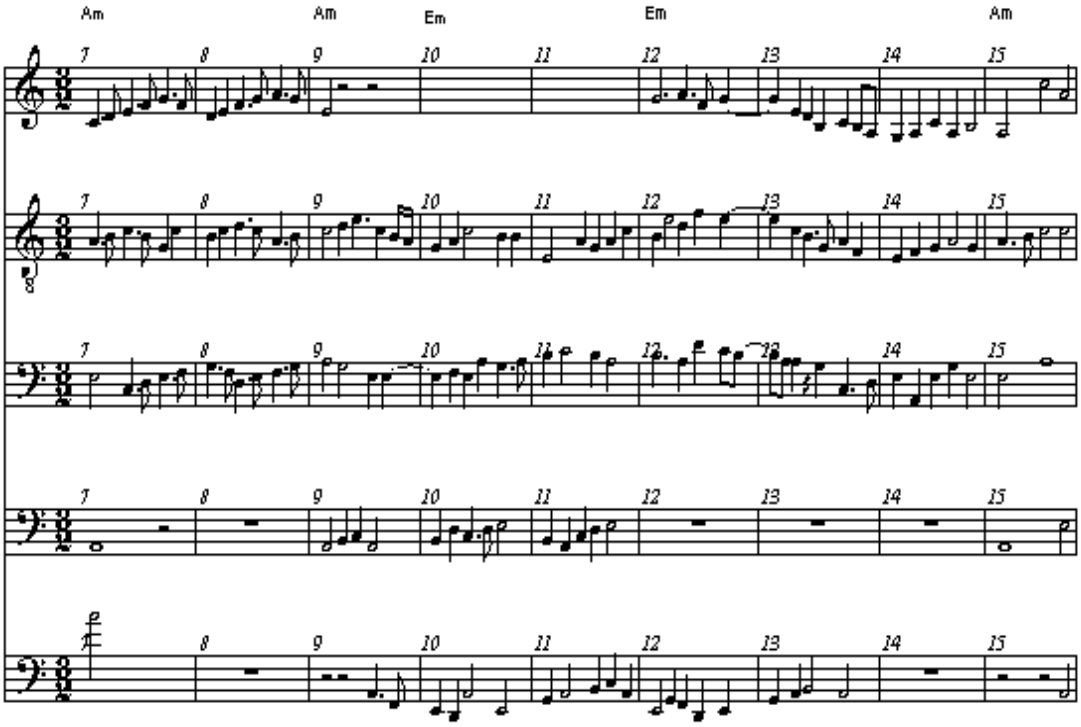


Instead of giving us a final cadence to end the piece, Ockeghem ends with a pedal point, or suspension, on Emin when the natural inclination would be to resolve to Amin instead. He does this by introducing E in the first and third voices, bar 135, and tying them through to the end. The other voices are more or less wanting to resolve to Amin through the first three beats, adding the G in the bass on the 4th beat throws the listener off a bit and then he moves the to Cmaj instead of the expected Amin resolution and then resolves the C to the 5th of Emin or the B. While the ending indicates Phrygian-like cadence, I suspect that the listener is ultimately left only with a sense of suspension in order to suggest, again, that the music is non-rhetorical and instead is only to be experienced as transcendence.

A further detailed harmonic analysis of Ockeghem's work might be an experimental and somewhat risky effort. However, since tension and release of dissonant / consonant intervals does play an important role in Ockeghem's

method of creating mystical ambiguity or morphing from one “sound flow” to another, and in creating amorphous cadences which leave the listener with a sense of suspension and, most often, without unequivocal closure, I will use some anachronistic but familiar harmonic terms in order to give sense to the harmonic field this use of intervals elicits.

Example: bars 7-15:



Bars 7 and 8 led step wise into an Amin tonality in bar 9 leading without hesitation into a E(min) tonality, albeit modal, in bar 10, setting up a modern listener’s anticipation of a simple I-V-I cadence at bar 11. However, instead of a cadence, Ockeghem again gives us an extension of the E tonality in bar 12 creating a heightened sense of coming closure through prolongation. Our modern ears (perhaps older ears as well?) are once again thwarted because

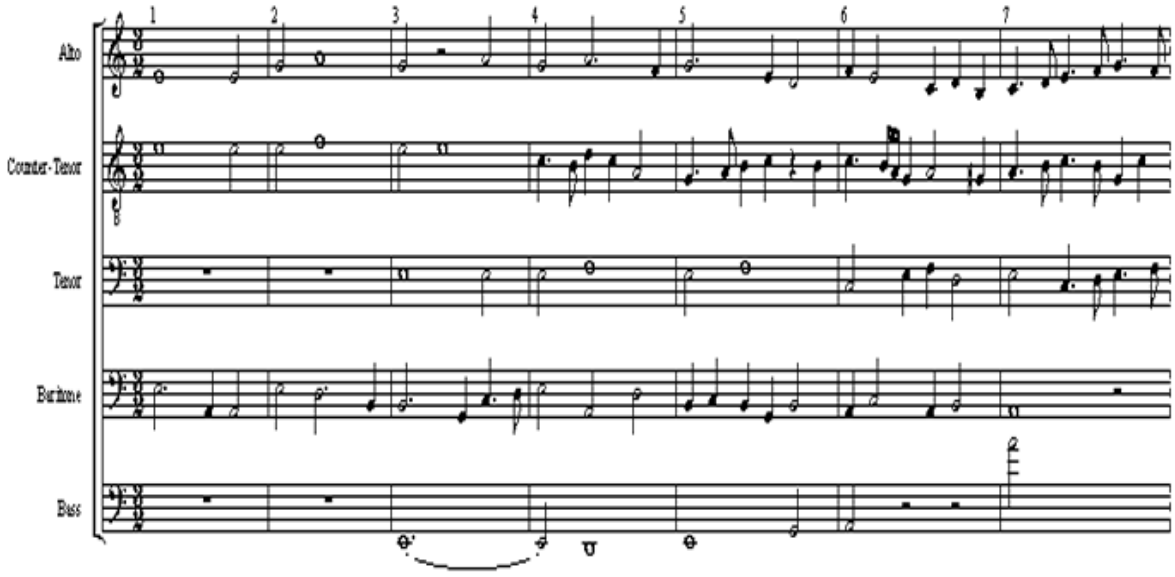
instead of landing on Amin the E is further extended but intensified with the introduction of the high G on top and stepping through a Dmin back to Emin but with another suspension 6-5 (C-B) and further cycling of Emin (v) and Amin (i) through C (IV) until finally giving us a slight breather at bar 15 by landing on Amin, but not for long as the immediate movement from A to B continues to move us onward.

The “harmonic” field remains fairly consistent throughout *Intemerata Dei mater*. I will attempt to give a simplified overview of the harmonic structure, as much as it can be defined in the modern sense of harmony. Keep in mind that the overriding nature and compositional purpose of the music will always override the structural aspects as defined harmonically and perhaps with that in mind the reader may attach some additional significance to the “harmony” as it is defined.

The entire work is primarily focus around the following chords Am, Dm, G, [Em], and the additional supportive use of their dominant chords (or diminished substitutes) or sub-dominants EMaj, AMja, DMaj CMaj along with BbMaj and FMaj. Obviously these chords interlock in a multitude of ways channeling not only the homogeneous consonant and consistent flavor of the sound (music), but also acting, where required so as to induce a tonic dominant cadential “harmonic” relationship, or alternatively to induce a sense of suspension or even a kind of deceptive cadence. One significant missing chord in this mix is the dominant of Emin or BMaj. Interestingly, this lack of a dominant of Emin, takes nothing away

from its central role in *Intemerata Dei mater*. In fact, the lack of Eminor's cadential dominant preparation chord supports my argument about Ockeghem's musical intent. Emin is the "harmonic" beginning and ending *of Intemerata Dei mater*. It serves throughout, and most significantly in the end, as the only utilized chord that forces itself a tonal center without any "harmonic" support whatsoever. It is though the suspended unresolved ambiguity of Emin is, in fact, the default tonal center of the work since ambiguity, and free flowing discourse is at the nerve center and is this work's central purpose, as well as the relevant legacy for composers like Ligeti…

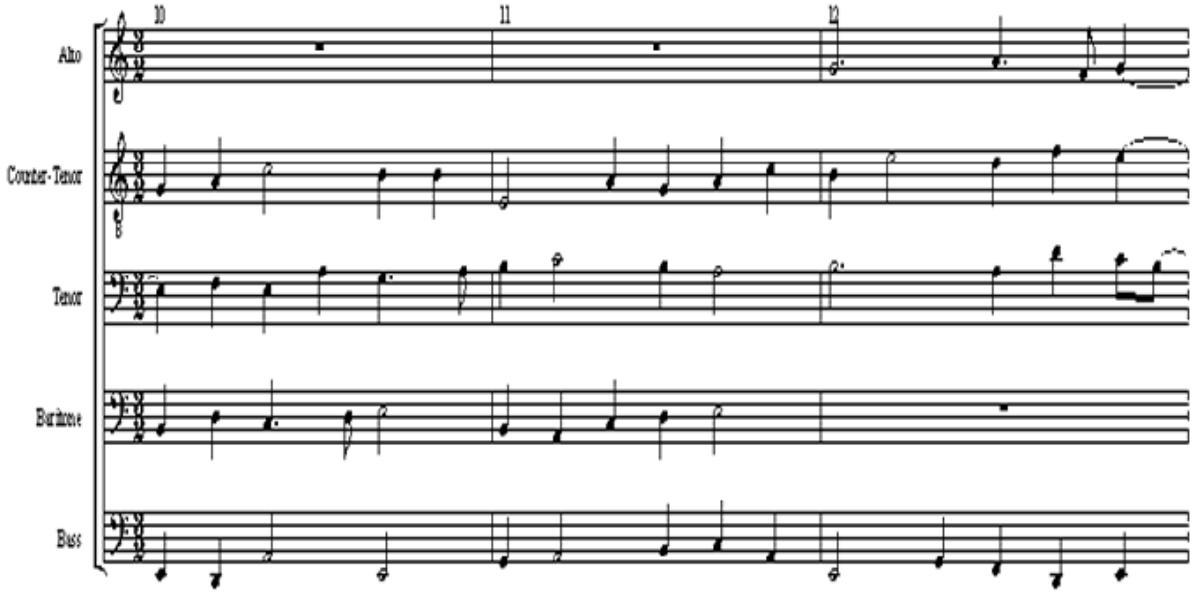
The music begins with six bars in a mixture of chords without a strong sense of key since, as often as not, important pedal notes (in the "harmonic" sense) or other identifying notes are left out of a chord, allowing the ear to hear it in any number of harmonic routes. For example the opening chord can be defined, and seems likely to sound as though it was an Emin. However, since the B is omitted and the E in the bass drops quickly to a repeated A, one could also hear it as an Amin7. Bar 2 returns to E in the bass, however the upper voice no longer doubling E moves up to G and then lands on A in the second beat, with the expected result being Amin - instead the lower voices spell Dmin, especially with the D in the bass. The D then drops to the B, which is repeated quickly on the downbeat of bar 3, this time giving us a clear Emin:



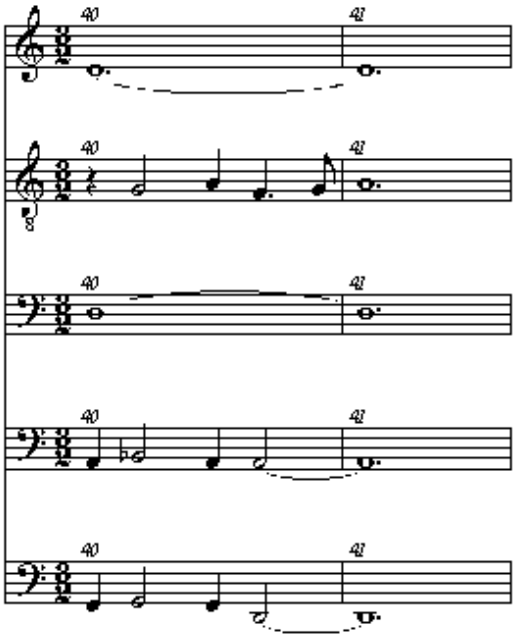
The inner voice G is repeated, followed closely by a strong reiteration in the bass signaling an first inversion of Amin but just as quickly moving up and passing through D leading to a momentary glimpse of CMaj in first inversion on the downbeat of bar four. However with an immediate movement to the low A in the bass spelling a first inversion of Dmin we are still in motion on a journey we know not where. A quick pass through C in a middle voice does nothing but suspend the sense of Dmin when it is reiterated throughout the rest of the bar (most notably with the D in the bass). Bar 5 revisits Emin, Amin, CMaj and Dmin in quick succession and in a matrix-like flow. However, bar 6 surprises us with the introduction of an FMaj chord in first inversion passing through Amin to CMaj, Amin and then suddenly an EMaj, taking us to the first relative sense of cadence on Amin at the odd numbered bar 7. However, the three major chord “cadential signal” of bar 6 is offset by the landing of the expected tonic Amin on the odd bar of number 7.

The tonal effect of Amin does not last long however as a new sense of tonal center takes fleeting jurisdiction in bars 10 and 11 (prepared by the two previous bars). The movement to Emin as a tonal center is not created by any traditional cadential means, but rather by strong prolongation and reiteration of Emin for two entire bars which leaves the listener no choice but to accept Emin as where we have "glided" to. This two-bar type prolongation plays a significant role in *Intemerata Dei mater;* Ockeghem uses this technique five separate times throughout the work, most importantly in the final two bars which, as previously noted, leave us with the suspended floating sensation and the ending "question mark."

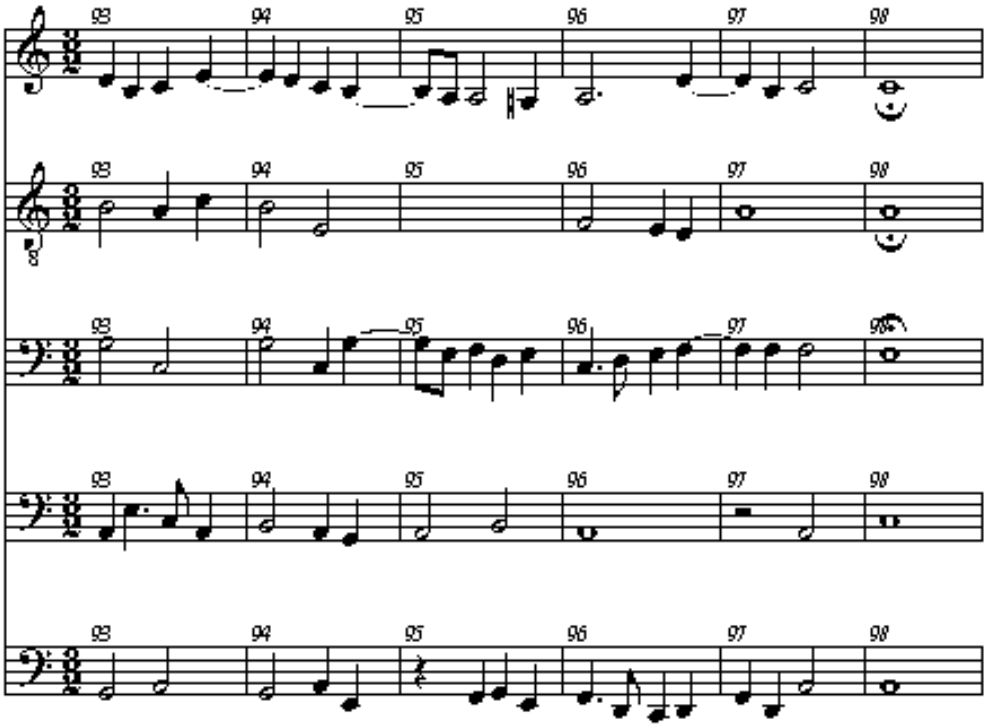
Bars 10-12:



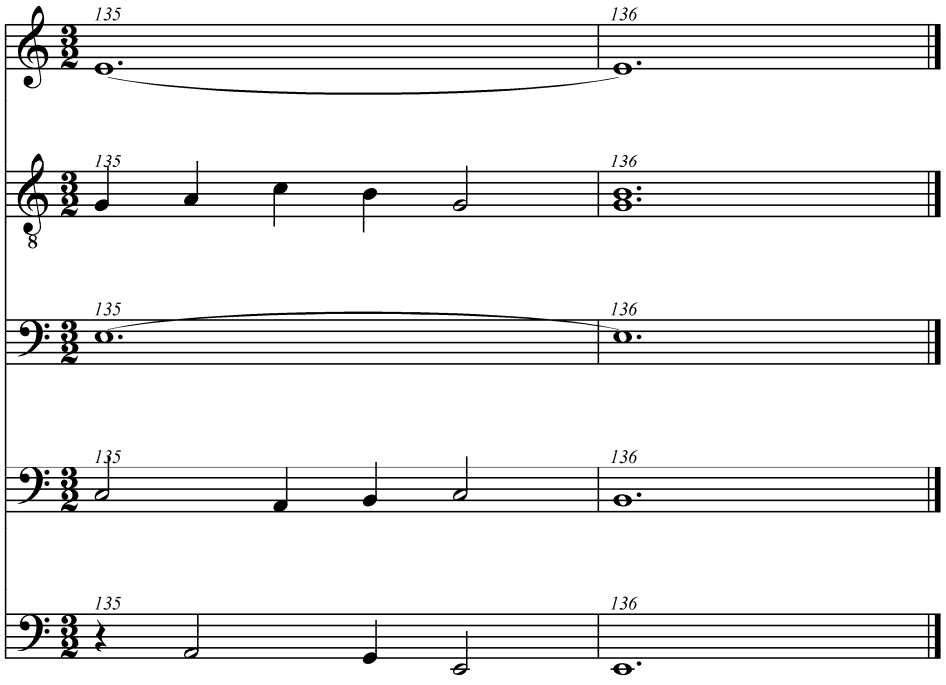
Bars 40-41:



Bars 93-94 though 96-98:



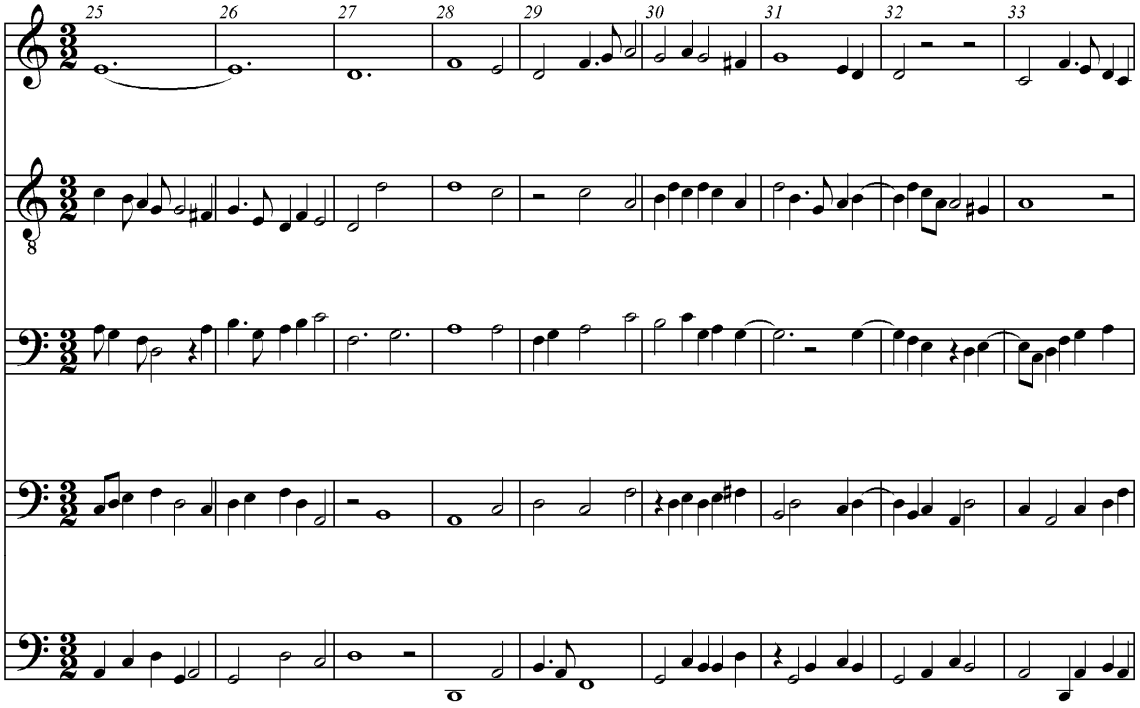
Bars135-136:



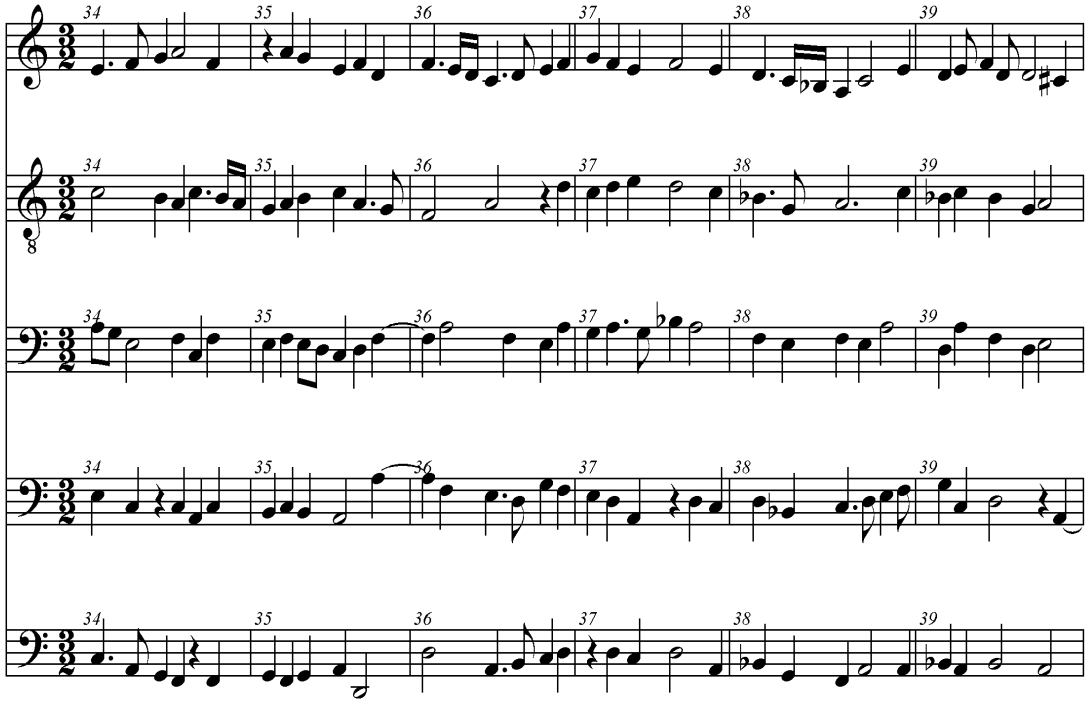
Another important use of this technique comes in a long stretch from bar 15 where Amin has been established by a soft cadence (using Emin instead of EMaj as the dominant preparation) through a series of Emin, F, Amin (tonic suspended on B) , Amin, Emin – Amin, or in numerical terms v-VI-i-v-i. From the downbeat of bar 15 all the way through bar 25 we get a streaming flow of Amin with all surrounding pitches moving constantly in step motion to invoke a feeling of undulation rather than any sense of harmonic progression. Then suddenly without warning, on the upbeat to bar 26 we get the dominant of G (or D - in the dimished form without the D) - an unusual and weak cadence to GMaj.

Not coincidentally, the constant intricate counterpoint stops and for the first time there is rhythmic pause with two bars of long held notes dominated by the Dmin

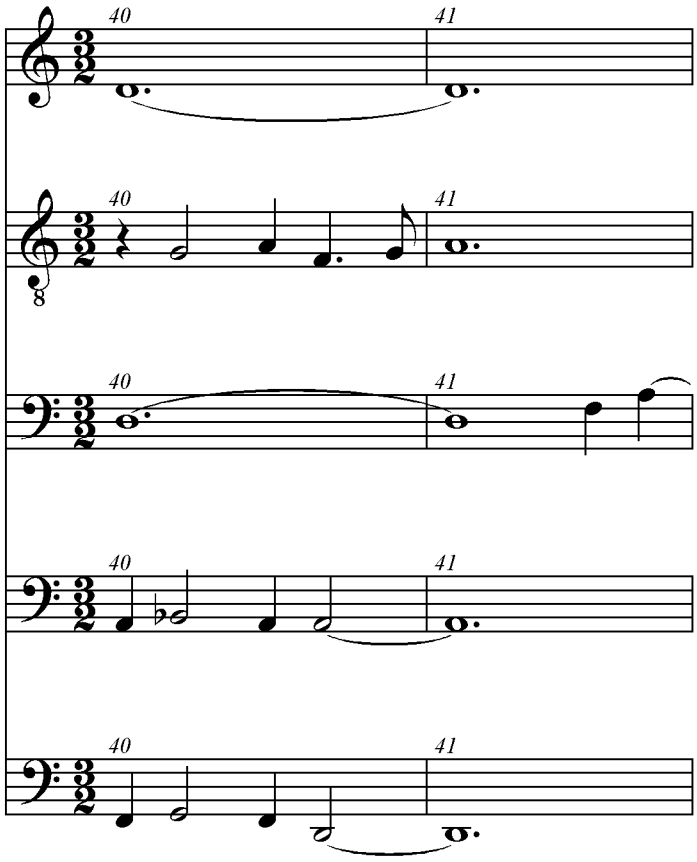
in this case acting as a min V of G and confirmed by the movement between bar 29 and 30 of VII-I or F-G and between 30 and 31 of V-I or D-G. From there we get a two bar prolongation of G which is short lived by the strong V7-I cadence back into Amin (or E7-Amin) at bar 33 (another odd number strong cadence):



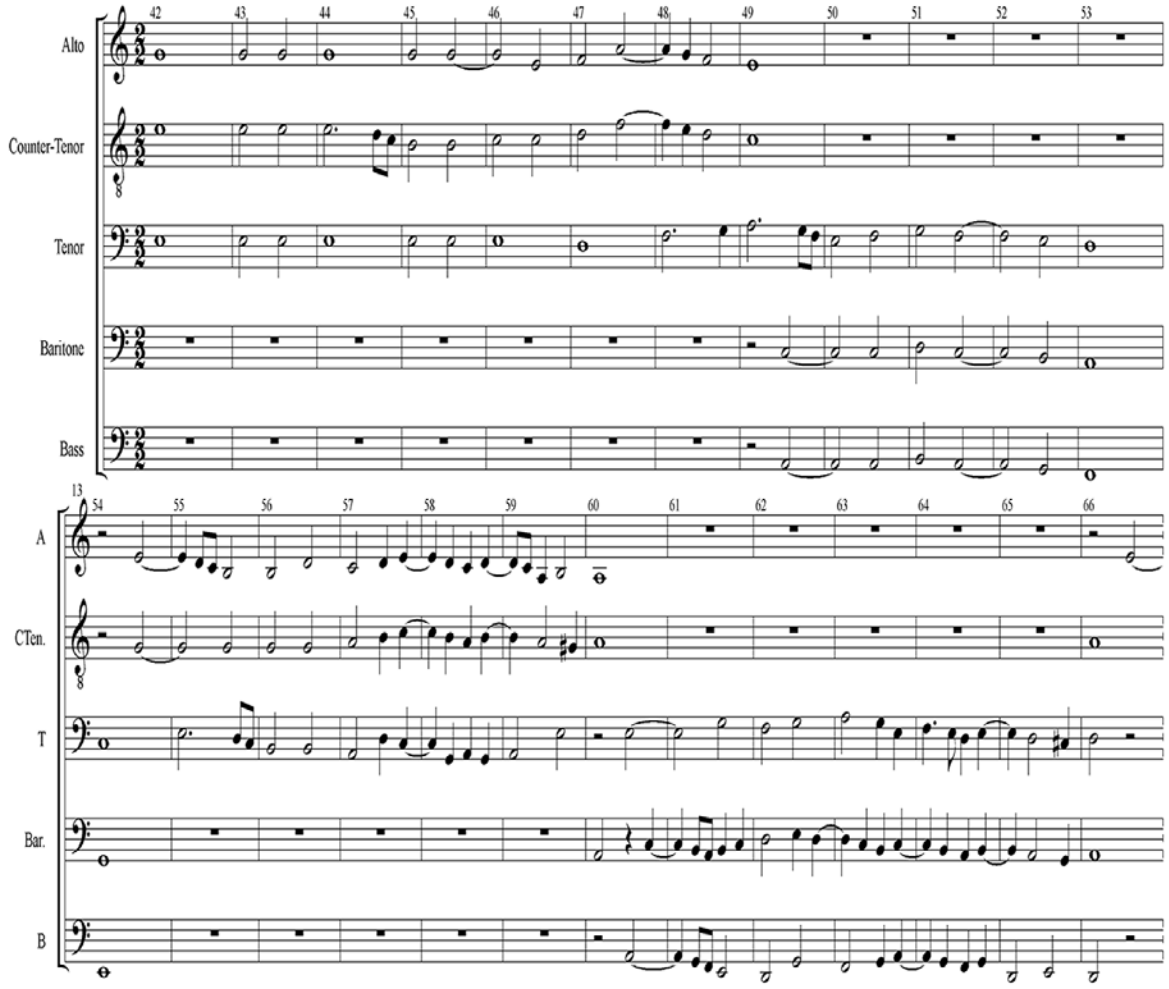
From the cadence at bar 33 in Amin, the sense of Amin is prolonged through a rocking around Amin, Emin and Dmin until the introduction of BbMaj at bar 38 which signals movement to Dmin at bar 40 and acts as a IV of Dmin. The cadence into Dmin is supported by the sudden shift from Amin to AMaj at the upbeat to bar 40 (V-i):



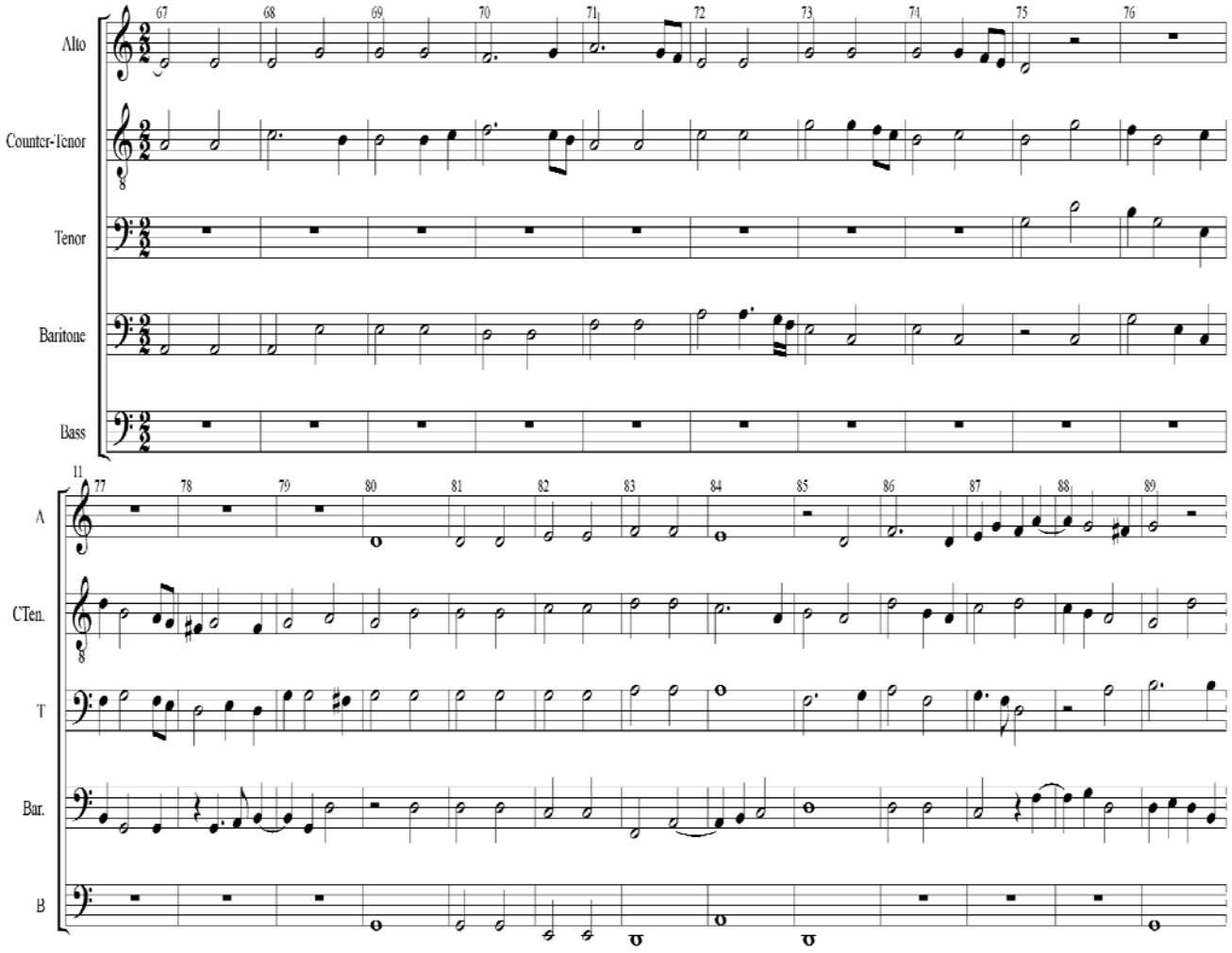
Bar 40 and 41, is another use of a ‘soft’ cadential prolongation that we saw earlier (see bars 10-11). The significance of this two bar prolongation technique is solidified here as it is followed by and most curious shift to another musical level. We not only are suddenly faced with only the upper voices on long held notes (as opposed to the constant contrapuntal flow that has continued almost unabated – except for bars 27-28), but we have a strong declaration of Emin, without any preparation whatsoever, except in that it has been a constant supporting presence since bar 1 - this is clearly new territory:



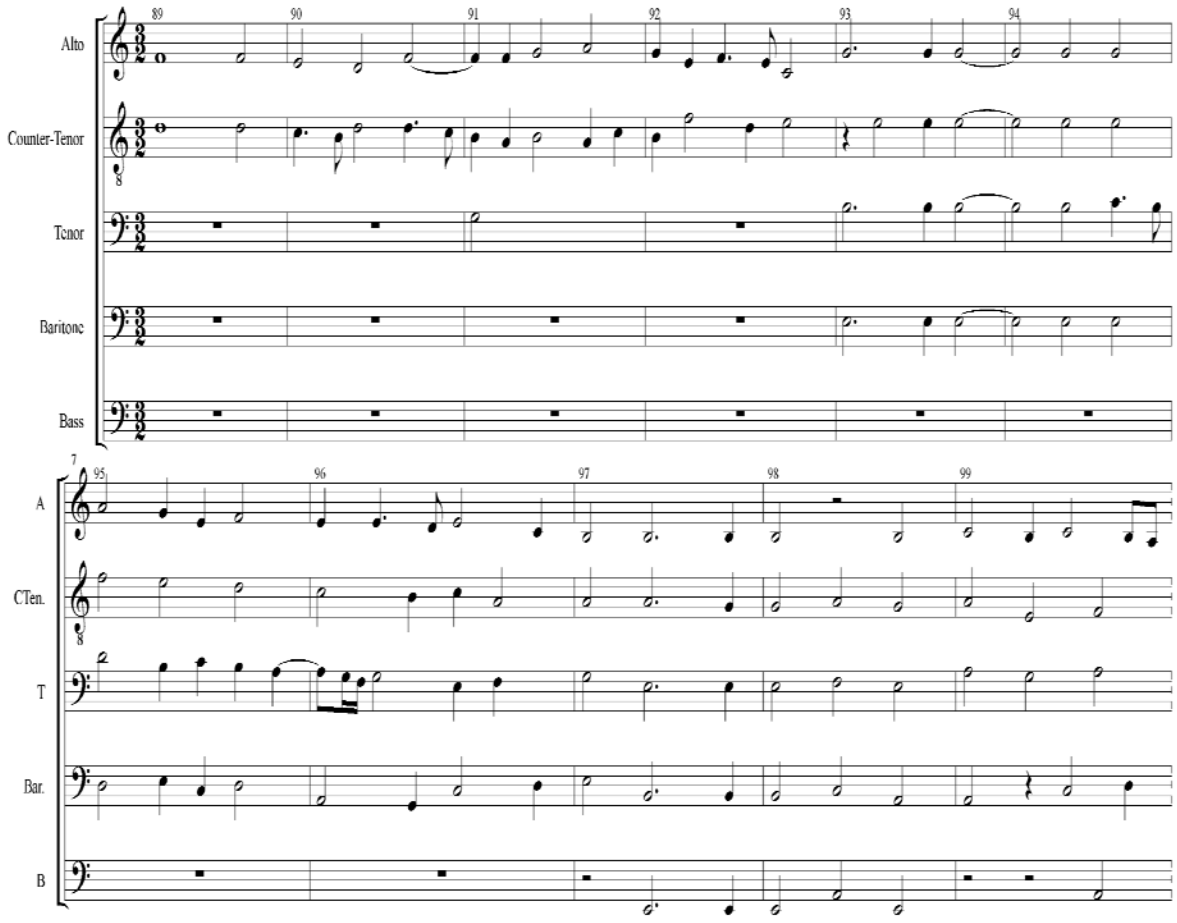
After the sudden leap to Emin at bar 42 we get a very soft movement to Amin at 49 (v-i) and the drop to the lower voices which “must give us pause” (as Shakespeare would say). Again the voices move to the upper range as the sense of pervading serenity passes from Amin through Dm and up to G. Even the stronger V-i (E-Amin) cadence at bar 59 firmly placing the music in Amin in the lower voice doesn’t break the continuity of flowing lines and it is followed within a few bars to a rising once again to the upper voices on a V-I cadence to Dmin, In other words, we are passing through tonal centers without a solid foundation and with the movement of range up, down, up, down and up again we get that overriding musical undulation and flow as mentioned earlier in this section:



The section between the arrival of Dmin at bar 66 gives us a similar sense of floating without the undulating range shifting, but with open and light vocal writing and a slight increase in contrapuntal movement until we arrive with another V-I (D-G) cadential shift at bar 80 on Gmaj. Like bar 42 the shift back to a homogenous rhythm is a prolongation of GMaj through the second GMaj cadence at bar 89:



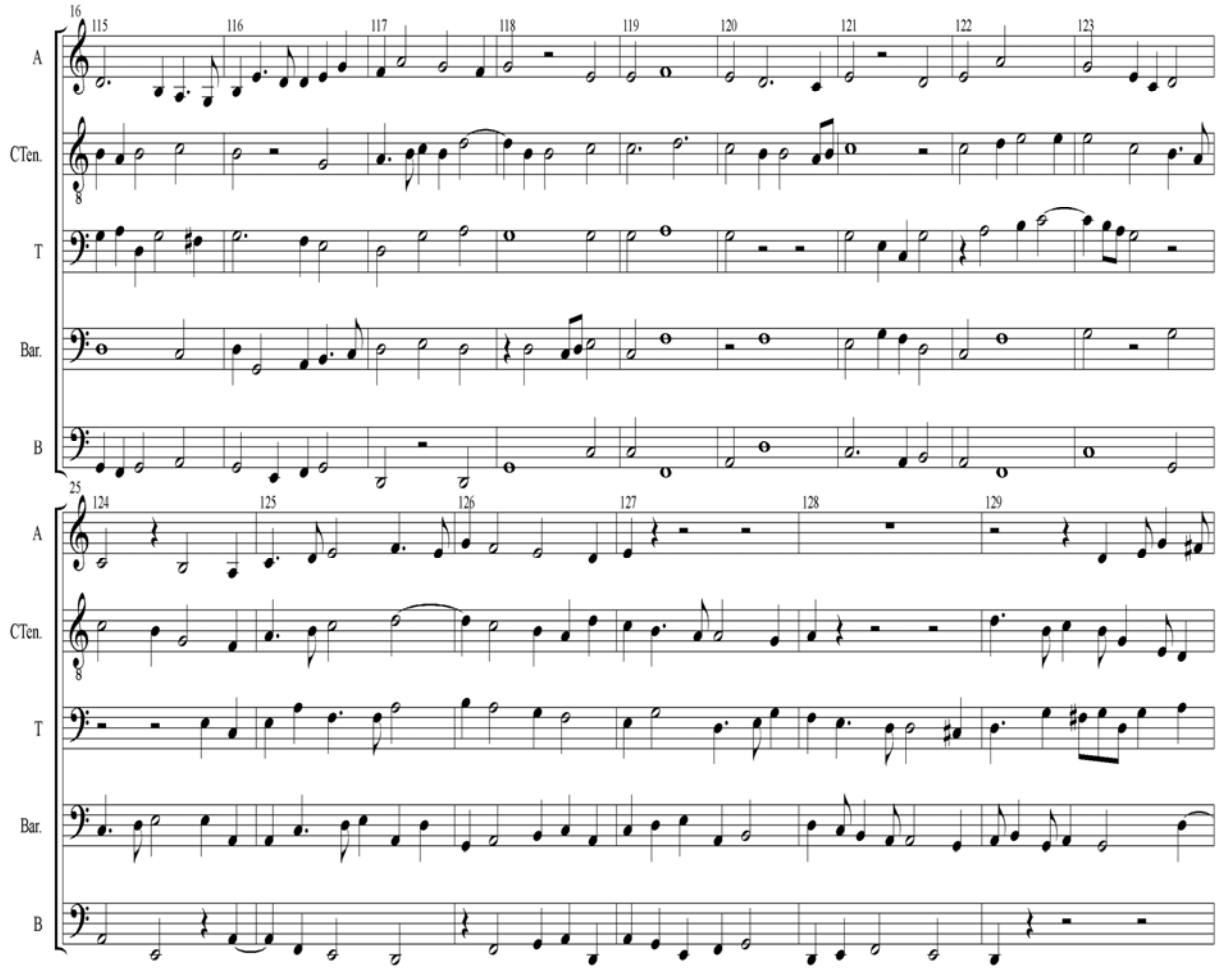
From the GMaj cadence at bar 89 the music drifts back slowly to Amin with a very weak almost false cadence at bar 96 on Amin, however the tonality is strengthened first by our old friend the 2 bar prolongation (an Ockeghem mode of cadence?) seen earlier and then with a soft landing at bar 99 by way of VI-I (F-Amin). And even here, though we are clearly landing in Amin, the subtle and constant sifting of the "tonal center", seemingly endlessly throughout the work makes the Amin unstable and sounding like a suspension:

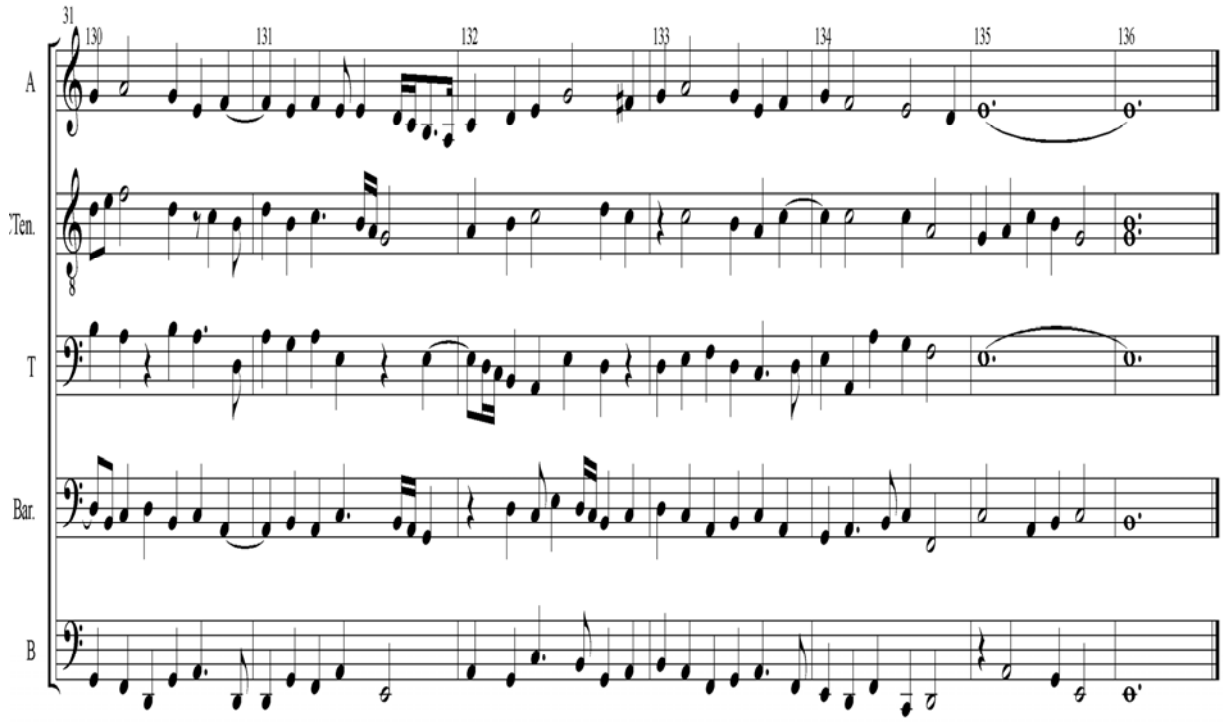


And once again (like bar 40-41 into the sudden Emin bar 42), just when we think we may be preparing to land (if you will excuse the flight analogy), we catch another wind and are lifted up both in timbre (upper voices) and in “harmony” to Dmin at bar 99.

Like a bookend, this timbral excursion is short lived as we have the entrance of 4 voices by bar 103 and all voices by bar 107 and the beginning of a contrapuntal complexity developing intensely through to the end of the work. Between Bar 104 and bar 118 we pass fluidly through the primary tonalities of Amin, Emin, Dmin, and G, and even at the moment when previously we might have gotten

some kind of momentary cadence on G, this time a sense of arrival at bar 118 is foiled as by the movement in the Contratenor from B to F natural on the 4th beat and the F natural final beat in the Alto voice bar 117 moving to G. This elaborate cadential deception only works because we started the work with a slew of pitches moving from v-i and then began to get numerous, but quickly shifting, V-I moments - suddenly we are back to a even more ambiguous v-i (Dmin-G). If not for the relentless unstable tonality of the work this moment would have sounded like wrong notes, but here it is in perfect union with the nature of the music and thus, sounds “perfect.”





From this moment on, the music, with great contrapuntal complexity and deftness, flows through our various “harmonic” constituents for the 20 final bars. Even the V-I (A-Dmin) cadence at bar 128-129 sounds only a passing daydream as does the immediate reiteration of V-I (D-G) in bars 129-130. The music seems to train the listener’s ears to expect the unexpected - a continuous flow of events and a total acceptance of the endless ocean of sound. The work ends with the two bar prolongation in Emin! A suspension of disbelief has now engulfed the listener and the ultimate and final ambiguity leaves us breathless.

SUMMARY (RAMIFICATIONS)

> "My overriding concern throughout has been to help lift the veil from what Lawrence Bernstein has termed Ockeghem's "aesthetics of concealment". Ever since Manfred Bukofzer's path-breaking study on the *Caput* Masses, scholars have conceded that Ockeghem's music is far more easily discussed in negative than in positive terms. But the oft-expressed opinion that Ockeghem seems to eschew traditional means of formal articulation (like cadences or 'structural' imitation) is only partly true: he does not so much eschew as subvert them. If such devices as cadences and repetition of material were entirely absent, the result would be an incoherent musical syntax. Yet even at his most radical – say, in the *Au travail suis* Mass – Ockeghem is never incoherent. Rather, the secret of his art lies in the deftness with which he covers his tracks. Thus the twin themes of subversion and concealment run like Leitmotivs throughout his work." Fabrice Fitch. *Johannes Ockeghem Masses and Models*.[69]

What was Ockeghem trying to accomplish with his avoidance of strong cadence and his rejection of more modern unifying structural harmony and harmonic rhythm available to him at the time, techniques extensively used by his contemporary, French composer Guillaume Dufay?

In the following quote Manfred Bukofzer elaborates on the stylistic differences between the more "traditional" (although considered the more modern at the time) Dufay, and his fellow composer, Ockeghem:

> "The progressions of triads in Ockeghem's music are in their lack of tonal direction perfect examples of such modal harmony. Both Dufay and Ockeghem combine modes in their music in the manner described by Tinctorus. However, they differ so strongly in regard to harmony because Dufay, in his late works, adumbrates incipient tonality by means of his modern cadences whereas Ockeghem avoids them, subordinates chords to part writing, and creates the impression of all-pervading "modality." His modal harmony is directly bound up with his melodic design, his avoidance of cadence, and his conception of counterpoint; it is thus part and parcel of his general style."[70]

[69] Fitch, Fabrice. *Johannes Ockeghem, Masses and Models*, *Collection Ricercar, 2*. Paris: H. Champion, 1997;. 9

[70] Bukofzer, Manfred F. *Studies in Medieval & Renaissance Music*. [1st ed. New York,: Norton, 1950; 291

Using the terms described above by Fabrice Fitch, what was the purpose of Ockeghem's "twin themes of subversion and concealment"? In the following quotation, again referring to the differences between Ockeghem and Dufay's compositional methods, Bukofzer hints at the primary purpose for this stylistic gap as it relates to Ockeghem's musical intent:

> "The avoidance of cadences… accounts for the restless continuity so highly characteristic of Ockeghem's music…. The desire to create a ceaselessly flowing style manifests itself strongly in the melodic design. While Dufay's melody (Caput Mass) progresses in nearly juxtaposed phrases and receives direction from, and in turn sets a goal to, the cadence, Ockeghem's overlapping lines hover in midair because they are not securely anchored at the fixed points the cadence would normally provide. For this reason they lack directive forcefulness of Dufay's motives, undulate in seemingly contour-less and irrational fashion, and are bound only to their own intervallic progressions. Their particularly restive yet gentle quality and their endless floating would perhaps be most fittingly described by the term "endless melody," which is actually more appropriate here than in Wagner's music." [71]

Ernst Krenek, in his 1953 biography of Ockeghem, *Johannes Ockeghem*[72] was, perhaps, along with Manfred Bukofzer, one of the first to dispel the long-standing misnomer that Ockeghem's musical intent was strictly cerebral, that he meant to overwhelm the listener with complexity, therefore making it enjoyable only to theorists and musicologists.

> "For up to recent times they [scholars] were unanimous in pointing out that his contribution was mainly theoretical. In Cecil Gray's *The History of Music* we read, for instance: "…Ockeghem is a pure cerebralist, almost exclusively preoccupied with intellectual problems, and the most typical example in music of the kind of artist who, in the hackneyed phrase for which there is no adequate substitute, goes out of his way to create difficulties for the pleasure of overcoming them."…We are not surprised to observe that in the nineteenth century, in which these opinions on Ockeghem were formed, nobody bothered about excavating his music

[71] ibid.
[72] Ernst Krenek;

> from its dusty repositories in remote archives.….What puzzles the modern observer who is able to study the great majority of Ockeghem's works available in our time, is the question how those earlier scholars arrived at their quite articulate opinions about the character of the Flemish master's music. They admit that very little of it was known to them.[73]"

> "The modern composer will be especially attracted to Ockeghem by the master's unusual and imaginative treatment of dissonance, by his boundless freedom in rhythmic and metric matters, and by his capacity for spinning forth tirelessly vibrating melodic lines over extraordinary spans.[74]"

More significantly and for the first time, since its creation, Manfred Bukofzer was able to make a case for the beautiful and spiritual nature of Ockeghem's work.

> "…to put it bluntly, how does Ockeghem manage to be "mystical" in music? Looking back on the salient characteristics of his style, we find that he renounces with amazing consistency all customary means of articulating a composition: cadences, profiled motives, symmetrical phrase structure, lucid interrelation of parts, imitation, sequences, prominence of one voice over others, and so forth. Even the larger structural aspects of the composition are made subservient to this end.[75]"

As discussed in the Introduction to this study, it was probably no coincidence that it was during this period that early music was finally made available through scholarship and began to see many credible performances in Europe and in North America. Many previous scholars over the centuries had extremely limited first hand knowledge of Ockeghem's works, and based their writings almost exclusively on clinical studies of surviving manuscripts. I also doubt it was any coincidence that with the sudden increase in performances of early music, and meaningful scholarship, such as that by Bukofzer, György Ligeti would have come across, and been influenced by, the music of Ockeghem.

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[73] Ibid.

[74] Ibid.

[75] Manfred Bukofzer;

Bukofzer's analysis of Ockeghem's music, focuses on the techniques which Ockeghem used to create a sense of continuous flow and prolongation of closure:

> "The interdependence of autonomous lines is clearly reflected in the unusually complex phrase structure. In part writing such as this the voices do not coincide in their points of repose; the phrases are of uneven length and cannot, therefore, cadence together. The asymmetrical and individual phrase structure of each part strongly reinforces the independence of lines. The continual stream of overlapping phrases brings us to the most striking single factor in Ockeghem's music: the avoidance of cadences. He has a veritable *horror vacui* and betrays a strong disinclination to interrupt the continuous intertwining and overlapping of lines or to arrest the flow of voices in simultaneous halts." [76]

Bukofzer ultimately concludes that the veritable objective of Ockeghem's "all-pervading 'modality'" is to create a mystical musical experience, and he (Bukofzer) describes with utter clarity the means by which Ockeghem achieves his objective:

> "Ockeghem's sacred music has been justly associated with the ecstatic fervor of the *devotion moderna* [Bessler, *Musik des Mittelalters und der Renaissance,* 237), the "contourless, mystical Neo-Gothic," and the late Gothic efflorescence of the North which "once more resurrected all the fantastic richness of Gothic art [Paul H. Long, *Music in Western Civilization,* New York, 1941. 184. 186.]." …. We have here no less than a far reaching renunciation of rational organization in music, and that is why we are justified in speaking of musical mysticism. Ockeghem's methods of composition can be rationally analyzed, however irrational their effects may be. The listener is deprived of any regularity that sets up the feeling of anticipation; he can only passively follow the unfolding of lines and be carried by their unpredictable rise and fall. Just as in the flamboyant style of the late Gothic cathedrals the structural pillars and supports are hidden beneath and infinite network of ribs which branch out and interlace in delicate and seemingly endless ramifications, so is, in Ockeghem's Mass, the cantus firmus covered up by the unending and irrational flow of lines. Significantly, the lack of rational articulation can be described only in negative terms, which assumed prime importance also in the "negative

[76] Manfred Bukofzer; 284

> philosophy" of the time – in the *docta ignorantia* of mysticism, which found its last great representation in Cusanus, whose connection with the *devotion moderna* is well known."[77]

While I completely agree with Bukofzer's assessment that the purpose of Ockeghem's structural concealment was actually mystical (spiritual) rather than intellectual, I must take issue with his metaphorical conclusions likening Ockeghem's work to the "flamboyant style" of a late Gothic Cathedral. The whole of this study has rendered it impossible to use any physical edifice in a comparative analogy to the music set forth in these pages. Only in the cloaking of human construct, and the evanescent pull of unidentified forces, can we find an appropriate analogy – and the keys to the "kingdom."

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Perhaps, due to its writing and publication in the 1990s, Daniel Leech-Wilkinson fares a bit better in capturing the essence of Machaut, than Bukofzer does with Ockeghem, in his *Preface* to Machaut's Mass:

> "Guillaume de Machaut's *Messe de Nostre Dame* has some of the qualities of the great Neolithic circle at Stonehenge. It functions as an imposing vehicle for worship; for its creator it represents a triumph of construction; while to us it is a work whose magnificence dwarfs all that survives of its age."[78]

While he alludes to the Neolithic Circle at Stonehenge as a comparable vehicle for worship, and therefore implies space, he still wraps it all up in an imposing and quite visible monolithic construction.

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[77] Manfred Bukofzer; 291-292

[78] Leech-Wilkinson, Daniel, and Guillaume. *Machaut's Mass : An Introduction*. Oxford, England New York: Clarendon Press ; Oxford, 1990; --

Bukofzer's and, to some degree, even Leech-Wilkinson's conclusions can only make sense within the confines of a Western scholar's use of historical metaphor, and the general understanding of spiritualism in the mid-twentieth century, but that understanding of spirituality (mysticism) was inadequate and parochial. Since 1950 our comprehension of the nature of "otherworldliness" has expanded due in part to general evolution, new technologies and information sharing, the influence of the eastern philosophies on western thinking, the beginnings of a awareness and experience of "world music" to the western ear, and the entire counter-culture movement beginning in the beatnik era leading into the dynamic and revolutionary 1960s, and early 1970s, when Ligeti wrote the work we have examined in these pages.

In this writer's opinion, in order to comprehend musical mysticism, or music and spirituality, neither Machaut's, Ockeghem's or Ligeti's work, can yet be likened to human "edifice of sound" or any venerated monument to man's invention. We must look beyond the controlled construction of classicism, whose primary purpose is cool self-edification, sociocultural dialogue. Kofi Agawu describes some of that "classical" discourse in plot-like terms (sometimes secret agenda):

> "…a confrontation between high and low styles, an episode from a commedia dell'arte, a critique of an Enlightenment world view; these are sample plots developed for various Classic pieces." [79]

[79] Agawu, V. Kofi. *Playing with Signs : A Semiotic Interpretation of Classic Music*. Princeton, N.J.: Princeton University Press, 1991; 130

Are we are capable of creating a physical manifestation of that which is not of this world (God-like)? When we explore the very essence of music, and what sets it apart from other forms of art, we discover that music is ultimately unearthly and non-literal, and while music can be made to suggest certain literal things (like the famous storm in Beethoven's Pastoral Symphony) in reality the storm suggestion has been mentally planted by programmatic suggestion and the actual music has no literal meaning whatsoever – no universal meaning that can be translated so that all can perceive in exactly the same way the same way. When we see the word apple, we all envision the same thing, albeit in different varieties (although through cultural conditioning a Red delicious would likely come to mind). When a painting of an apple is exhibited, everyone sees exactly the same thing. It is only through discourse and communal agreement that people can assign meaning to music, however abstract. Kofi Agawu argues that there are structural levels to "classical style" from purely music to topical blatancy:

> "My argument has been that both the purely musical signs discussed in this chapter and the topical signs discussed in the previous chapter contribute equally to the articulation of this drama [referring to Mozart's String Quartet in D Major, K. 593]. I mean, therefore, to challenge the supremacy accorded structuralist interpretations of Classic music (and tonal music in general), and to argue for a more expanded interpretive framework. I have not, however, proposed a verbal narrative for this piece, although Ratner's scenario retains a bounded temporality. The reason is that such narratives usually trivialize the complex play of temporal forms by privileging a single one of those forms – the flow of events comparable to those of a story or drama. There is, of course, nothing wrong individual listeners resorting to such discourse, so long as its claims are not stretched unduly."[80]

[80] ibid; 79

The "classical" dominion over musical culture since the 16th century is simply the result of the ever-developing egoism of humanity, a determination for personal power and the adoration of objet d'art which demonstrate self-veneration. However, it is because music has no pre-ordained quintessence that a multitude of artists and scholars throughout history have come to define music as the supreme (spiritual) art form. Because of music's non-literal, non-referential nature, writers and visual artists in the romantic and modern periods have tried to emulate, and idolize, even going so far as to give their works musical titles, such as *Ghost Sonata*.[81] This attempt at emulation is perplexing, since the majority of these literary, visual and theatrical artists equated their work, as proven by their choice of title and other documented considerations, with the least spiritual of music's manifestations, "the classical tradition" -- the most self-referential, self absorbed and humanly structured of all.

The music of György Ligeti and Johannes Ockeghem have in common an invisible framework upon which they built undifferentiated progressions of massive counterpoint. The result of this exercise in freedom, and sublimation of ego, is a musical work that is bigger than the sum of its parts. The works examined in this dissertation have much in common: all can be analyzed in a reverse Schenkerian-like method[82]; all can be heard to capture the "higher plane" through negation, or the sublimating of the structural content; all are non-referential of individual narrative; all strive for a transcendent experience through

[81] August Strindberg
[82] refer to Chapter 1; 26/73

music; and all thwart the potential for linearly directed structure by dissociated, seemingly free-floating musical lines, through which the listener may experience a spellbinding, and unanticipated, transcendence.

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