Yngve Horvei

Inventing Style

Compositional Techniques in Ligeti's Musica Ricercata

Bachelor's thesis in Musikkvitenskap Supervisor: Karina Valnumsen Hansen May 2023



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Norwegian University of Science and Technology Faculty of Humanities Department of Music



Foreword

On completing this Bachelor's thesis, I want to say a big tusen takk to my excellent

supervisor Karina Valnumsen Hansen, and all students and staff at NTNU Musikk. Further, I

want to thank the late György Ligeti for the privilege of immersing myself into his work in

this thesis. I also send my best wishes to Ligeti's family, friends and acquaintances as well as

everyone with a relationship to his music, regarding his imminent 100 year anniversary. I am

forever grateful for all the music that Ligeti left behind for us to listen to, play, think about,

write about and talk to our friends and family about until they ask us to stop.

Yngve Horvei, 21 May 2023

I

Abstract

This thesis explores the work *Musica Ricercata* for solo piano by Hungarian composer György Ligeti, written in 1951-1953. The work was written early in the composer's career, and at the time when his experimental style was not fully developed. Due to Hungary being a satellite state of the Soviet Union at the time, the country had a strict cultural policy forbidding certain musical styles, particularly those associated with the West and experimentalism. This led to the piece, due to its experimental nature, not being publicly performed until 16 years after its conception.

The piece has 11 movements, of which the first only uses two pitch classes; the second uses three pitch classes, and this pattern repeats itself until all 12 pitch classes are in use in the final movement. This experimental approach came from Ligeti wanting to define his own style "out of nothing", both to find his own voice as a composer as opposed to that of his early influences, and likely also as an act of rebellion in the regime.

In this text, I analyse *Musica Ricercata* movement for movement in order to discover the techniques that defined this style and resulted from this experiments. Both in how they effect the work and its aesthetic and musical qualities, as well as how they contributed to Ligeti's later compositional style.

Samandrag

Denne oppgaven utforskar verket Musica Ricercata for solopiano av den ungarske komponisten György Ligeti, skrive i 1951-1953. Verket var skrive tidleg i komponistens karriere, og på den tida da hans eksperimentelle stil ikkje var fullt utviklet. På grunn av at Ungarn var ein satellittstat i Sovjetunionen på den tida, hadde landet ein streng kulturpolitikk som forbød nokre musikalske stilar, særskilt dei som var knytt til Vesten og eksperimentalisme. Dette førte til at stykket, på grunn av sin eksperimentelle natur, ikkje vart offentleg framført før 16 år etter det vart komponert.

Stykket har 11 satsar, og den første av dei nyttar berre to tonehøgdeklasser; den andre nyttar tre tonehøgdeklasser, og dette mønsteret gjentek seg til alle 12 tonehøydeklasser er i bruk i siste sats. Denne eksperimentelle tilnærminga kom frå at Ligeti ynskja å definere sin eigen stil "ut av ingenting", både for å finne sin eiga stemme som komponist i motsetnad til hans tidlege påvirkninger, og sannsynlegvis også som ein opprørshandling i regimet.

I denne teksten analyserer eg Musica Ricercata sats for sats for å oppdage teknikkane som definerte denne stilen og resulterte frå desse eksperimentane. Både i korleis dei påverkar verket og dets estetiske og musikalske kvalitetar, samt korleis dei bidrog til Ligetis seinere komposisjonsstil.

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1. Introduction

I have often liked to think of György Ligeti's *Musica Ricercata* as a simplified, compressed and caricatured history of art music. The limits to pitch classes make the earlier movements mostly exhibit qualities in rhythm and dynamics, as any melodic or tonal qualities were restricted by the work's premise of a gradually increasing number of pitch classes. In the middle movements, as higher numbers of pitch classes are being applied, the concepts of melody and tonality become part of the pieces' musicality. Towards the latter third of the work, the tonality becomes gradually more free until it arguably dissolves in the final movement, employing all 12 pitch classes available on the piano. The work tells a story through a gradient of increasing tonal diversity: From relying on rhythmic dynamics in the beginning; to forming recognisable melodies using scales and keys in the middle; to letting chromaticism take over until all tonal hierarchies dissolve towards the end. It is a tale of music where the lack of boundaries ultimately wins. This rather dramatised way of hearing *Musica Ricercata* is one of infinitely many that are possible. Another is this: What can an artist do when they restrict the availability of their tools, and what can they do when they are required to use every single one of them?

Composed in 1950-1953, early in György Ligeti's career, *Musica Ricercata* for piano is an outlier among the composers other works from the same period. The work clearly breaks with the social realist style that was not only common, but mandated by the Soviet-influenced Hungarian People's Republic at the time. This made Ligeti keep the work strictly to himself, holding off its premiere until 1969, 16 years after its conception. The theoretical foundation of the 11 movements of *Musica Ricercata* is what the Hungarian government at the time might would deem *formalist*: Each movement limits its number of pitch classes to *n*+1, where *n* is the movements' placement in the order of movements. That is, number 1 is composed using 2 pitch classes (A and D), number 2 is composed using 3 (E#, F# and G), and this pattern is recurring until the 11th and final movement where all 12 pitch classes are in use.

Ligeti explained this theoretical experimentation as wanting to break away from the influences of Bartók and the post-Bartókian style, in a process in which he regarded the music

¹ Griffiths, György Ligeti, 78.

he already was influenced by as 'irrelevant'. This was a way of starting with a blank sheet when exploring different sonorities and rhythmic structures, creating a compositional study independent of his past influences. Ligeti himself said the following in the programme notes for a concert of his in 1978: "I asked myself: what can I do with a single note? With its octave? With an interval? With two intervals? With certain rhyth- mic relationships? In this way, several small pieces resulted, mostly for piano.2" This shows a motivation behind the theoretical structure of the work hinging on simplifying the creative process by doing as much as possible with narrow limitations. In the same note, Ligeti explained his thought process as "building a "new music", so to speak, out of nothing".

This is not to say *Musicca Ricercata* is without influences from preceding works and styles. Apart from the numerous comparisons that can be made to the works of Bartók and others, Ligeti also based several of the movements upon his own past works. Specifically, two of the movements are rearrangements of the *Sonatina* for 4 Hands by Ligeti in 1950. Movement 1 of *Sonatina* is similar to movement 3 of *Ricercata*, movement 2 of *Sonatina* is similar to movement 7 of *Ricercata*, whereas movement 3 of *Sonatina* does not appear quoted in *Sonatina*. Movements 9 and 11 state specifically in the score to be homages to Béla Bartók and Girolamo Frescobaldi, respectively, and the influences of these composers are notable in each of the two movements.

Despite being influenced by Ligeti's past works as well as preceding and contemporary music in Hungary, *Musica Ricercata* remains an outlier among Ligeti's compositions from the same period. It is an early example of the experimental style that would come to define his artistry, and a work that Ligeti himself would quote and reference much later in his career. This study aims to analyse Musica Ricercata, and discuss how its compositional techniques reflect Ligeti's desires to redefine his own compositional style through creative limitations and theoretical approaches. In addition to this, I aim to discuss the political traces in the work, and how it responds to the regime in which it was conceived. All this ties to the research question of what compositional techniques Ligeti employed in *Musica Ricercata* in order to develop his own style, as opposed to his own past influences and the expectations of the regime.

² Kérekfy, A new music from nothing, 205.

2. Ligeti: Historical and biographical context

György Sándor Ligeti was born 28 May 1923 in Transylvania, only 3 years after the region became part of Romania as a result of World War 1, having previously belonged to Hungary. His family was Hungarian Jewish, and considered by Ligeti to be artistic and musical, with notably Ligeti's great-grand-uncle being the violinist Leopold Auer.³ Ligeti started learning to play the piano at age 14, only after his only sibling, his younger brother Gábor, was discovered to have absolute pitch and therefore given violin lessons. Ligeti went to the Georghe Dima Conservatoire in Cluj, Transylvania to study composition in 1941, despite that studying physics was his first choice. New anti-Jewish laws, however, made entry to university difficult for Jewish applicants, making the conservatoire one of few available options in higher education. During his time at the conservatoire, he also received private lessons in Budapest with Pál Kadosa, an influential Hungarian post-Bartokian composer and pianist who has also taught several other important Hungarian musicians of his time, including György Kurtág and András Schiff.

In 1944, Ligeti's education at the conservatoire was interrupted when he was sent to a Hungarian forced labour brigade as part of the Hungarian Horthy regime's implementation of the holocaust.⁴ Regent of the Kingdom of Hungary, Miklós Horthy, was loyal to the axis during the war, and deported the country's Jewish population to nazi-run concentration camps, apart from young men of of working age and health, such as Ligeti, who were sent to work at domestic forced labour camps. Ligeti's parents were sent to Auschwitz-Birkenau, while Gabór, aged 16 at the time, was sent to Mauthausen-Gusen concentration camp. Only Ligeti's mother, Dr. Ilona Somogyi Ligeti, survived, while Ligeti's father, Dr. Sándor Ligeti, and Gabór perished in the camps.

After the war, Ligeti went to Budapest to continue his music education at the Franz Liszt Academy of Music.⁵ During this time, he studied under Kadosa and others including Ferenc Farkas, Zoltán Kodály and Sándor Veress. In addition to this, he conducted

³ Griffiths, György Ligeti, 5.

⁴ Griffiths, György Ligeti, 6.

⁵ Griffiths, *György Ligeti*, 7-8.

ethnomusicological research concerning the folk music of the Hungarian population in Transylvania. A year after graduating in 1949, he started teaching musical analysis, harmony and counterpoint at the same academy. While teaching at the Franz Liszt academy, he also composed. Many of the works from this period (1950-1956) were in the tradition of Hungarian folk music, and with a majority of the works being songs or chorals. During this period, he also wrote his first orchestral piece, *Concert Românesc*, inspired by Romanian folk music he had encountered while conducting research in Transylvania and while growing up in the region. Another notable work written during this time is *Musica Ricercata* for solo piano, the composition that is the focus of this study.

After emigrating to Austria in 1956, Ligeti travelled to Cologne where he encountered Karlheinz Stockhausen, and eventually attended the *Internationale Ferienkurse für Neue Musik* in Darmstadt.⁶ Here he met other Western composers, the music of which had been unavailable to him in Hungary. In his career after leaving Hungary, he went on to experiment with electronic music, and composed orchestral and choral works in the style he himself dubbed *micropolyphony*, which would become defining for his oeuvre. Other techniques he is known for employing are polyrhythms and cluster chords. His most significant work for solo piano following *Musica Ricercata* is the series of Études, book 1 of which was published in 1985, book 2 in 1994 and book 3 in 2001. These creative works feature polyrhythms and other experimental techniques in the solo piano format. Book 3 of the *Études* for solo piano became one of Ligeti's last published works.

2.1. Communist Hungary and social realism

Musica Ricercata was not published at the time of its composition, which has to do with the cultural policy of Hungary at the time. The defeat of Nazi Germany and the axis in World War II came with a regime change in Hungary, in which the monarchy of the nazi-aligning Horthy regime was abolished. In its place came the Second Hungarian Republic (1946-1949), heavily influenced by the Soviet Union, and eventually the Hungarian People's Republic (1949-1989), which was a one-party satellite state of the Soviet Union. These republics both followed the cultural policy of the Soviet Union, which involved a policing of artistic output

⁶ Griffiths, György Ligeti, 17.

favouring *social realism* and especially *socialist realism*, and denouncing western so-called *formalism*. ⁷ Social realism refers to artistic work depicting and drawing attention to the life and conditions of the working class as a way of critique to the power structures causing the depicted conditions. Social realism is not in itself connected to the Soviet Union, as its trademarks can be traced back to American inter-war period art history, and before that 19th century European realism and arguably Dutch Baroque-era genre painting.

Socialist realism is the version of social realism that was developed in and mandated by the Soviet Union and, by proxy, Hungary. Although related to social realism, this particular style emphasises values of communism, depictions of the proletariat, as well as idealisations of the regime and its leaders. The idealising aspect is notable, because this separates the style from realism, as realistic depictions are not a priority in this style and will be trumped by the requirement of idealistic depictions. Socialist realism is also characterised by a lack of artistic complexity or deep interpretations, and is usually obvious and literal in its purposes. It is not necessarily obvious how these principles transfer to music, it being arguably more abstract in nature than the visual arts. Socialist realistic music however, tends to be songs with lyrics related to class struggle or other ideologically related themes. Another characteristic of socialist realist music is the composition of typical Gebrauchsmusik for activities related to political actions, such as marches, workers' songs and revolutionary songs.

The term *formalism* was used in the Soviet Union and other East Bloc countries to characterise music of which the meanings and aesthetics are determined mainly by its form, and often used critically towards the avant-garde and modernist music of the West. The term has longer and more nuanced roots in music theory and aesthetic theory, but its use as a negative connotations stems mainly from cold war-era cultural policy of the East Bloc. The Stalinist regime in Poland, for example, divided music into socialist realist which was acceptable, and formalist which was forbidden, affecting composers like Witold Lutosławski. Hungary implemented similar policies.

Ligeti said this about Musica Ricercata in an interview with composer Toru Takemitsu:

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⁷ Griffiths, *György Ligeti*, 10-13.

In Communist Hungary, dissonances were forbidden and minor seconds were not allowed because they were anti-socialist. I knew very little Schoenberg, Berg or Webern and practically nothing of Cowell or Ives, but I had heard about clusters. They were forbidden, of course, as was twelve-tone music. As a reaction to this I very naively decided to write music which was built on the forbidden minor seconds. I was an anti-harmonist because harmony, tonal harmony was permitted in Communist Hungary and chose dissonances and clusters because these were forbidden.⁸

Here, he emphasises his liking for dissonances due to it not being allowed by the regime. In an interview with Paul Griffiths, Ligeti explains that he initially identified as a socialist after the war, and was convinced to willingly compose music that was conventionally beautiful and available to ordinary people, having to do with his own will to believe in the ideas of the regime. As the Stalinist Hungarian People's Republic was established and banned any sort of new music, Ligeti became highly critical of the Hungarian regime and more attracted to modernist ideas. He also adds that Bartok, and by that means a Bartokian style, was exempt from the regime's ban on new music, I infer for patriotic reasons. The political situation made it impossible to release *Musica Ricercata* at the time it was written. It was not premiered until 1969, 16 years after its conception. He was, however, able to release and have performed five of the movements rearranged for wind quintet, in the form of 6 *Bagatelles for Wind Quintet*. The latter movement, based on the 10th movement of *Musica Ricercata*, was deemed too dissonant for performance. The arrangement was inspired by Bartok, contributing to it being deemed as acceptable at the time.

Ligeti eventually left Hungary, explaining to Griffiths that he left relatively late, and that it was a difficult thing to do by that time. During the revolution, it would have been easier as borders were not as monitored as after the Stalinist regime had consolidated itself. He managed, however, to flee to Austria in 1956, in a risky, clandestine operation. This was two months after the Hungarian uprising, the countrywide revolt against the People's Republic, which was violently crushed by Soviet armed forces.

⁸ Fosler-Lussier, Music divided, 154

⁹ Griffiths, György Ligeti, 12-13

3. Musica Ricercata: Analysis

The following analysis is based on the written score for *Musica Ricercata* by Ligeti. ¹⁰
Comprehensively analysing *Musica Ricercata* requires a variety of approaches, due to the movements' variety in number of pitch classes, and thereby compositional techniques, degrees of tonality, melodic variation and potentially other creative approaches. The goal of this analysis does, however, remain the same for all 11 movements, which is to contribute to the following discussion of what techniques Ligeti employed in *Musica Ricercata* in order to create a new compositional style. The following is an analysis of every movement in terms of form and compositional technique. I made the choice to analyse all the movements instead of focusing on a selection, due to the great stylistic diversity among the movements. This diversity, as well as the overall progression of the work, are themselves elements worth considering when discussing the themes of this study. This element could potentially be lost if the analysis was based solely on a selection of the movements, whichever way such a selection would be made.

I: Sostenuto - Misurato - Prestissimo

The opening of *Musica Ricercata* consisting of the two pitch classes *A* and *D*, but doesn't introduce the latter until the very final notes. The movement consisting of solely the pitch class *A* for the vast majority of the time, results in a movement of which the musical variables consist of varying tempo, dynamics and rhythms. The movement is divided in 4 sections of 3 dynamic markings: Measures 1-6 are marked *Sostenuto* ("sustained"); Measures 6-59 are marked *Misurato* ("measured"); Measures 60-81 are marked *Prestissimo* ("very fast"), while the final measures 81-85 are again marked *Sostenuto* like in the first 6 measures. In terms of the movement's form, I interpret it to have one main section lasting from measure 6-80 (comprising both the *misurato* and the *prestissimo* section), preceded by a short opening in measures 1-5 (the first *sostenuto* section), and succeeded by a brief coda in measure 80-85 (the second *sostenuto* section).

¹⁰ Ligeti, Musica Ricercata

The reason why I find both the *misurato* and *prestissimo* sections to be part of the same main structure of the piece, has to do with the piece's narrative progression. After the first 6 measures, which are separate from this structure, the piece consists of a gradual increase in tempo, note frequency and loudness until it plateaus in measures 61-67 which I identify as the climax of the piece. Despite the change in marking from *misurato* to *prestissimo*, I don't find the climax starting in measure 61 to break with the preceding section, but rather to be the point to which the preceding section builds up. The following measures 68-80 make up the ending of the main section, before the coda of the piece in the final measures.

This description of the main section as building up, climaxing and then building down, also explains why the two *sostenuto* sections at the beginning and end are separate from the main section, as they entirely break with this progression. The opening (measure 1-5) consists of rapid octaves in both hands played loudly, serving almost as an opening fanfare of the movement and possibly *Ricercata* itself. This loud figure contrasts sharply with the quiet part immediately succeeding it, commencing the gradual build-up of the main section. The final 4 measures consist of the note D in two octaves being held down through two measures, while the notes A and D in two separate octaves are written with the text "depress keys without sounding". This long, final note marks the coda of the piece after the main section ended in measure 80. The fact that it is a D, while all the notes in the main section are A, and the fact that the note is sustained while all the notes in the main section are either 1/8 or 1/4 notes, make this a separate part from the main section.

Despite its tonal simplicity, there is an identifiable main theme of this piece, which is the rhythmic figure consisting of three 1/8 notes followed by a single 1/4 note. This figure does not appear in the early parts of the piece, which I will attribute to the piece not yet being fully developed, but becomes recurring as the tone frequency and loudness increases. The main argument for identifying this as the piece's main theme is the climax (measures 61-67), which consists solely of 10 repetitions of this figure in two octaves. The figure first appears in measure 23 with alternating octaves, and starts appearing within one octave from measure 40 in the right hand. In measure 52, the main theme appears again in the right hand and marked *Fortissimo*, in the sequence that makes up the final build-up to the piece's climax. The main theme in the right hand in measure 52-56 therefore serves as a forward echo to the climax.

I find the musical and aesthetic device of this piece mostly to be its distribution of energy, apparent in the varying degree of frequency, tempo and loudness of the A notes throughout the piece. Early on in the piece, energy levels are limited, but gradually increasing until it reaches a higher point. This aesthetic device makes it comparable to a story arc in a drama. The way the movement is composed, it can also be tied to human emotions, for instance of stress or excitement. Ironically, the piece can even be interpreted in a schenkerian way, with the many A notes representing a long dominant followed by the final D representing the tonic.

II: Mesto, rigido e cerimionale

Musica Ricercata's second movement contains the three pitch classes E#, F# and G, so three adjacent semitones. Like in the first, the distribution of frequency between the pitch classes is uneven, with E# and F# making up the majority of the movement. The feel, tempo and style of this movement starkly contrasts with the first, in its slow, mostly unchanging pace. The title means "sad, rigid and ceremonial", which already signals a different tone compared with the first movement. The movement has an easily discernible main theme, which is a simple melody of E# and F# alternating in rows of 1/8 notes. In addition to this main theme, there is also a contrasting theme of high pitched and rapid repetition of the note G. The movement consists of these two themes exclusively, and each pitch class occurs exclusively in its respective theme (E# and F# in the main theme, G in the contrasting theme).

After first being introduced in a single octave, the main theme is repeated in a variety of octaves and a variety of gaps between the octaves. The piece sporadically utilises the *una corda* pedal to create dynamic contrasts between the different variations of the main theme. The first break with this pattern occurs in measure 18. Here, the contrasting theme in G is introduced in a gradually increasing tempo, increasing the amount of evenly spaced G5 notes per measure by one each measure. A similar polyrhythmic acceleration also occurs late in movement 1, from its measure 70 onwards. After this culminates with the pianist being instructed to repeat the G5 notes as densely as possible, the main theme returns and combines with the high-pitched rapidly repeating G note. The main theme returns on its own in a return to the movement's first section, until the two themes combine in a single finishing measure where the movement ends with a gradual slowing.

This movement is driven by the contrast between the two themes, one being rhythmically even, simple and controlled; while the other is rapid to the point of not having a tempo apart from "as quickly as possible". This combination makes a piece that exploits rhythmic rigidity combined with tense unpredictability. It also makes use of the tension between semitones, and the complete lack of consonant notes.

III: Allegro con spirito

Movement 3 has the four pitch classes of C, Eb, E and G. This complete C chord in both major and minor makes it the most melodic piece yet, and its ambiguity between major and minor gives it a bluesy character. The title means "lively with spirit", suggesting a pace and feel different from the rigid and slow character of the previous movement. The melody of this movement first appeared in the first movement of the *Sonatina for Piano Duet*. The *Sonatina* version did, however, consist of all 12 pitch classes, making the version that appears in *Musica Ricercata* significantly reduced in terms of tonal diversity when compared with the *Sonatina* version.

This movement consists of two separate melodies appearing in ABA form. The first varies between C major and C minor, while the second melody uses both the minor and major third by default. In measures 1-15, the first part of the movement, the first melody is played in C minor, first by itself with a simple single-tone bass. A variation of this melody then follows, where it appears an octave lower and in C major, accompanied by an arpeggiating C major chord in the left hand. The third variation is a canon of the melody in both major and minor and in separate octaves. Measure 16 introduces the second part and the second melody, accompanied by 1/8 notes of rapidly repeating C major chords or dyads of C and E, alternating melody and accompaniment between the hands. The melody ends in a pattern of three notes (Eb, E and G) that repeats in a long row of crescendoing 1/16 notes. In the third part, from measure 33 onwards, the first melody reappears, now in a canon between its major and minor version from the start. Like the second part of the movement, this final part also ends in a melody transforming to a few notes repeating with increasing tempo and loudness until a sudden end. The movement then finishes with a quiet measure followed by a mere C3 note played *pianissimo*.

This movement reads like a play on contrasts. Most obviously between major and minor, as the two intertwine throughout the movement. Another contrast is that of loudness, as the movement features several *pianissimo* and *fortissimo* markings throughout, often close to each other. This is for instance the case in measures 29-30 and 40, the latter alone having 5 dynamic markings alone. As the title would suggest, this piece is lively, and is easy to be heard as humorous, not least with the anticlimactic finish in the final measure.

IV: Tempo di Valse (poco vivace - "à l'orgue de Barbarie")

Movement 4, featuring pitch classes F#, G, G#, A, Bb. All the pitch-classes make a row in which every pitch-class is a semitone apart, as in movement 2. This is the first of the movements to have a key signatures with accidentals. The piece is marked both Bb and F#, making an unconventional key signature. The title indicates the movement's waltz-like character. The text in parenthesis can be translated to "not very lively - "at the barrel organ". This indicates that the piece be played somewhat mechanically, as if played on a barrel organ, including the tempo and rhythm. Ligeti has written the following about this in the score: "The metronome value refers to the maximum tempo, the piece may be interpreted freely - as well as being slower - with rubati, ritenuti, acccelerandi, just as an organ grinder would play his barrel organ.". Despite having "waltz" written in its tempo and the time signature of 3/4, sporadically singular measures will be in 2/4 time before immediately going back to 3/4.

The waltzy pattern of accompaniment in dactyl-like rhythm in the left hand remains almost constant in the whole duration of the movement, making this the closest thing to a constant trait throughout a whole movement in *Musica Ricercata* so far. The movement does, however, have a clear three-part structure, with a melody repeating twice in the beginning and end, with a countertheme between them. This gives it the ABA form that also appeared in movement 3, except this time the first theme repeats the first time. Both the first and second theme share the trait of the figure first appearing in measures 24-25 in the first theme, and measure 40-41 in the second theme. This, combined with the shared left-hand accompaniment makes it clear that these are not separate themes, but rather that the second is a development of the first. As was the case in movement two, the last pitch class to be introduced is done so loudly and drastically halfway into the movement, as G# is introduced with three triple-octaves marked *fortissimo* in measures 54-55. The movement ends with a return to the first theme, without

changing anything from the first part of the movement. This makes the fourth movement the first in *Ricercata* not to end with something that hadn't been played in the movement earlier.

This movement appears relatively humorous and light-hearted, with its parodically rigid left hand and references to the barrel-organ in the instructions. It gives the impression of parodying pomposity with the ever-present waltz rhythm that occasionally "stumbles" where the measures in 2/4 time occur. Grantham¹¹ suggests that the piece could have to do with organ grinders playing the barrel organ on the streets often having had the reputation of being drunken and with badly maintained instruments. He therefore suggests how the metric "hiccup", as he calls it, could refer to the actual hiccup of a stereotypical drunk, or the malfunctions of a broken barrel organ.

V: Rubato, Lamentoso

With the pitch classes of Ab, B, C#, D, F and G, the fifth movement immediately seems like a continuation of the second with a melody consisting of mostly semitones. The movement is also marked with a novel key signature of Ab and C#. *Lamentoso* in the title means that the piece should be played in a mournful and grieving manner. The title, as well as the overall feel of the piece, indicates that this is a serious movement following the two previous, rather lighthearted ones.

The form of this movement is less distinct than the two previous ones, as there are not as easily distinguishable parts. There is a break both in terms dynamics, tempo and structure in measure 12, indicating that 1-11 form a first part. However, this section seems to be more of an introduction to the rest of the movement than a separate section, as the elements introduced in this section are developed rather than abandoned after measure 12. The introduction has an escalatory form, starting out with a simple semitone based melody, which develops in complexion and tonal range. A trichord with tritone and fourth intervals appears in measure 5 to be frequently repeated later on. In movement 12, the piece takes on a fugue-like character as the dynamic markings indicate *più mosso* (more animated) and *non rubato*. The right hand plays short, 5-note melodies to be imitated in the left hand a tritone deeper. This develops into

¹¹ Grantham, Ligeti's early experiments in compositional process, 45.

a crescendoing canon, still while modulating by a tritone. In measure 21, the piece culminates with a duet between high-pitched semitones, almost like a more desperate version of the opening theme in the right hand; and a more advanced version of the melody played in parallel tritones and fourths in the left hand, as a result reintroducing the chord from the opening. A high pitched semitone harmony played repeatedly in triple-forte ends this pattern. The final part of the piece consists of a contrasting alteration between a soft, low-pitch repetition of a variation of the opening melody, and more of the high-pitched, loud semitones. The piece ends with more crescendoing semitones up until another triple-forte. Finally, the instructions say to play a G major chord by silently depressing the keys (an instruction also seen in the first movement) until any sound dies away.

While earlier movements have been characterised by uneven use of the available pitch classes, often holding off introducing a pitch class until late in the movement, this movement employs all six of them economically. The pitch classes allow for three different tritones: Ab-D, B-F and C#-G. This makes tritones central throughout the piece, both harmonically and melodically. The pitch class set even allows for the main melody to be played in parallell tritones, exploiting the set especially efficiently. The sharp, dissonant intervals of semitone and tritone appearing in the piece so frequently, contributes to its serious and mournful character. So do also the abrupt contrasts in dynamics and pitch.

VI: Allegro molto capriccioso

Movement 6 has the 6 pitch classes of A, B, C#, D, E, F# and G. This means, for the first time, that a conventional key signature is present, as C# and F# corresponds to either D major or B minor, both chords of which have their complete triads represented in the pitch class set. In fact, the pitch class set is sufficient to form a standard major or minor triad with 6 of the 7 pitch classes as the tonic, with only C# lacking a regular fifth. This suggests a tonal and chord-based piece. The title suggests another more light-hearted and playful piece, contrasting with its predecessor.

One of the shorter movements in the cycle, the sixth movement is characterised by contrasting two themes. Not so much in separate sections, but rather by frequent changes between the two. One of the themes is recognisable by downwards, step-wise movement, which both

imitates an octave lower and is eventually played in a canon that's rhythmically two 1/8 notes apart. The other theme has upwards going, stepwise movement combined with the melody that first appears in measure 7. The dichotomy between these two themes is however quickly dissolved, as several variations occur. The melody from the second theme is played in simple double-octaves in measure 11. It also appears in parallel triads in measure 23, making use of the pitch class set's readiness to form triads. In measure 17, the downwards movement results in an up-and-down going fourth in the bass, breaking with the rising or falling tendency of the piece. The falling A major add9 chord that first imitates and eventually plays in canon reappears towards the end, until it dies out. The coda of the piece is two different triads (B minor and F# minor) being played simultaneously before dissolving into three octaves of E.

While contrasting starkly in mood and feel with the previous movement, the theme at the beginning and end is similar to the fugue-like section starting in measure 12 of movement 5. In both cases, a melody is played in the right hand first, then imitated in the left hand (separated by a tritone in movement 5 and an octave in movement 6). The imitation does then in both cases transform into a canon. The downwards movement in measure 6 resulting in the repeating alternating fourths, is reminiscent of how the high-pitched melodic theme in Tempo 1 of movement 5 ends up in repeating semitones. Both movements also share the trait of abrupt changes in dynamics, as is common in all the movements we have seen so far. These form-related similarities despite widely different feel between movement 5 and 6 could suggest that these are traits Ligeti opted for in this range of pitch class diversity.

VII: Cantabile, molto legato

Movement 7 has the 8 pitch classes of F, C, Eb, Bb, G, D, A and Ab. As in movement 4, the left hand is almost constant with a 7-note ostinato of the seven notes F-C-Eb-Bb-C-G-F being played repeatedly at an even pace and unchanging dynamic throughout the piece. The ostinato is rhythmically independent from the right hand, which plays a melody in F mixolydian and variations thereof. Most of the pitch classes appear regularly throughout the piece, with the exception of Ab which does not belong in the F major mixolydian scale and therefore only appears in lieu of Eb when the right hand melody is modulated down a fifth. Like movement 3, an earlier version of this piece was one of the three movements of Ligeti's *Sonatina for Piano Duet*. The melody was the same in the *Sonatina*, and it also featured a left hand

ostinato. However, the two of them were connected, whereas in *Ricercata* they are independently moving elements. The title of this movement, *Cantabile molto legato*, refers only to the right hand, which should be played in a singing-like style as opposed to the unwavering left hand.

The movement is not divided into separate parts, as it is bound together by the ever-present seven-note ostinato. The right-hand part can, however, be divided into an initial exposition of the melody (measures 1-27), followed by 5 variations of it. The first variation (measures 29-54) adds a second, lower voice to the melody. The second variation (measures 56-82) is a loose cannon where phrases from the melody are followed by a version of itself modulated down a fifth, thus first introducing the pitch class of Ab. The third variation (measures 84-103) combines the principles of the two former variations, playing the melody harmonised with a lower second voice, while the canon this time is 4 notes higher then the main melody. The canon is actually in the same register as the canon in the second variation, but the main melody is an octave lower this time. The third variation, marked (mezzo)forte, is the first part of the piece not to be marked either piano or pianissimo. The instructions specify, however, that the left hand remain pianissimo. Variation 5 is a shorter version of the melody played in thirds and two octaves higher than in the exposition. The sixth and final variation is another shorter version of the melody, also played in thirds and another octave higher than variation 5. With the introduction of variation 6, the left hand ostinato also transposes an octave higher, thereby changing for the first time. As variation 6 ends, the left hand strikes an F major chord as the right hand adopts the ostinato until petering out to a trill, finishing the piece.

The form of this piece is comparable to the *passacaglia* or *chaconne*, in which a short and repetitive bass ostinato combines with a series of variations, and often in triple metre like in this movement. This form is widely connected to the composer Girolamo Frescobaldi¹², to whom the 11th movement is an hommage, and who is also famous for the form *Ricercare* which likely influenced the title *Musica Ricercata*. In theory, this movement is faithful to the style of the passacaglia. However, the polyrhythm resulting from the lack of any rhythmic relationship between the bass ostinato is a novelty in this form. This piece is clearly one of the serious ones in the cycle, and has a highly melodic, meditative and conventionally beautiful

¹² Grove Music Online, "Passacaglia".

character. The mixolydian melody is traditional and could fit a functional chord notation, however the constant ostinato gives the harmonics of the piece a drone-like character. This is reminiscent of minimalism, which mixes into the rather classical forms of passacaglia and chaconne. Pianist Pierre-Laurent Aimard describes this movement spatially, with the ostinato as a backdrop and the melody gradually drifting further away from it as it moves into the higher registries. Aimard then compares this with a memory that with time disappears further back in the subconscious.

VIII: Vivace. Energico

In movement 8, Ligeti uses the 9 pitch classes of E, D, B, C#, A, C, F#, G and G#. Two of these, C and G, do not fit in the piece's assigned key signature of three sharps, and do also not appear in the pieces main melodic theme. They do, however, appear through the piece's occasional bass pattern of falling fifths. This piece therefore has chromaticism in the accompaniment, but not in the melody. The title means "Lively. Energetic", and comes with the instruction to play "very dance-like and rigorously in tempo", and with this clearly breaks with the calm, meditative mood of the previous movement.

Another one of the shorter pieces in the cycle, this movement is cohesive in form. The entirety of it is based on the melodic theme that is presented in two octaves in both hands following the single, introductory dissonance. The theme is based on a step-wise melody spanning from the notes of G# up to D. In addition, with every note an E is played on top like a pedal point. This makes the melody an exposition of different harmonic intervals depending on each note's distance from E, ranging from a sixth to a second. After presenting this theme, it is varied upon by making use of its rigid rhythmic structure, which remains in place through all variations. First, the theme is played in the right hand accompanied by open fifths in the right hand that eventually start falling by exactly a fifth each time, introducing the chromatic pitch classes of C and G. The piece also varies upon the main theme by playing it in canon, but adjusting it so that the rhythmic structure still remains the same in each voice. This leads to different intervals combining in each beat, and thus several different chords extracted from the theme. After playing with this, the piece introduces a single melodic line based on the main theme in measure 43, accompanied by the theme in the left hand. Although still

¹³ Aimard, "Ligeti: Musica ricercata No. 7 | Pierre-Laurent Aimard explores the work"

remaining mostly in line with the main theme's rhythmic structure, this melody sounds especially free and unconstrained when compared with the rigorous nature of the piece before this point, reminiscent of a soloist improvising on top of a fixed accompaniment. The theme then vigorously returns in both hands, this time both in canon and modulated by a fifth in the left hand. The melody returns once more, accompanied by open fifths, before a final canon of the theme ends the piece.

This movement is clearly playful, melodic and gets reminiscent of folk dance from its dance-related instructions and frequency of open fifths. The piece is however also rather theoretical, with its emphasis on different harmonic intervals and their combinations with each other through the rigid rhythmic grid on which the movement is written. Another central characteristic of the movement is the abrupt changes, often at unexpected places. An instance of this is on measure 27, where the bass changes from pedal point to open fifths mid-melody. These abrupt jumps in dynamic, accompaniment, pitch and timing (regarding the rhythmically form-fit canons), gives the movement the feel of a traditional folk song that has been cut apart and glued into a collage. Abruptly changing dynamics has been an important device in several of the preceding movements. In this, however, it is somewhat different as the main structure of the piece remains flat and fixed. This makes this piece a series of terraces in terms of dynamic highs and lows, rather than an altogether flexible dynamic as can be said about e.g. movement 3.

IX (Béla Bartók in memoriam): Adagio. Mesto - Allegro maestoso

The ninth movement has the 10 pitch classes of C#, A#, F, D, A, B, C, D#, F# and G#, excluding only E and G. The title indicates that the movement is dedicated to the memory of Béla Bartók, and that the movement be played slowly, mournfully and majestically. At the beginning of the piece, there are instructions to play "like low-sounding bells". The movement is without a key signature, as is the case with the two remaining movements.

The theme of bells is central throughout this movement, beginning with an octave in C# played in the low registers of the piano, before introducing a bell-like rhythmic figure in the right hand. This rhythmic figure consists of a short note followed by a longer one, giving the bell-like feel. These two opening themes interact in a polyrhythmic pattern, as the right hand

figure follows the assigned time signature of 4/4, while the accompanying left hand sounds every third beat. The right hand develops into a rapidly ascending melodic line while the left hand remains unchanged, until the piece rapidly breaks into loud "bell tolls" of parallel fifths in both hands, combined with a continuation of the melodic theme of the opening in the left hand. This then breaks into a rapidly moving and crescendoing pattern marked "Stringendo, as if panicking". The piece then once more repeats this alternation between tolling fifths and panic-like melody, before a quieter section takes over and the movement fades slowly away.

This piece has a noticeably serious tone throughout, not unlike for instance movement 5. The title with its mention of Bartók, who died under a decade before *Musica Ricercata* was composed, indicates that the movement's mournful character and many church-like bell sounds through the short-long rhythmic patterns and open fifths could be in reference to him. The use of open fifths to imitate the sound of bells is not new, and was for example done by Edvard Grieg in the lyric piece "Bell ringing". 14 Ligeti has mentioned being exposed to Grieg's lyric pieces at an early age, and could have gotten inspiration from there. 15 This is however not a necessity. This movement is furthermore not built of separate parts, but rather a development of one theme throughout. Rhythmically, it is strikingly free-form, especially when compared with the previous movement. In addition, as with so many of the previous movements, the rapid changes in dynamics is a driving force also in this movement.

X: Vivace. Capriccioso

Using every pitch class except C, the tenth movement shares half a title with movement 8 (vivace - lively), and another half with movement 6 (capriccioso - capricious). The movement is markedly dissonant throughout, and is otherwise notable by its high tempo, frequent changes in time signature, and overall difficulty of playing.

The movement can be separated into two parts by how it is arranged, with the first part (measures 1-77) being characterised by a freeform composition that quickly changes its structure, and where the right and left hands play different roles. In the second part (measures 78-122), both hands are coordinated in building up to the movement's very feisty finish,

¹⁴ Sutcliffe, *Grieg's Fifth*, 161.

¹⁵ Griffiths, György Ligeti, 5.

making this a significantly more stylistically homogenous half of the piece than the first. In the first 77 measures, there is a clear tendency for the right hand mostly to play melodically, with the left hand accompanying. An initial, highly chromatic melody is presented in the right hand, while the left hand plays a pedal point arrangement in D. The chromaticism in the right hand melody is so ever-present that the melody almost gets a microtonal feel, because it becomes hard to keep track of where the boundaries between the pitch classes go. This arrangement is then broken up by an arpeggiating melody played on white keys in the right hand and black keys in the left hand. The right hand keeps developing this arpeggio theme while the left hand accompanies with a characteristic stepwise upwards-moving series of 4 semitone-intervals between each phrase. The piece takes on yet a new form in measure 44 as both hands break into an ostinato of three repeated thirds. The left hand keeps this going as the right starts playing a variation of the initial melody on top of it. This particular arrangement bears a significant resemblance to the repeated thirds in movement 3, and even the main theme of movement 1 in terms of the triple repetition. The piece then makes a brief return to the preceding arrangement, before the aforementioned second part sets in.

The second part of this movement has the two hands moving in parallel motion, playing a highly dissonant and chromatic melody that moves stepwise up and down in a playful and whimsical way. The section is marked *più mosso* (faster/more animated), *strepitoso* (resounding) and *precipitando* (falling/crashing). The latter two are not frequently used dynamic markings. As the dissonant melody finishes developing in measure 95, it transforms into a pattern that, possibly on purpose, has the illusion of perpetual upwards movement. This is a theme Ligeti would explore in greater detail decades later in his Études for piano. Eventually this pattern stops by bashing out seconds in each hand, which eventually with every beat transforms into increasingly advanced cluster chords played at an increasing loudness. This culminates with 10 pitch classes being sounded at once, with the dynamic marking of *sffff*. Following this powerful finish is a short, softly played coda bringing back the arpeggio-theme from earlier.

This movement is characterised by its loudness, dissonance and fast pace. It shares much of the whimsical playfulness of e.g. movement 3, but in addition to this, it unmistakably comes with a certain anger or even madness. The quadruple-forte of the final chord, or the chord itself, could on its own be evidence of this. However, there is also the instructions as the

cluster chords begin to show up towards the end: "Insistent, spiteful", followed by "As if mad". This simultaneously contributes to the humorous characteristics of the movement, and adds another sense of seriousness to it. I believe this piece can be heard politically, and with regards to the Ligeti quote mentioned earlier where he explains how the fact that clusters and dissonances were forbidden made him want to use them. The harsh, loud, almost violent character of this movement could therefore be a compositional protest or satire.

XI (Omaggio a Girolamo Frescobaldi): Andante misurato e tranquillo

In the final movement of *Musica Ricercata*, all pitch classes on the piano are present, and the melodic leitmotif that starts it off is in fact a 12-tone series. The piece is dedicated to the previously mentioned Girolamo Frescobaldi, who is widely connected to the form of fugue known as Ricercare. The dedication to Frescobaldi therefore indicates that this piece is written based on this form. Further evidence of this is the fact that Ligeti also arranged it for organ as a stand-alone work under the title "Ricercare: Omaggio a Frescobaldi". This makes it fitting as the final movement of *Musica Ricercata*, given the title of the work likely both alluding to this form and the work's exploratory nature.

The piece opens with a simple exposition of the theme in the left hand, with instructions to play "very evenly". The melody is markedly melodic for a 12-tone series, and is centred around high points that the melody seems to climb up towards only to consistently fall down again. After the exposition, the melody is then accompanied by a countertheme of falling semitones. The melody and the countertheme switch places, are harmonised with different intervals and chords and change rhythm in a fugue-like imitation throughout the movement. The movement is not, however, true to the classical principles regarding harmony and dissonances, making it more modern than a traditional ricercare or fugue. The movement increases and decreases again in loudness, however much more gradually than most of the previous movements. Towards the end, it becomes more quiet until it finishes with the highest and lowest A on the piano, played in triple-piano. With this, *Musica Ricercata* ends at the same pitch class at which it started.

4. Discussion

Having analysed the totality of *Musica Ricercata*, it becomes clearer both how diverse the movements are and how clearly there are similarities between them. The title is thematically ambiguous, that is not referring to any events, moods or real objects that the work is about. This is also reflected in the pieces, that do not communicate any singular mood or message, but rather a host of musical ideas extracted from the piece's theoretical frame. One phenomenon that can be pinpointed as a frequent occurrence, is the use of ostinati as building blocks for the pieces. For example can what I identified as the main themes of movements 1 and 8 be called ostinati; as can the bass lines of movements 4 and 7. Another trait that kept standing out among the movements, was the drastic contrasts in dynamics. This was characteristic of all the movements except movement 7 and 11, which both had a more even dynamic development.

In all the remaining pieces, the shock value of sudden changes in dynamic and rapid juxtaposition of loud and quiet sections made an important aesthetic element, whether through dynamic markings; varying between *una corda* and *tre corde*; or the lack of caesura, which is specifically instructed in movements 9 and 10. Dynamic contrasts are also often accentuated with contrasts between high and low notes, which happens in movements 2, 5, 6, 8, 9, 10 and 11. Contrasts are of course nothing new in music, but rather an elemental component of it. The striking abruptness in many of *Ricercata*'s movements could however be indicative of Ligeti's self-invented style at the time: One that seeks to be bigger, more active, energetic and impatient than the music that surrounds him.

About the subject of how *Musica Ricercata* left its mark on Ligeti's later style, Griffiths¹⁶ remarks how the latter eleventh movement is indicative of Ligeti's later style, with the counterpoint of descending chromatic scales being reminiscent of the much later études. I would also want to point out how in movement 9, measure 95, when the dissonant pattern culminates into a movement that seems to form an illusion of perpetual upward movement, this is also central to both the Études *Coloana Infinita* and *L'escalier du Diable*, and in general precedes Ligeti's fascination with optical illusions.

¹⁶ Griffiths, György Ligeti, 71.

Doing the analysis, I constantly found myself using degree of seriousness as one of the dichotomies on which the analysis was based. This can easily be misread as indications that some of the movements are deemed less well written, or less worthy of serious attention than others, which is not what is meant by this. The dichotomy of seriousness has to do with the extent to which humour and irony is one of the aesthetic devices that the movement employs. Analysing or discussing *Musica Ricercata* without acknowledging this variable becomes difficult, because some movements are clearly written with a flippant intent, without this diminishing the movements' other compositional qualities. This is especially clear in movement 4, where the faux-pompous style of the movement is complimented with the title and instructions alluding the movement to the grinder of a barrel organ. Yet, even without words, Ligeti was able to convey humour through details like the comically quiet codas to movements 3 and 9 or how he refuses to introduce the full open fifth before it is dissonant with the right hand in measure 27 of movement 8. Arguably, one can also point out that the entire premise of movement 1 is humorous, although this movement can be interpreted in a myriad of ways as previously discussed.

Griffiths¹⁷ points out how Ligeti has a special talent for humorous composition, blending serious music and meticulous theoretical approaches with self-mockery, irony and absurdity. One example of Ligeti's ironic sense of humour and mockery of pomposity, is the work "Grande Symphonie Militaire op. 69", from 1951. This was the same year as he started working on Musica Ricercata. Griffiths¹⁸ asked Ligeti about this in an interview, given the uncharacteristic pompous nature of the piece and the fact that it has an opus number unlike Ligeti's other works. Ligeti explains that it was just a joke, ironising over the political situation in Hungary, and that the opus number refers to the sexual position.

This demonstrates his willingness to use music for humour and irony, still while many of the movements of *Musica Ricercata* re highly solemn and serious. Griffith further notes how the clear playfulness and teasing character of *Musica Ricercata* is a characteristic of Ligeti's

¹⁷ Griffiths, *György Ligeti*, 39.

¹⁸ Griffiths, György Ligeti, 11

music¹⁹, however one that would be more characteristic of his later works. Speculatively, this could indicate that part of Ligeti's inventing a style of his own was this tongue-in-cheek style of composition, but that it would take time for him to be comfortable making this a clear trademark of his style as a well known composer, given that he was not yet a well known composer at the time of writing *Musica Ricercata*.

Sallis²⁰ points out how Ligeti's early works had a tendency to be revised and put in as movements of other works. *Musica Ricercata* is an example of both ends of this, as two of its movements first were used in the *Sonatina for Piano Duet*, and that some of the movements in *Musica Ricercata* later were repurposed as the *6 Bagatelles for Wind Quintet*, and the *Ricercare* for organ in the case of movement 11. This entails that these early works were to an extent on a network with shared themes and attributes. Sallis further underlines the importance of Bartóks influence on Ligeti at this compositional output, which cannot be overstated. Bartok was central to any music education in Hungary at the time, and remained one of the few newer composers that were available under Stalinism.

Ligeti was however also influenced by ideas of dodecaphonic technique, which Sallis through a recorded conversation with Ligeti had learned came from the book *Philosophie der neuen Musik* by Theodor W. Adornos which he had acquired through Hungarian connections that were based abroad. This example, and likely how it represents other means by which Ligeti could have learned about Western modernism and experimental music, could help explain Ligeti's project and desire for self-renewal with Musica Ricercata, and how he started to grow his fascination with ideas of the avant-garde. Interestingly, Sallis finds that the compositional writing style of Musica Ricercata is reminiscent of Ligeti's written text as a journalist in the 1940s.²¹ He emphasises the concise, concentrated writing style which blends with a light and playful tone in the language. This further explores the theme of inventing an individual, personal style, as it is characteristic of a personal style rather than the inspiration of an individual composer to be able to noticeably transcend style through different media like music and text.

¹⁹ Griffiths, György Ligeti, 71

²⁰ Sallis, An Introduction to the Early Works of György Ligeti, 11.

²¹ Sallis, An Introduction to the early works of György Ligeti, 103

Kerékfy quotes Ligeti as saying the following:

About 1950 it became clear to me that developing the post-Bartókian style, in which I had composed before, would not further me. I was twenty-seven years old and lived in Budapest completely isolated from all the ideas, trends, and techniques that had emerged in Western Europe after the war. In 1951 I began to experiment with very simple structures of rhythms and sonorities as if to build up a 'new music' from nothing. I regarded all the music I knew and loved as being, for my purpose, irrelevant. I asked myself: what can I do with a single note? With its octave? With an interval? With two intervals? With certain rhythmic relationships? In this way, several small pieces resulted, mostly for piano.²²

Here, Ligeti explains the theme of personal style and its importance as an individual and as an artist, perhaps furthered by the authoritarian nature of the regime at the time. He elaborates on the political side of this motivation in the following quote:

When the strong oppression, the Zhdanovian–Stalinist oppression began, that is, in 1948 and 1949, one tried at first to find a free zone in it. About 1950, there was the worst phase of the dictatorship, in 1950 and 1951, when people disappeared and tens of thousands of people were deported from Budapest, then began this: We have no free zone, we must work quite clearly against [the system].²³

This makes it hard not to infer political messages from Ligeti's *Musica Ricercata*, whether it be the sarcastic style of movements 3 and 4, or the powerful anger and dissonant madness of movement 9. If we define "formalist" as music mainly determined by form, then a case can be made that *Musica Ricercata* is by its very premise formalist by how the number of pitch classes is predetermined by sheer numbers. The experimental style that Ligeti embraces in *Musica Ricercata*, makes an early indication of his seeking of new styles and influences; an early draft of his personal style void of the influences of totalitarian ideology and one-sided

²² Kerékfy, A new music from nothing, 204.

²³ Kerékfy, *A new music from nothing*, 229.

exposure to music; and not least a clear statement against the cultural policy that curbed his creative work and ultimately had him leave his country.

5. Conclusion

Musica Ricercata is an early example of Ligeti's experimental style, where he explores what he is able to extract from different numbers of pitch classes available. This leads to a work that employs a wide number of techniques, and an adaptability to different circumstances. The result is a diverse cycle of movements with both common traits and considerable differences. Movement 1 employs mostly the pitch class A, and uses a wide extent of rhythmic ostinati and abrupt variations in dynamics, loudness and octaves to create a sense of excitement in the movement. From here on, the movements of *Musica Ricercata* can be described as humorous and sarcastic; serious, somber and sorrowful; highly theoretical and intuitive. Many of the movements have in common a use of sharp, abrupt contrasts in pitch and loudness, as well as frequent use of rhythmic ostinati and repetition. Humour is also an important form of expression in the piece, with sometimes absurd dynamic instructions; unconventional choices regarding time signature, key signature and chords; and not least pieces with an ironic character that seem to mock feeling of pomposity and pretentiousness. Despite this, many of the pieces are also highly solemn and serious, with several of the pieces having mournful characteristics. Many of the movements also display a sense of melodic beauty in a conventional way, but then often in arrangements that emphasise characteristic compositional techniques such as ostinati and polyrhythms.

Ligeti described his intentions behind the work as wanting to invent a new style "out of nothing", in order to define himself as a composer. The analysis highlights some of the techniques that Ligeti employed in order to do so. This text has also discussed how Ligeti's societal circumstances heightened the need for individual expression, as Hungary at the time was a totalitarian regime that regulated what kind of music could be written and performed. In this regard, a lot of the abruptness, forwardness and dissonance in *Musica Ricercata* can be read as rebellion, or at least an attempt to hold onto oneself while met with the totalitarian regime. Nonetheless, *Musica Ricercata* is a work that introduces a lot of the techniques, and not least the subtle, musical language that Ligeti became known for as his career progressed.

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