



**BACK TO BAGATELLES:
REALIZING THE REMAINDER OF LIGETI'S *MUSICA RICERCATA*
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ABSTRACT

György Ligeti completed *Musica Ricercata* in 1953, and shortly thereafter transcribed six of the movements into the *6 Bagatelles* for wind quintet. Much of the scholarship surrounding Ligeti's transitional period discusses *Musical Ricercata*, a pivotal work for Ligeti marking divergence in compositional style from his early works. One persistent question frequently arises: why did Ligeti leave five movements out of the transcription?

Through study of the history surrounding the composition of *Musica Ricercata* and analysis of Ligeti's approach to transcription, we can learn much about the Ligeti's priorities and ideas. Using Ligeti's own transcription as a stylistic template, this project suggests what could have been had Ligeti completed the transcription process. What results is *Musica Ricercata* for wind quintet—the remaining movements joining the original *Bagatelles*.

INTRODUCTION & STRUCTURE

György Ligeti is a hugely significant figure for composition in the Post-Modern era. Considered an important composer for his innovative and influential work, he remains a figurehead for the avant-garde movement.¹ His output is characterized by distinct periods of work and, as he progressed through his life, he developed techniques crucial to development of music in the twentieth century.

One of the most-performed works for wind quintet, the *Six Bagatelles*, comes from Ligeti. While the 1953 *Bagatelles* are inextricably associated with the wind quintet ensemble, the work was not initially conceived for that medium: they constitute the composer's reworking of a selection of movements from a work crucial to his own development as a composer—*Musica Ricercata*, for piano. *Musica Ricercata* contains a total of 11 movements, meaning only six of the movements were orchestrated. For this project, I transcribed the remaining movements to facilitate a complete performance of *Musica Ricercata* by wind quintet. The purpose of the project is to present a theoretical study in orchestration addressing what Ligeti might have done, had the need to transcribe the remaining movements presented itself, and an analysis of what made the transcription challenging to accomplish.

This thesis includes four parts: First, a discussion of the background on the composition of and circumstances surrounding *Musica Ricercata* and the *Six Bagatelles*; second, an analysis of how Ligeti addressed challenges as he transcribed movements from *Musica Ricercata* for winds in the *Bagatelles* and the techniques used in understanding this process; third, the additional challenges made necessary to navigate while transcribing the rest of the movements and how these techniques were employed; and finally, the arrangement itself.

¹ Cummings.

Musica Ricercata was performed by wind quintet in its entirety for the first time on April 9, 2019, at the University of Utah Undergraduate Research Symposium.

HISTORICAL BACKGROUND

Musica Ricercata

Beginning in 1951, György Ligeti began a personal reassessment of his compositional style, attempting seriously to redefine his creative process and product. Up until this point in his life, the Hungarian composer's output demonstrated a heavily Bartókian influence.² *Musica Ricercata* for piano represents Ligeti's first foray away from his early style. Though Bartók's influence would persist far longer than this point in time, the 28-year-old intentionally rejected all that he knew of music before this point: "I started to experiment with simple structures of rhythms and sounds, in order to evolve a new music from nothing, so to speak. I regarded all the music I had known and loved up to then as something I couldn't use."³ The work explores the possibilities of compositions limited by intervallic content, specific rhythmic situations, and either the absence of or a reinterpretation of functional harmony. Interestingly, this initial departure from his early style represents the earliest of Ligeti's works regularly programmed today.⁴

The premise of *Musica Ricercata* remains a simple one: each of its 11 movements is restricted to only a set number of pitch classes. The project took a year and a half to complete, drawing to a close during March of 1953.⁵ The first movement comprises entirely of the pitch A (and every A available is utilized), up until its final note, where Ligeti writes a single D. This establishes a premise for the entire work's structure: each movement includes progressively one additional pitch class more than its predecessor. (See Table 1.) In this way, the second movement includes three pitch classes and so on until the final movement, which uses all twelve half-steps

² Steinitz, 53.

³ Toop, 38; Burde, 29.

⁴ Kerékfy, 209.

⁵ Ibid., 210.

available in conventional Western music. Though *Musica Ricercata* does not employ an extraordinarily experimental rhythmic language, it does explore more limited rhythmic patterns. Harmonically and motivically, also, the piece clearly diverges from the aesthetic of Ligeti's prior compositions.

Table 1. Pitches used in each movement of *Musica Ricercata*

Movement	Available Pitch Classes
1	A, D
2	E \sharp , F \sharp , G
3	C, E, E \flat , G
4	A, B \flat , F \sharp , G, G \sharp
5	A \flat , B, C \sharp , D, F, G
6	A, B, C \sharp , D, E, F \sharp , G
7	A \flat , A, B \flat , C, D, E \flat , F, G
8	A, B, C, C \sharp , D, E, F \sharp , G, G \sharp
9	A, A \sharp , B, C, C \sharp , D, D \sharp , F, F \sharp , G \sharp
10	A, A \sharp , B, C \sharp , D, D \sharp , E, F, G, G \flat , G \sharp
11	A, A \sharp , B, C, C \sharp , D, D \sharp , E, F, F \sharp , G, G \sharp

Ligeti seemingly did not intend for the project to progress in the way that it did, at least at first. He wrote the initial two movements as standalone studies in 1951, exploring the heavy pitch class restrictions. The middle movements were written during 1952, and by the time he started the third movement, the project was clearly beginning to take shape, as illustrated by the fact that two movements are reworkings of a previous composition; with the final movements

completing the work during 1953.⁶ Two of the eleven movements actually represent reworkings of material from his 1950 “Sonatina” for piano, four hands: the third and seventh movements of *Musica Ricercata* correspond respectively to the first and second movements of this slightly earlier work.⁷ Remarkably, Ligeti opted to include these two movements in the original *Six Bagatelles* (movements one and three), meaning that the composer himself published three distinct formats of the same compositional material.

It becomes quite apparent that by the time Ligeti approached the third movement of *Musica Ricercata*, he had the full scope of the project in mind. Rewriting the previously tonal movement from the *Sonatina*—which utilizes all available pitches—into a movement that contained only four clearly demonstrates an awareness of the work’s grand design. The movement, too, uses only C, E-flat, E, and G, which are the notes necessary for both C major and minor triads.⁸ The new movement rebukes any sense of functional tonality by interplaying the major and minor chords with increasing persistence, which illustrates perfectly how Ligeti was attempting to reject the music that he already knew. Knowing this, we can view the remainder of the composition as fitting into the goal of the rest of the work.

The final movement, also, was composed initially prior to undertaking the overall process, though it provides the inspiration for the work’s name. It employs a variation on the highly chromatic ricercar style used in the 17th century, as used by composers such as Frescobaldi. (The movement proudly bears “Homage to Girolamo Frescobaldi” in Italian.⁹) However, the technique gets employed in such an exaggerated and insistently regular fashion that the attribution is not without humor.¹⁰ Important to note, too, is that while the movement

⁶ Sallis, 103.

⁷ Kerékfy, 211.

⁸ Ligeti, *MR*, 10.

⁹ Ligeti, *Musica Ricercata*, 34.

¹⁰ Toop, 38; Steinitz, 57.

employs both a subject and countersubject exemplifying twelve-note themes, Ligeti was at the time unaware of the techniques in use by the Second Viennese School, and the work therefore is not a reflection of them but an independent development.¹¹ Simultaneously looking both forward in its harmonic language and backward in name and process—it exhibits many traits of a Bach fugue in treatment of the theme throughout—the movement typifies Ligeti’s developing style exceptionally.

Musica Ricercata, while now programmed with relative frequency, actually did not see its public premiere until 1969 in Sweden.¹² The cultural attitudes against Modernist art in Europe prevented the work from receiving the attention it merited for nearly fifteen years. However, its position in Ligeti’s catalog represents such an important juncture of style that it is rightfully remembered as one of his most significant early works. In addition, it allowed for the creation of the *Six Bagatelles*, which has gained even wider recognition than its source material, indeed becoming a true staple of the wind quintet repertoire today.

Six Bagatelles

In 1953, Ligeti reimagined *Musica Ricercata* shortly following its completion, commissioned in the same year to rework some of the movements into a piece for wind quintet. Ligeti accepted this challenge. Though he did not conceptualize the project as a productive one initially—the complete work, unsuitable in its time even to be heard on piano, could hardly prove more palatable once orchestrated—he still eagerly approached the project.¹³ Both in its original incarnation for piano and as the *Six Bagatelles* for wind quintet, the work received many private performances. In 1956, the first five *Bagatelles* saw the light of day during a Hungarian

¹¹Steinitz, 58.

¹² Ibid., 59.

¹³ Ibid., 59.

Music Week; however, the sixth movement was still deemed far too experimental, and the selection committee censored it from the performance.¹⁴

Ultimately, 1969 proved a fruitful year: both the *Bagatelles* and *Musica Ricercata* experienced their first complete public performances.¹⁵ Ironically, the premiere of *Six Bagatelles* occurred just six weeks prior to the premiere of *Musica Ricercata*. Furthering the circumstantial oddity, Ligeti's other entry into the wind quintet repertoire, *Ten Pieces* (1968), was performed earlier that year, nine months before either *Musica Ricercata* or *Six Bagatelles* were heard for the first time.¹⁶

Much of the scholarship surrounding Ligeti includes discussion of his later works and style. The works from his transitional period centering around 1952, and even more so the music written prior to them, have received far less scholarly attention. However, one question often arises from the research around Ligeti's early works—why did he opt to transcribe only six movements from *Musica Ricercata*, and what motivated the omissions of the others?¹⁷ I do not attempt to speak for Ligeti in terms of artistic intent. However, in the following pages, I present the argument that Ligeti's selection of only certain movements was motivated by neither his inability to complete a transcription, nor the unsuitability of the movements to reinterpretation. I posit that Ligeti would have completed the project had the right opportunity and circumstances presented themselves. Alas, the composer died 13 years prior to the writing of this thesis, and such a circumstance will never see realization. Accordingly, this thesis presents an attempt to suggest what could have been, were the composer tempted to see the transcription through to its fulfillment during his lifetime.

¹⁴ Grantham, 5.

¹⁵ Steinitz, 59–60.

¹⁶ Busan, 10.

¹⁷ Ibid., 166.

LIGETI'S TRANSCRIPTION PROCEDURES

Throughout the transcription process, Ligeti prioritizes certain elements of the original work. Not everything can be perfectly translated from a single piano to five wind instruments, requiring that Ligeti make adjustments to the music. While studying Ligeti's transcriptions, I identified particular strategies he employs, as well as which components he considers important enough to preserve exactly versus where he made compromises or adjustments.

One consistent concession Ligeti makes throughout the *Bagatelles* is that of octave. Rather than aiming for exact recreation of the octaves used in *Musica Ricercata*, register becomes the more significant consideration. Refer to Figure 2 below for an excellent illustration of this: immediately at the outset of the first Bagatelle, Ligeti already calls for the flute and oboe in octaves, creating a double not present in the original. Likewise, the use of piccolo at all in this movement shows that Ligeti is in his scoring asking for aggressive punctuation, not considering severely the technical octave displacements occurring during translation. I contend that octave choice, while still vital insofar as its consideration as a textural element, proves unimportant in Ligeti's grand scheme of translating the music from its original format to wind quintet. One can find examples of octave modifications and doublings throughout the work on almost every page of the *Bagatelles*, so it does not serve to discuss this further except to emphasize that in my arrangement work, I tried to maintain the prioritizations that I observed reflected in my study of Ligeti's work.

György Ligeti Sechs Bagatellen für Bläserquintett (1953)

I

Allegro con spirito
(♩ = 92)
Fl. grande

Flauto
Oboe
Clarinetto (Si b)
Corno (Fa)
Fagotto

Figure 2. *Six Bagatelles*, movement I.

Throughout his transcriptions, Ligeti takes care to employ idiomatic characteristics of the instruments to enhance articulations and moments throughout piece. For an example of this, again refer to Figure 2. Though the oboe and flute take on the role of the right hand from the piano, the oboe also assists with the initial downbeat. Providing a powerful accent in the low register proves easy for an oboist, so this addition—Ligeti could have left the oboe out of the first note with good effect—shows just how aware Ligeti was with the capabilities of the instruments he was writing for. Rather than resulting in a merely adequate transcription, as a result of this awareness, small details highlighting the instruments' capabilities provide significant flavor and interest in positions not always expected. Ligeti demonstrates his awareness of the characteristics of the instruments across all their registers throughout the transcription, and as such he employs them effectively to replicate the affect of many moments in *Musica Ricercata*. For example, in measure 40 of movement II (Figure 3), the horn and bassoon

are used to their full potentials as low and powerful instruments, and the opposite extreme of lightness among the flute, oboe, clarinet, and bassoon as the movement closes.

The image displays two staves of a musical score for woodwind instruments. The top staff includes parts for Fl. grande, Ob., Cl., Cor., and Fg. The bottom staff includes parts for Fl. grande, Ob., Cl., Cor., and Fg. The score is marked with various dynamics and tempo changes.

Top Staff:

- Tempo markings: *poco rall.*, *a tempo*, *stringendo molto*.
- Measure 35 is circled.
- Dynamics: *f*, *pp*, *mf*, *p*, *pp*, *p*.

Bottom Staff:

- Tempo marking: *Moderato*, $\text{♩} = 76$.
- Measure 40 is circled.
- Tempo marking: *stretto*.
- Dynamics: *mp*, *mf*, *f*, *fff*, *ppp*, *ppp ten.*, *perdendosi*, *senza sord.*, *fff*, *(fff) dim. molto - - perdendosi*, *(fff) dim. molto - - ppp ten.*.

(Durata: ca. 2'40")

Figure

3. *Six Bagatelles*, movement II.

Again, specific moments can be highlighted that display this sensitivity throughout the composition; it does not prove useful to detail and delineate every one. One should note, though, that in every divergence from *Musica Ricercata*, Ligeti clearly makes a conscious effort either to translate the musical ideas effectively or modify the existing material to function in a different but still effective manner. From the perspective of a player of a wind instrument, it becomes

exceedingly clear that every discrepancy between the two works is an intentional choice aimed at creating successful translation. Numerous transformative elements between the two works serve to make the music function better in the new idiom.

Regarding articulation specifically, the printed articulations themselves often diverge not just in scoring decisions and placement but also in actual notation. I observed that for the most part, whenever articulation discrepancies occur, the resulting effect ends up essentially the same as the original intention. In this way, were Ligeti transcribing to a different ensemble with instruments of a different makeup—for instance, a string quartet—I can confidently express that the resulting articulations would be different from either existing version. For examples of this, contrast Figure 3 above, with Figure 4 below. Notice how starting in measure 32, note durations vary among the woodwind parts, mimicking the effects from the corresponding piano passages. Take note, also, of how the various pedaling techniques and registral shifts called for in the original are recreated through dynamic changes and slight adjustments to the instructional markings. Finally, notice how as Ligeti changes the scoring in the passage leading up to measure 40, he also modifies the articulations to communicate the increasingly intensified affect of the section.

The image displays two staves of musical notation. The top staff is for piano, featuring treble and bass clefs. It includes dynamic markings such as *f* tre corde, *pp* una corda, *mp* tre corde, *p*, and *pp*. There are also performance instructions like *poco rall.* and *a tempo*. The bottom staff is for strings, with markings like *pesante, cresc.*, *cresc. molto*, and *fff*. Handwritten annotations in various colors (blue, red, green) are present throughout, including numbers 1, 2, 3, 4, and 5, and phrases like *string. poco a poco*, *non string.*, *lunga*, and *senza ped. ca. 3'*. A footnote at the bottom explains a performance instruction: *(*) Die Tasten stumm niederdrücken und ganz ausklingen lassen / depress keys silently and allow sound to die away.*

Figure 4. *Musica Ricercata*, movement V. In this and other examples, handwritten 1, 2, 3, 4, and 5 refer to Flute, Oboe, Clarinet, Horn, and Bassoon, respectively. All other pencil marks highlight modifications Ligeti made in the *Bagatelles* differently than the original.

Occasional structure changes do occur in the piece as well. One such change occurs at the ending to movement V, discussed immediately above. (Figure 3) The ending here uses a piano-specific technique, striking some loud repeated Gs with the damper pedal depressed, then releasing the pedal while silently holding down the keys to a G major chord. Ligeti's ultimate decision to solve this complication was to present somewhat of a rewriting of the closing passage. Ligeti's rewrite, as already discussed, involves maintaining and even amplifying the crescendo and stringendo before letting the bassoon and horn take over at their top volume—in a minor second, not a unison or octave as in the piano, calling reference to earlier motives. After

this, the other woodwinds enter at their softest dynamic completely covered by the other two instruments, with the flute playing a C# (an added pitch not in G major, again heralding the opening theme). As the horn fades out and the bassoon diminuendos down to meet the others, the flute holds on for another measure before leaving the other woodwinds to hold the G major chord, reminiscent of the ending in the original iteration. Though this is a particularly significant instance, other rewrites are scattered throughout the work.

Another change, even more significant than the one already described, appears during the seventh movement of *Musica Ricercata* (Bagatelle III). The piano features an ostinato played throughout by the left hand while the right hand plays a very lyrical (and fully independent) melody. (Figure 5) This would present challenging elements for a quintet if transcribed directly for two reasons: first, for pacing and fermatas among group members; and second, a single player repeating the same figure ad nauseum with more complex finger movements involved becomes exhausting both physically and mentally much more quickly. Ligeti ingeniously worked around this by translating the constant and independent figure into a constant but *dependent* figure, and also by always sharing the figure among two players. All five players except the oboist takes at least one turn repeating the septuplet figure, and rather than continuously repeating at an extreme pace, the players take a single measure of the (now-fully written-out) melody to complete the figure each iteration. In this way, not only does the movement become functional, it takes on a charming character while everyone shares the workload.



Figure 5. *Musica Ricercata*, movement VII. Notice that the left hand maintains a constant and independent septuplet ostinato. The ostinato remains in the *Bagatelles*, but instead it is metered and trades off between players each statement.

On a smaller scale, Ligeti also adjusts small components to become more suitable for the ensemble, including reversing musical elements such as dynamic or a compositional process. Two such instances occur in the third movement of *Musica Ricercata* (Bagatelle 1). The first occurs during the fifth measure. A diminuendo in measure 5 which sets up the second phrase in the original is replaced in the wind quintet version by a maintained forte dynamic and an implied crescendo. This appears to be designed at least partially with the flute's register in mind, as this movement is the only place Ligeti asks for a C7 from the flute. However, the forte-pianissimo gesture at the outset of measure 6 turns the louder dynamic into just as effective a setup for the material that follows. Later in the same movement, a reversal not of dynamic, but of melodic treatment, occurs. In *Musica Ricercata*, Ligeti writes a retransition to the recapitulation by increasingly employing diminution and stringendo to the melodic fragment. In the *Bagatelles*, rather than speeding the fragment up, Ligeti has the bassoon slow the motif down through both augmentation and rallentando until the group relaunches into the recapitulation together. Though

the melody here undergoes the opposite procedure, both iterations work effectively to set up the music that follows.

The image shows two musical score excerpts. The left excerpt is from *Musica Ricercata III*, featuring a piano part with a treble and bass staff. The treble staff has a melodic line with a handwritten annotation '(all)' above it. The bass staff has a melodic line starting with a double flat (Bb) and a handwritten 'pp' above it. The right excerpt is from *Six Bagatelles I*, showing a woodwind section with staves for Fl. grande, Ob., Cl., Cor., and Fg. The Fl. grande staff has a circled '5' above it. The Ob. staff has a melodic line. The Cl. staff has a melodic line with a handwritten 'p' above it. The Cor. staff has a melodic line. The Fg. staff has a melodic line with a handwritten 'f pp' below it and 'staccatissimo, leggero' above it.

Figure 6. Corresponding passages demonstrating reversed dynamic nuance in *Musica Ricercata* III (left) and *Six Bagatelles* I (right).

The image shows a musical score excerpt for the Bassoon (Fg.) from *Musica Ricercata I*. The staff contains a melodic line with dynamic markings: 'pp' (pianissimo), 'dim.' (diminuendo), 'sf' (sforzando), and 'ff' (fortissimo). The tempo markings 'rallentando' and 'diminuendo' are also present.

Figure 7. Bassoon rallentando/diminuendo/augmentation. In *Musica Ricercata* I, this passage experiences opposite procedures in all regards.

All of the discussion thus far about the suitability of the transcription is not to imply that the *Bagatelles* do not present a challenge in the ensemble setting—on the contrary, particularly as the movements progress, they become increasingly more difficult to execute effectively. The sixth Bagatelle—*Musica Ricercata* X—remains famously challenging for ensemble due to its mixed meter, complex tonal language, and quick speed: Ligeti marks the tempo at $\text{♩}=450$, even faster than the original ($\text{♩}=400$). For another illustration of the challenges inherent to the quintet version of the piece, observe Ligeti's use of the oboe's low register, employed to such excellent effect in the first bagatelle, must now play quite soft and sustained low notes during the fifth movement. (Figure 8) However, Ligeti clearly again prioritizes the overall effect here; the rich

overtones in the sound of an oboe at its low end work to establish the character of the piece.

Again, just as in the first movement, the scoring would have been otherwise adequate, but when Ligeti calls for demands such as this in the extreme registers, the achieved result becomes extraordinary.

V

Adagio. Mesto
♩ = 50

Fl. grande
Ob.
Cl.
Cor.
Fg.

p possible *simile*
p *con sord.*
pp
p possible *simile*

pp espr.

5

Figure

8. *Six Bagatelles*, movement V.

As the movements progress and increase the number of utilized pitch classes, Ligeti became faced with the challenge of using five instruments to address more than five simultaneous pitches. This becomes epitomized in the sixth movement of the *Bagatelles*. A moment is reached at the climax where ten unique pitches are called for—every note used in the movement except for D, and C, which is absent throughout. Obviously, five wind instruments cannot easily reproduce ten pitches sounding simultaneously, nor can they all play in the notated register. Ligeti's solution: select a highly dissonant subset of the ten notes, one for each instrument, and score all five players in their respective upper registers so that the resulting color

remains as harsh and aggressive as the original. The clarinet, remarkably, makes a jump on the final chord to written F#6, the highest note Ligeti asks of the player in the entire *Bagatelles*. This is shown in Figures 9 and 10 below at the position marked “wie verrückt” (translated “as if mad” or “as though insane”).

The image displays two systems of musical notation for a piano and clarinet. The first system is marked with the tempo and mood "insistierend, trotzig / insistent, spiteful" and includes dynamic markings such as *sf*, *cresc.*, and *fff*. The second system is marked "wie verrückt / as if mad" and includes the instruction "(oft wiederholen / repeat often)". Handwritten annotations include "4 added measures" with an arrow pointing to a specific measure, and "ca. 1'15\"". The score is numbered 46891.

Figure 9. *Musica Ricercata*, movement X.

crescendo, estatico - - - string. molto ("as though insane") „wie verrückt“ - - -

110 115

Fl. piccolo

Ob.

Cl.

Cor.

Fg.

G. P. G. P.

con sord.

Meno mosso
♩ = 74

120 125

G. P.

(con sord.)
lontano

p

dim. - - -

pp

perdendosi - - -

pp

(Durata: ca. 1'15'')

Figure 10. *Six Bagatelles*, movement VI.

One last area that Ligeti demonstrably put some effort into is the challenge of converting a solo work performed by one individual to an ensemble work with several musicians playing in consort. Figures 9 and 10 illustrate one such example where this occurs—notice that in the *Musica Ricercata* version, measure 112 includes the instruction “oft wiederholden” (repeat often), indicating the performer should repeat the measure a few times. For a quintet to execute this successfully, a premeditated number must be determined in rehearsal. Rather than leave this up to chance and potential miscounting, Ligeti writes out a precise number of notes and

entrances for the quintet to play together. In the section immediately prior to the one shown, Ligeti also rebars many of the sporadically alternating 3/8 and 2/4 measures, allowing for better ensemble communication. This consideration illustrates the level of care Ligeti put into the translation, ensuring that piece not only retains the musical content but was notated in the such a manner that an ensemble performance would be successful.

ADDITIONAL TRANSCRIPTION CHALLENGES

As illustrated in the previous section, Ligeti necessarily made compromises in the transcription of *Musica Ricercata*. As pointed out in other research, certain compositional and executional challenges are inherent to the wind quintet as an ensemble due to its nature as ensemble nature and its structure of five instruments of different types. Some scholarship argues that the *Six Bagatelles* and *Musica Ricercata* exist as wholly different and entirely independent works.¹⁸ Previous scholarly work highlights restrictions, such as range reduction and limitations presented by nature of playing as an ensemble instead of as a soloist, as factors preventing Ligeti from arranging the other movements successfully.¹⁹ Busan suggests that this apparent ill-suitedness of medium translation presents substantial enough qualifications to justify a conscious decision by Ligeti to abandon the other movements from the project entirely.

Speaking directly to this position, I argue that not only can the movements undergo successful transcription, they prove equally well-suited for the wind quintet as the original six *Bagatelles*. Arguments against this position range in scope—suggestions are presented at times that movements are too pianistic or unable to capture the same affect or are, simply, unsuited for translation. In the rest of this section, I will refute this by explaining how various challenges

¹⁸ Ibid., 6.

¹⁹ Busan, 166.

were broached and how, ultimately, a complete set of all eleven movements could be formed to unite the work as a whole in the other medium.

What follows are details of how I overcame the more complicated facets of transcription. I took inspiration from Ligeti's methods throughout this process, attempting to make the same type of concessions I see appearing in the composer's work. My experience as a wind player, flautist, and arranger, as well as consultations with performers on the other quintet instruments, composers, and theorists all informed how I approached the transcriptions of the remaining movements. Challenges of academic integrity and musical preservation represent the primary focus of the project, though some performance considerations deserve mention as well.

In terms of preserving the intent and spirit of the work, I thought it was important to imitate the priorities I observed in Ligeti's own arrangements. For example, elements such as exact octave preservation were abandoned at times in favor of maintaining musical content and affect. Ligeti was striving for "maximum result from the minimum material."²⁰ I aimed, therefore, to create a musical translation that preserved musical substance and employed diversity in scoring and colors throughout.

One specific challenge that immediately presents itself are the pianistic techniques lacking equivalence in the quintet world. The opening of the first movement of *Musica Ricercata*—truly, the first note of the piece—already presents a challenge: a tremolo that wide cannot be effectively executed on wind instruments. (Figure 11) I had three options to pull from: a sustained tone, a trill, or a flutter-tongue. A trill was, by my interpretation, too far off from the spirit of the movement, as a trill brings another note into play (which uses only As until the final tone). A sustained A from all five instruments would not have been a bad idea and, in practice, would have been sufficient; however, ultimately a flutter-tongue by all instruments got the sound

²⁰ Steinitz, 54.

the closest to the original's tremolo effect. Although a flutter-tongue works more effectively on some instruments (flute, bassoon) than others (oboe), the overall effect with all members fluttering resulted in a close approximation of the tremolo. The opening, both original and transcription, follow in Figures 11 and 12.



Figure 11. *Musica Ricercata*, movement I.

Musica Ricercata

Sostenuto ♩ = 66

I

Miserato ♩ = 106

György Ligeti
arr. Mitchell Atencio

The musical score is written for five woodwind instruments: Flute, Oboe, Clarinet in Bb, Horn in F, and Bassoon. The key signature is one sharp (F#) and the time signature is 4/4. The score is divided into two sections: 'Sostenuto' (♩ = 66) and 'Miserato' (♩ = 106). The first system of notation shows the following details:

- Flute:** Starts with a forte (ff) dynamic, followed by a fortissimo (fff) dynamic. The notation includes a 'flz.' (flautando) marking and a 'p' (piano) dynamic in the 'Miserato' section.
- Oboe:** Starts with a forte (ff) dynamic, followed by a fortissimo (fff) dynamic. The notation includes a 'flz.' (flautando) marking and a 'p' (piano) dynamic in the 'Miserato' section.
- Clarinet in Bb:** Starts with a forte (ff) dynamic, followed by a fortissimo (fff) dynamic. The notation includes a 'flz.' (flautando) marking and a 'p' (piano) dynamic in the 'Miserato' section.
- Horn in F:** Starts with a forte (ff) dynamic, followed by a fortissimo (fff) dynamic. The notation includes a 'flz.' (flautando) marking and a 'p' (piano) dynamic in the 'Miserato' section.
- Bassoon:** Starts with a forte (ff) dynamic, followed by a fortissimo (fff) dynamic. The notation includes a 'flz.' (flautando) marking and a 'p' (piano) dynamic in the 'Miserato' section.

The score also includes various articulations and dynamics, such as 'ord.' (ordine), 'G.P.' (György Ligeti), and 'pp' (pianissimo).

Figure 12. *Musica Ricercata* arrangement, movement I.

The second extended technique also appears in the first system of the piece. Like the end of the fifth movement of *Musica Ricercata*, Ligeti calls for a loud strike followed by sustain of only select keys. I essentially copied his concept at the end of the fifth movement, recreating a loud entry point and soft sustain entering thereafter. This practice is repeated at the end of the movement, with the introduction of the D.

Another challenge from the first movement is that the repeated bass figure—which can only logically be executed by the bassoon for a combination of reasons including range, agility, and endurance—continues almost for the entire movement. Wind instruments have one particular limitation that others lack: the requirement of breath. One option to navigate this would be to have the horn or clarinet cover the upper note on occasion; however, this would require a lot of coordination and cause an unnecessary color change at times. That solution would also limit the bassoonist, requiring the player to breathe in all the indicated spots, which takes away from the

ease with which they could complete the entire movement successfully. In order to facilitate breathing as needed (and to provide slight breaks for the embouchure and mind), I opted to highlight good breathing opportunities by surrounding certain eighth notes with a pair of parentheses, as in (♩). (Figure 13) These were always positioned so that the player could opt to breathe when another player was doing an accent, essentially masking the fact that a note was missing. This proved successful in performance.



Figure 13. *Musica Ricercata* arrangement, movement I.

Two apparent challenges presented themselves as a result of the gradual accelerando that occurs throughout the movement. First, rather than maintaining the octave leaps in the bassoon part throughout, a better result was achieved by sticking with the lower octave once a certain point in the accelerando was reached; that position was predetermined. This enabled the bassoonist to accelerate without getting held up by the repeated leap to satisfactory effect. Second, the climax of the movement presented what would appear at first glance to end up being quite challenging for an ensemble in the shortening of the rests, starting with two full measures of silence and ending with a septuplet in a single measure. However, this turned out not to be as challenging as one might think at first, and the quintet had no trouble performing this section as is.

One final complication arose in terms of range and register. The original form of the movement utilized every A on the keyboard, from A0 to A7. The use of a piccolo helped extend the sounding range for the flutist by an octave to sounding A7. Normally, the bassoon can only get to A2, though through the use of a low A extension, an A1 is achievable. The low A extension prevents the ability to play a low B♭; however, since no B♭s occur in the movement,

the extension can be fully inserted throughout the movement. The low A was saved for the equivalent moment in the original where the piano strikes its lowest A, measure 66, and likewise the piccolo's highest A is used at the same metric position, measure 70. The resulting effect was one of a full and forceful sound from all registers, just as in the original, but with an expanded color palette.

Movement II proved simpler to emulate as it did not require nearly the same extreme demands. One primary issue arose, that being the quick repetition of tones Ligeti requests once the third pitch is introduced halfway through the movement. The G features prominently after a page and a half featuring only E# & F#—its entry is accompanied by an increase to the loudest dynamic yet and more than a doubling in tempo, as well as rhythmic diminution and crescendo as the pitch repeats. Upon arrival at measure 24 (Figure 14), the best solution to imitate the upper staff again was a flutter-tongue, this time executed by piccolo and punctuated at the louder moments with interjections from the oboe and very high clarinet. While a flutter-tongue does not directly imitate a rapid striking of a note, the product was close enough to the densification of sound and made for an effective adaptation. To accompany the piccolo's flutter-tongue, on the first arrival, the clarinet also flutters while simultaneously executing a timbral/resonance trill. (Figure 15) This kind of trill causes enough fluctuations in the overtones that the pitch ends up producing a “wobbling” sound. These sounds together resulted in a sound mass around G that roughly approximate the effect Ligeti was seeking after his original work.

molto pesante, minaccioso

cresc. molto

21 *Senza tempo, rapido*

sfpp
lunga

perdendosi

24 *ff*
con ped.

sfpp

sfpp sfpp sfpp

Intenso, agitato ♩ = 76

ff

sfpp

(pp)

(m.s.)

ff

(sempre ff)

*) Mit beiden Fingern zugleich anschlagen / *play note with both fingers at once.*
 **) Tonrepetition so dicht wie möglich / *repetition of tones as dense as possible.*

Figure 14. *Musica Ricercata*, movement II.

23 *flz.*

sfpp
lunga

ff
lunga

*resonance trill with
G# key and flutter-tongue*

lunga
sfpp

Intenso, agitato ♩ = 76 *flz.*

sfpp

26

ff

ff

ff

ff

ff

ff

Figure 15. *Musica Ricercata* arrangement, movement II.

The final measure of the piece was treated the same way as the earlier instance, the only difference being that at the appropriate time, the flutter was changed into a fast double-tongue that tapered down and ultimately slowed to quarter notes, as indicated by Ligeti. (Figure 16) This final measure proved initially difficult in rehearsal, so adjustments were made to facilitate easier performance. The addition of cues in the individual parts proved particularly helpful, facilitating easier comprehension of the other lines so that breaks, fermatas, and pauses could be acknowledged by all players.

The image shows a musical score for a flute part, labeled 'Senza tempo' and 'Flute flz.'. The score is written on a single staff with a treble clef. It begins with a measure marked '33'. The first part of the score is marked 'ffpp' and 'mp', with a 'Gradually slow down flutter then change to tonguing, creating a diminution effect' instruction. The second part is marked 'mp' and 'pppp'. The score includes various musical notations such as notes, rests, and dynamic markings.

Figure 16. *Musica Ricercata* arrangement, movement II. (Other staves visible)

The fourth movement, in terms of character, contains two elements. First, its Chopinesque quality of a lyrical melody atop a waltz; and second, Ligeti's instruction to interpret the piece "freely, with rubati, ritenuti, accelerandi, just as an organ grinder would play his barrel organ."²¹ At first, again, the tempo flexibility would seem to present a challenge for an ensemble without a conductor, but in reality this was not difficult to rehearse. What was difficult, though,

²¹ Ligeti, *Musica Ricercata*, 13.

was the effort to score the piece in a way that both preserved the waltz-like character of the movement and also explored colorful scoring options in a way that Ligeti would have.

To this end, all of the woodwinds, including the bassoon, get to take a turn playing the melody. Much in the way that Ligeti opts to employ unorthodox scoring—at times putting the flute underneath the oboe or clarinet, instead of the more conventional practice of keeping the flute on the top—and asking for higher notes from the bassoon and horn, similar practices are employed here. The colors develop as the movement progresses, too, meaning that the same configuration does not experience an identical return. In all, this results in a transcription both capturing the goals of the movement in the first place while still exploring what the quintet can accomplish from a timbral perspective.

The sixth movement is the shortest, lasting only about 30 seconds. Its biggest challenges were the way that it stratified range and the instance where two hands of block chords are utilized simultaneously, octaves apart. However, the voicings of this movement were quite simple to orchestrate, allowing for easy coloration throughout. Figure 17 illustrates how the introductory gestures could be tossed around easily, creating a light and playful texture without bogging down any one specific player. Each gestural change is accompanied by a scoring change, helping to advance Ligeti's ever-changing characters in the movement.

Musica Ricercata VI

György Ligeti
arr. Mitchell Atencio

Allegro molto capriccioso ♩ = 96

Piccolo

Oboe

Clarinet in Bb

Horn in F

Bassoon

f *cresc.* *f* *cresc.* *f* *cresc.*

Figure 17. *Musica Ricercata* arrangement, movement VI.

As we progress through the piece, the number of pitch classes involved in each movement increases; to this end, we begin to run into problems of expressing every pitch used. Fortunately, during the instance in question for this movement at measure 23 (Figure 18), the pitches for each chord are covered, so rather than insisting on precise block chord imitation, the middle note of the lower chord was left out and instruments were assigned the most idiomatic note. The resulting approximation proved perfectly adequate at replicating the effect, still creating a bright color change from what occurs both directly before and directly afterwards.

19

pp sub. *sempre pp* *mp* *ff martellato*

20

p *mp* *ff martellato*

21

p *mp* *ff martellato*

22

mp *ff martellato*

23

mp *ff martellato*

24

ff sempre *poco rall.* *a tempo*

25

ff sempre *p* *a tempo*

26

ff sempre *poco rall.* *a tempo*

27

p *a tempo*

28

p *a tempo*

p sub. *f*

Figure 18. *Musica Ricercata* arrangement, movement VI.

22

mp *ff martellato* *ff sempre*

mp *con ped. *)* *p sub. senza ped.*

Figure 19. *Musica Ricercata*, movement VI.

The final movement definitely represented the most challenging to accomplish from an arranging standpoint. The movement possesses an incredibly thick texture—as many as 4 staves occur simultaneously, with different voices represented on all of them—and both fugal and chromatic *ricercar* elements persist throughout. The challenges to navigate were fourfold: 1) how to make the movement more idiomatic for winds; 2) how to assure every voice gets covered; 3) how to handle when part of a motif falls outside the range of the instrument responsible for its beginning, or otherwise needs to involve a voice exchange for any reason; 4) how to handle the piece’s conclusion.

First, in terms of adjusting the movement to be more suitable to wind instruments, I added articulations to emulate a style evocative of early music. Rather than leaving every note without any articulations, as in the original format, I added slurs highlighting the individual counterpoint going on with each line with the fugal, contrapuntal style in mind. This helped in terms of phrasing and in making the parts more comfortable for the players, making every element of the movement easier to execute.



Figure 20. *Musica Ricercata* arrangement, movement XI.

Handling range restraints proved by far the most significant ordeal for this movement. Often, the theme’s development and progression into the countersubject requires a significant range traversal, and in these instances voice exchanges became necessary. Ultimately, though, even at its thickest moment, every part was covered in an approximation of original placement and role, holding the piece intact. (Figure 22)



Figure 21. *Musica Ricercata*, movement XI, measures 54–57.

Figure 22. *Musica Ricercata* arrangement, movement XI, measures 54–57.

Additionally, even when some voices had to pick up other loose ends to complete a few lines, this was accomplished without too much difficulty, as in Figure 23. Especially considering the progressively fragmented way in which the theme develops, the transitions all made sense in the context of the movement. Notably, in many cases, the ensemble challenges were lessened significantly by adding cues from other parts.



Figure 23. *Musica Ricercata* arrangement, movement XI. Notice that the clarinet completes the flute melody when it drops beneath the instrument's range.

Finally, the movement's conclusion proved a challenge orchestrationally. Ligeti again takes the piano to its extremes, requiring the instruments to go to their outermost limits. Furthermore, the low A that ends the piece can only be performed by the bassoon with the low A extension inserted, which problematically prevents the B \flat that immediately precedes it from being played. To solve this complication, the player to the bassoonist's left—who is, at the time, resting—could insert the low A extension while the player breathes in between the last two notes. (Figure 25) This did require some practice to execute correctly and time the breath properly with the flute player so that they could move between the last two notes together with the assistance of the clarinetist, but once accomplished yielded a very satisfying conclusion to the work.



Figure 24. *Musica Ricercata*, movement XI.

60

dim. poco a poco

insert low A extension during breath

dim. poco a poco

Have player to left insert low A extension during breath

Figure 25. *Musica Ricercata*, movement XI. Notice that the bassoonist can see the flute player's part and, additionally, the clarinet player will insert the low A extension.

This final movement, with all of its challenges, proved one of the most rewarding. Certainly, it was the most complex movement contrapuntally and established the most obstacles. However, it also became a very satisfying movements to perform. If this movement can undergo successful transcription, then there should be no question as to the possibility of transcription for the entire work.

Musica Ricercata

I

Miserato ♩ = 106

[illegible]

7
extension

The image shows a musical score for a 7-measure extension. It consists of five staves. The first four staves are treble clefs, and the fifth staff is a bass clef. The first four staves contain whole rests for measures 1 through 4. The fifth staff contains a rhythmic pattern of eighth and sixteenth notes. The pattern starts with a quarter rest, followed by an eighth note, a quarter rest, and an eighth note in measures 1 and 2. In measures 3 and 4, it continues with eighth notes, a quarter rest, and eighth notes. In measures 5 and 6, it continues with eighth notes, a quarter rest, and eighth notes. In measure 7, it ends with a quarter note, an eighth note, a quarter note, an eighth note, and a quarter note.

11

Cl.

Bsn.

miserato, poco pesante
Play

pp

Breathe as needed
where marked (♩)

15

Cl.

Bsn.

pp

3
stringendo poco a poco sin al Prestissimo

19

Cl.

miserato, poco pesante

Play >

pp

cresc. poco a poco (sin al ff)

cresc. poco a poco (sin al ff)

cresc. poco a poco (sin al ff)

23

Play > miserato, poco pesante

cresc. poco a poco (sin al ff)

pp

27

27

31

31

Hn.

Fl.

Play

mp
cresc. poco a poco
(sin al ff)

35 5

Musical score for measures 35-38. The score is written for five staves. The first staff has a treble clef and a key signature of one flat. The second staff has a treble clef and a key signature of one flat. The third staff has a treble clef and a key signature of one flat. The fourth staff has a treble clef and a key signature of one flat. The fifth staff has a bass clef and a key signature of one flat. The score includes various musical notations such as notes, rests, and dynamic markings. The word "Play" appears above the second staff in measures 36 and 38. The word "Ob." appears above the third staff in measure 36. The score is divided into four measures.

39

Musical score for measures 39-42. The score is written for five staves. The first staff has a treble clef and a key signature of one flat. The second staff has a treble clef and a key signature of one flat. The third staff has a treble clef and a key signature of one flat. The fourth staff has a treble clef and a key signature of one flat. The fifth staff has a bass clef and a key signature of one flat. The score includes various musical notations such as notes, rests, and dynamic markings. The score is divided into four measures.

43

Musical score for measures 43-46. The score is written for five staves (treble and bass clefs). The first staff (treble clef) has a whole rest in measure 43, followed by a quarter rest in measure 44, and then a quarter note with a grace note in measure 45. The second staff (treble clef) has a whole rest in measure 43, followed by a quarter note with a grace note in measure 44, and then a quarter note with a grace note in measure 45. The third staff (treble clef) has a quarter note with a grace note in measure 43, followed by a quarter note with a grace note in measure 44, and then a quarter note with a grace note in measure 45. The fourth staff (treble clef) has a quarter note with a grace note in measure 43, followed by a quarter note with a grace note in measure 44, and then a quarter note with a grace note in measure 45. The fifth staff (bass clef) has a quarter note with a grace note in measure 43, followed by a quarter note with a grace note in measure 44, and then a quarter note with a grace note in measure 45.

47

Musical score for measures 47-50. The score is written for five staves (treble and bass clefs). The first staff (treble clef) has a quarter note with a grace note in measure 47, followed by a quarter note with a grace note in measure 48, and then a quarter note with a grace note in measure 49. The second staff (treble clef) has a quarter note with a grace note in measure 47, followed by a quarter note with a grace note in measure 48, and then a quarter note with a grace note in measure 49. The third staff (treble clef) has a quarter note with a grace note in measure 47, followed by a quarter note with a grace note in measure 48, and then a quarter note with a grace note in measure 49. The fourth staff (treble clef) has a quarter note with a grace note in measure 47, followed by a quarter note with a grace note in measure 48, and then a quarter note with a grace note in measure 49. The fifth staff (bass clef) has a quarter note with a grace note in measure 47, followed by a quarter note with a grace note in measure 48, and then a quarter note with a grace note in measure 49.

51 7

ff

ff

ff

ff

ff

This musical system contains measures 51 through 54. It features five staves: a single treble staff at the top, and a grand staff (treble and bass) below. The music is written in 3/4 time. Measures 51 and 52 show a melodic line in the upper treble staff and a rhythmic accompaniment in the grand staff. Measures 53 and 54 continue this pattern with more complex rhythmic figures. The dynamic *ff* (fortissimo) is indicated in measures 52, 53, and 54.

55

3/4

3/4

3/4

3/4

3/4

This musical system contains measures 55 through 58. It features five staves: a single treble staff at the top, and a grand staff (treble and bass) below. The music is written in 3/4 time. Measures 55 and 56 show a melodic line in the upper treble staff and a rhythmic accompaniment in the grand staff. Measures 57 and 58 continue this pattern with more complex rhythmic figures. The time signature 3/4 is indicated at the end of each staff in measures 55, 56, 57, and 58.

8

59 To Picc.

Prestissimo

Musical score for measures 59-63, marked **Prestissimo**. The score is in 3/4 time and features five staves. The first staff (Piccolo) has a whole rest in measures 59-61 and a half note in measure 62. The second, third, and fourth staves (strings) play a continuous eighth-note pattern, marked *fff*. The fifth staff (bass) plays a continuous eighth-note pattern, also marked *fff*. The key signature has one flat (B-flat).

64

Piccolo

Musical score for measures 64-68, marked **Piccolo**. The score is in 3/4 time and features five staves. The first staff (Piccolo) has a whole rest in measures 64-65 and a half note in measure 66. The second, third, and fourth staves (strings) play a continuous eighth-note pattern, marked *fff*. The fifth staff (bass) plays a continuous eighth-note pattern, also marked *fff*. The key signature has one flat (B-flat).

70 9

tutta la forza

tutta la forza

tutta la forza

tutta la forza

tutta la forza

75

3 5 3 5 3 5 3 5

10
79

ferocissimo 6 7

ferocissimo 6 7

ferocissimo 6 7

ferocissimo 6 7

ferocissimo 6 7

81

Sostenuto

To Fl.

p

sf

sf

p

Musica Ricercata II

György Ligeti
arr. Mitchell Atencio

Mesto, rigido e cerimoniale ♩ = 56

Piccolo

Oboe

Clarinet in B \flat

Horn in F

Bassoon

f *non legato* *sim.*

4

pp *pp* *pp* *pp*

8

8

sf
quasi parlando

f *non leg.* *quasi parlando*

12

12

sf

pp
rigido e cerimoniale

rigido e cerimoniale

rigido e cerimoniale

16 **Più mosso, pesante** ♩ = 126

The musical score consists of five staves. The first three staves contain vocal lines with lyrics. The fourth and fifth staves are empty. The score is in 4/4 time and features a key signature of one sharp (F#). The tempo and mood are indicated as "Più mosso, pesante" with a metronome marking of ♩ = 126. The dynamics include *ff* (fortissimo) and *cresc. molto* (crescendo molto). The lyrics are "tutta la forza" and "molto pesante, minaccioso".

ff
tutta la forza

ff
tutta la forza

ff
tutta la forza

cresc. molto
molto pesante, minaccioso

cresc. molto
molto pesante, minaccioso

cresc. molto
molto pesante, minaccioso

23

ffp
lunga

ff
lunga

tr
resonance trill with
G# key and flutter-tongue

lunga
ffp

ffp
lunga

ff

ffp

lunga
ffp

ff

Intenso, agitato ♩ = 76

flz.

flz.

26

sff *sff* *sff* *sff* *sff*

sff *sff* *sff* *sff* *sff*

sff *sff* *sff* *sff* *sff*

(sempre ff) *sffpp* *ff*

(sempre ff)

28

Tempo I ♩ = 56
ord.

pp
rigido e cerimoniale

sff *sff* *f* *mf* *pp*
rigido e cerimoniale

sff *sff* *f* *mf* *pp*
rigido e cerimoniale

sffpp *pp*
rigido e cerimoniale

pp
rigido e cerimoniale

31

To Fl.

Senza tempo

Flute
flz.

Gradually slow down flutter then change to tonguing,
creating a diminution effect

33

Musica Ricercata IV

György Ligeti
arr. Mitchell Atencio

Tempo di Valse (poco vivace—"à l'orgue de Barbarie") ♩. = 72

Flute

Oboe

Clarinet in B♭

Horn in F

Bassoon

p

7

grazioso

cresc. poco

pochiss. rit.

a tempo

13

f *dim. poco* *cresc.* *pochiss. rit.*

19

a tempo *p* *a tempo* *a tempo* *a tempo* *p*

26

Musical score for measures 26-33. The score is written for five staves (treble and bass clefs). The key signature has one flat (B-flat). The time signature changes from 2/4 to 3/4 at measure 29. The music features a melody in the upper staves and a bass line in the lower staves. Dynamics include *f* (forte) in measures 28, 29, and 30. The score ends with a double bar line at measure 33.

34

Musical score for measures 34-41. The score is written for five staves (treble and bass clefs). The key signature has one flat (B-flat). The time signature changes from 2/4 to 3/4 at measure 34. The music features a melody in the upper staves and a bass line in the lower staves. Dynamics include *pp* (pianissimo), *p* (piano), *mp* (mezzo-piano), and *ff* (fortissimo). The tempo marking *poco rall.* (poco rallentando) is present in measure 34, and *a tempo* is present in measures 35, 36, 37, 38, 39, 40, and 41. The score ends with a double bar line at measure 41.

42

mp *ff* *ff* *mp* *ff* *ff*

49

poco rall. *ff* *ff* *ff* *ff*

56 *più rall.* Tempo I 5

64

p *grazioso* *cresc. poco*

70

pochiss. rit. *a tempo*

pochiss. rit. *a tempo*

pochiss. rit. *a tempo*

pochiss. rit. *a tempo*

pochiss. rit. *a tempo*

mf cresc. poco *a tempo*

f *dim. poco*

76

pochiss. rit. *a tempo*

pochiss. rit. *a tempo*

pochiss. rit. *a tempo*

cresc. *p* *a tempo*

a tempo

pochiss. rit.

82

7

Musical score for measures 82-88. The score is written for five staves. The first two staves are in treble clef, and the last three are in bass clef. The key signature has one flat (B-flat). The time signature is 4/4. The music features a variety of note values, including quarter, eighth, and sixteenth notes, as well as rests. Dynamics include *f* (forte) and *p* (piano). The score is marked with a double bar line at the end of measure 88.

89

Musical score for measures 89-95. The score is written for five staves. The first two staves are in treble clef, and the last three are in bass clef. The key signature has one flat (B-flat). The time signature is 4/4. The music features a variety of note values, including quarter, eighth, and sixteenth notes, as well as rests. Dynamics include *pp* (pianissimo) and *f* (forte). The score is marked with a double bar line at the end of measure 95.

Musica Ricercata VI

György Ligeti
arr. Mitchell Atencio

Allegro molto capriccioso ♩ = 96

Piccolo

Oboe

Clarinet in B♭

Horn in F

Bassoon

f *cresc.* *cresc.* *cresc.* *f* *cresc.*

4

martellato, poco pesante

ff

più f

f

ff *più f* *f*

9

9

ff

mf

sf *leggiero*

sf

sf

sf

14

G.P.

G.P.

G.P.

G.P.

G.P.

G.P.

sf

pp *leggiero*

sf

sf

sf *leggiero*

sf

sf

sf

sf

19

pp sub. *p* *mp* *ff martellato* *fff martellato* *ff martellato* *ff martellato* *ff martellato*

sempre pp

3

24

ff sempre *p* *poco rall.* *a tempo* *ff sempre* *p* *poco rall.* *a tempo* *ff sempre* *p* *poco rall.* *a tempo* *f* *a tempo* *p sub.* *poco rall.* *a tempo* *f*

Musical score for measures 28-30. The score is written for five staves. The first staff is a grand staff (treble and bass clef) with a key signature of one sharp (F#) and a 3/4 time signature. The second staff is a treble clef with a key signature of one sharp (F#) and a 3/4 time signature. The third staff is a treble clef with a key signature of two sharps (F#, C#) and a 3/4 time signature. The fourth staff is a treble clef with a key signature of one sharp (F#) and a 3/4 time signature. The fifth staff is a bass clef with a key signature of one sharp (F#) and a 3/4 time signature. The music features various rhythmic patterns, including eighth and sixteenth notes, and rests. Dynamics include *f* (forte) and *ff* (fortissimo).

Musical score for measures 31-35. The score is written for five staves. The first staff is a grand staff (treble and bass clef) with a key signature of one sharp (F#) and a 3/4 time signature. The second staff is a treble clef with a key signature of one sharp (F#) and a 3/4 time signature. The third staff is a treble clef with a key signature of two sharps (F#, C#) and a 3/4 time signature. The fourth staff is a treble clef with a key signature of one sharp (F#) and a 3/4 time signature. The fifth staff is a bass clef with a key signature of one sharp (F#) and a 3/4 time signature. The music features various rhythmic patterns, including eighth and sixteenth notes, and rests. Dynamics include *p* (piano), *pp* (pianissimo), *ff* (fortissimo), and *fff* (fortississimo). The tempo marking *a tempo* is present in measures 34 and 35.

Omaggio a Girolamo Frescobaldi

Musica Ricercata XI

György Ligeti
arr. Mitchell Atencio

Andante misurato e tranquillo ♩ = 76

Flute

Oboe

Clarinet in B♭

Horn in F

Bassoon

Bsn. Play

sempre p, sempre legato (very evenly)

pp

6 Cl. Fl.

sempre p, sempre legato (very evenly)

pp

Fl. Play

sempre p, sempre legato (very evenly)

12

Hn. Play

sempre p, sempre legato (very evenly)

Play

p

pp

pp

18

Cl. Play

p

pp

pp

pp

p

To Picc.

24 Piccolo 3

Measures 24-29. The Piccolo part (top staff) enters in measure 24 with a melodic line. The other four staves (Flute, Oboe, Clarinet, Bassoon) have various melodic and harmonic parts. Dynamics include *p* (piano) and *pp* (pianissimo).

30 To Fl.

Measures 30-34. The Flute part (top staff) has a melodic line. The other four staves (Oboe, Clarinet, Bassoon, Bass) have various melodic and harmonic parts. Dynamics include *p* (piano).

35

Flute

p cresc. poco a poco

mp cresc. poco a poco

cresc. poco a poco

cresc. poco a poco

cresc. poco a poco

40

p

p

mp

*If the bassoon cannot play the E, these three notes are to be played by the clarinet; the clarinet will then play the notes in small print.

44

To Picc.

Piccolo

Cl.

Play

p

mf

(mp)

48

f

ff

f

ff

f cresc.

ff

cresc.

ff

mf

f

ff

51 To Fl.

f dim.

f dim.

f dim.

54 Flute **Poco meno mosso**

mp dim.

p

mp

mp

p

mf dim.

mp

p

Più tranquillo

7

57

G.P.

pp

G.P.

Bsn. *f*.

G.P.

G.P.

p

pp

Picc.

G.P.

pp

60

dim. poco a poco

insert low A extension during breath

dim. poco a poco

Have player to left insert low A extension during breath

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