

ABSTRACT

Title of Dissertation: UNUSUAL COLLABORATIONS: THE
PIANO IN UNIQUE TRIO SETTINGS

Zsolt Balogh, Doctor of Musical Arts, 2019

Dissertation directed by: Professor, Rita Sloan, School of Music

Performers of different instruments face great challenges in creating a unified tone in a chamber ensemble. One of the most challenging of chamber music settings involves strings, winds or brass, voice and piano. The objective of this performance dissertation is to explore and examine piano trios from the early classical era through the 20th century which differ from the traditional violin, cello and piano combination. By combining the piano with a string, a wind or brass instrument, or even voice, it becomes more challenging to create a homogenous ensemble sound. Each instrument has a different range, method of tone production, attack, dynamic range, timbre and intonation.

My dissertation includes works which highlight how blending sounds this varied and interesting has created an enriched and enlivened chamber music repertoire. Given that this particular repertoire is often exciting and immensely satisfying to study and perform, the rewards are great for all involved.

The three recitals in this dissertation were presented in Gildenhorn Recital Hall on 3/1/2017, 3/28/2018 and 11/5/2018 and included Ligeti's Horn Trio, Brahms' Horn Trio, Schubert's *Shepherd on the Rock*, Mozart's “*Kegelstatt*” Trio, Reinecke's Trio for Piano, Clarinet, and Horn, Beethoven's Clarinet Trio and Brahms' Clarinet Trio. My partners in this dissertation were soprano Amy Broadbent , violinists Anto Meliksetian and James Stern, violist Rebecca Barnett, cellist Molly Jones, French hornists Joshua Blumenthal and Derek Maseloff, and clarinetists Natalie Groom and Jeremy Eig.

Recordings of all three recitals can be accessed at the University of Maryland Hornbake Library.

UNUSUAL COLLABORATIONS: THE PIANO IN UNIQUE TRIO SETTINGS

by

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Thesis submitted to the Faculty of the Graduate School of the
University of Maryland, College Park in partial fulfillment
of the requirements for the degree of
Doctor of Musical Arts
2019

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Dedication

To all my chamber music partners

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Chapter 1: Introduction

A short history of the piano trio

The history of the piano trio can be traced back to the Baroque era. The major chamber-music genre of the day was the trio sonata which, despite its name, was performed by four instruments. The cello, or continuo line, was supported by the left hand of the harpsichordist while the right hand improvised over the figured bass line. The other two voices were generally treble voices, violin and flute being two principle examples.

In the Classical period, the trio came into its own as a major chamber music subdivision. Mozart and Beethoven wrote a number of string trios, normally for violin, viola, and cello, while Haydn's twenty string trios deviate from this norm as they are written for two violins and cello.

As the piano replaced the harpsichord and became more widely available late in the 18th century, composers were intrigued by the possibility of fuller and more varied textures which the piano trio (consisting of piano, violin, and cello) could produce. Haydn wrote nearly forty of them, although nowadays these are considered to be accompanied keyboard sonatas. Some of Mozart's late works are viewed as the ones that transformed the accompanied keyboard sonata into the balanced trio we think of today, wherein all three instruments maintain equal roles. "The composition which appears to have done most to unleash the new ideas about trio writing, [...] was the E-flat trio K498, for clarinet, viola, and piano [...]. In order to deal effectively

with an ensemble of so novel character, Mozart was forced to reconsider several aspects of blend, sonority, and the disposition of material in a way which was to prove significant for all his later trio writing.”¹

Beethoven perfected the genre and his piano trios, starting with Op. 1 through the “*Archduke*” Trio, Op. 97 are considered some of his finest works in any genre. Starting in the Classical period, amateur chamber music made the piano trio a very popular vehicle for arrangements of other works. For example, Beethoven transcribed his first two symphonies for piano trio. Trios in multi-movement sonata form were popular and single-movement works as well as variations thrived. These compositions not only varied in form but some composers were inspired to compose a few outstanding works for unusual combinations of instruments. Primary amongst these were Mozart’s “*Kegelstatt*” Trio for clarinet, viola, and piano K 498 (1786), Beethoven’s Op. 11 (1798) for clarinet, cello, and piano, and late in the 19th century, Brahms’s Op. 114 (1891) for the same combination.

In the 19th century, the musical vocabulary changed and at the same time the piano went through a rapid development. String instruments were slower in similar developments, however composers wrote for all three instruments in an increasingly brilliant style. The result was a kind of composition far removed from the amateur-orientated trios of the 18th century. Composers of piano trios of this era include Franz Schubert, Felix Mendelssohn, Robert Schumann, and Antonín Dvořák.

The 20th century saw one of the landmark compositions of the genre when Maurice Ravel wrote his Piano Trio in 1914. Additionally, there are examples of

¹ Basil Smallman, *The Piano Trio: Its History, Technique, and Repertoire*, (Oxford: Clarendon Press, 1990), 23-24.

works which incorporate a single wind instrument into the traditional trio by Bartók, Hans Zender, Klaus Huber, and Ligeti.² Major technical innovations in these pieces include skeletal writing for the piano, lengthy solo sections for strings and piano separately, and the use of string techniques such as *scordatura* tuning, microtones, *col legno* and snap *pizzicato*.

² "Trio", Encyclopaedia Britannica, accessed March 28, 2019, <https://www.britannica.com/art/trio-music#ref275846>.

Chapter 2: Definitions of instrumental sound characteristics

To discuss the way instrument families create a homogenous blend in a chamber group, we have to examine and compare how each instrument differs in creating sound.

Pitch range and dynamic range

Pitch is the quality that makes it possible to judge sounds as "higher" and "lower". Pitch can be determined only in sounds that have a frequency that is clear and stable enough to distinguish it from noise.³

In music, the range of a musical instrument is the distance from the lowest to the highest pitch it can play. For a singing voice, the equivalent is vocal range.

The range of dynamics in music is the difference between the quietest and loudest volume of a single instrument, or combined instruments.⁴ Loudness is a physiological sensation. It depends on sound pressure but also on the frequency range of the overtones and the physical duration of the sound. In order to be heard, low frequencies require significantly higher intensity, while higher frequencies are heard on a much lower decibel level.⁵

An instrument with a rich frequency spectrum (significant intensity in several harmonics) will sound louder than an instrument which makes a sound similar to pure

³ Harold S. Powers, "Melody", in *The Harvard Dictionary of Music*, ed. Don Michael Randel (Cambridge: Harvard University Press, 2003) 499–502.

⁴ J.C. Schmidt and Janet Rutledge, "Multichannel Dynamic Range Compression for Music Signals," 1996, 1013–16 vol. 2, <https://doi.org/10.1109/ICASSP.1996.543295>.

⁵ "Characteristics of Sound", City University of Hong Kong, March 28, 2019, <http://personal.cityu.edu.hk/~bsapplec/characte.htm>.

tone. This is especially true if the spectrum of frequencies is over 1000 Hertz, where the ear is more sensitive (the ear is most sensitive in the 3000 Hertz range).

Moreover, adding different instruments with different timbres, and/or playing different notes, increases perceived loudness faster than adding more of the same kind of instruments playing the same note. For example, ten violins playing the same note only sound approximately twice as loud as one violin, but ten different instruments combined in harmony, meaning they are playing different frequencies, will sound more than twice as loud as any one of the instruments (though probably not quite ten times as loud).⁶

The following figure illustrates loudness perception of different frequencies: the low C1 (32 Hertz), for example, is perceived as *piano pianissimo*, while a C5 (approximately 4200 Hertz) with an equal decibel value is perceived as *forte*.⁷ (Figure 1)

⁶ “More on Perception of Loudness”, McGill University, March 28, 2019, <http://www.physics.mcgill.ca/~guymoore/ph224/notes/lecture13.pdf>.

⁷ “The Basics of Acoustics”, Sibelius Academy, March 28, 2019, <http://www2.siba.fi/akustiikka/index.php?id=38&la=en>.

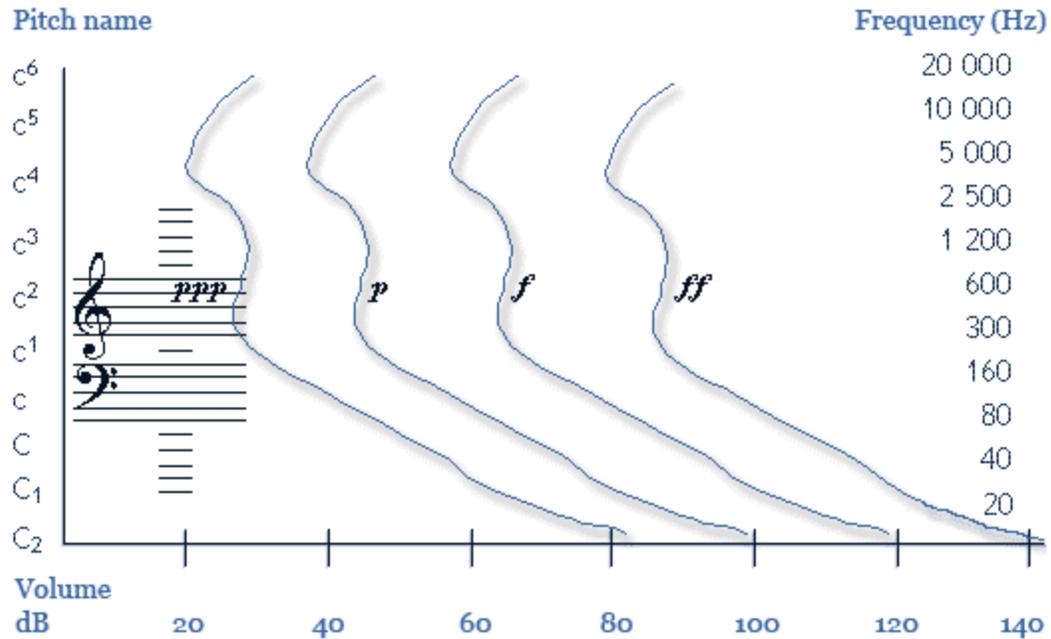


Figure 1: Loudness perception in human hearing range

Intonation and timbre

An important thing to remember is that the musical instruments discussed in this paper, with the exception of the piano, can only play an approximate 12-tone equal-tempered scale, since they cannot be built to be perfectly in tune. It is the musicians' task to make adjustments to the pitch to fit the harmony. If an ensemble is playing with a piano, the ensemble should adjust to match the piano, which is tuned to equal temperament.

There are several factors other than the instrument itself which impact intonation. Temperature is one of them and it affects ensembles made up of both winds and strings more than any other. These instruments go out of tune in opposite directions.

In a wind instrument, higher temperatures can make the air column move faster causing the instrument to go sharp. Conversely, string instruments lose string tension due to heat expansion resulting in a lower pitch.

Other factors that impact intonation are extreme pitches and volumes. Strings and idiophones can change tone quality at very high or low pitches without affecting intonation. Winds, however, can be strongly affected. At loud volumes, winds tend to go sharp and the opposite happens in soft sections.⁸

Pianos today are tuned to equal temperament wherein the chromatic scale consists of “equal” semitones. They are equal in the sense that the ratio of the frequencies of any two neighboring notes is always the same. This will cause the middle range of the piano to be almost perfectly in tune, while somewhere around the second octave above middle C, the notes will gradually become sharper; at the high C, this sharpening may be as high as 20 to 30 cents. (A cent is a unit of pitch based upon the equal-tempered octave such that one equal-tempered semitone is equal to 100 cents).⁹ Also, there will be some flattening of the notes in the lower octaves (Figure 2). This can be mitigated by "stretching" the octaves above and below the

⁸ “Tuning Your Ensemble”, Drew Pendergrass, March 28, 2019, <http://music.drewpendergrass.com/IHT/tuning>.

⁹ “The Use of Cents for Expressing Musical Intervals, Georgia State University, March 28, 2019, <http://hyperphysics.phy-astr.gsu.edu/hbase/Music/cents.html>.

temperament region.

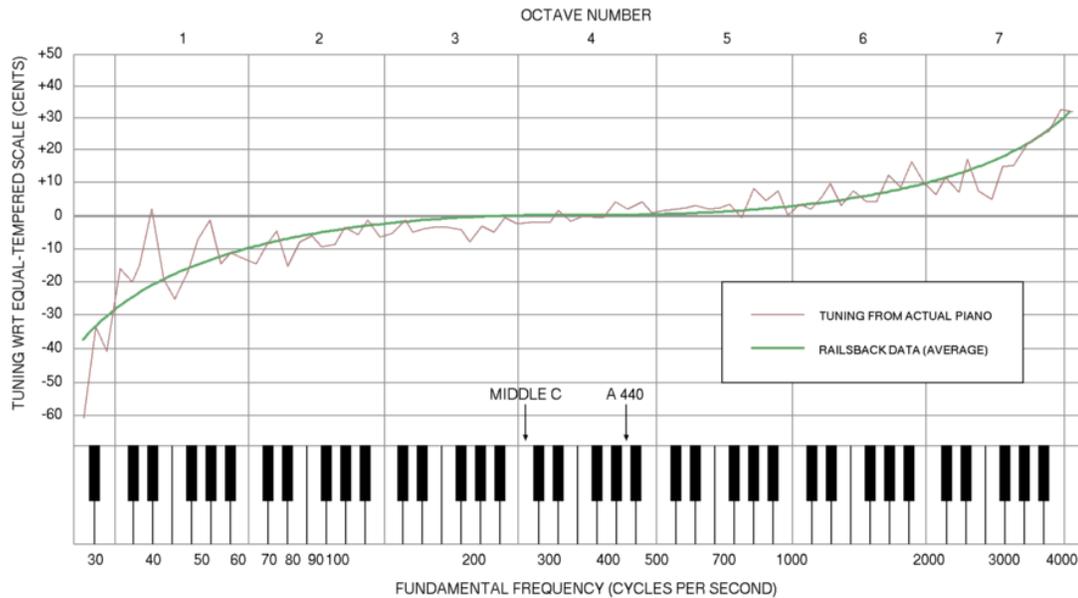


Figure 2: The curve indicating the deviation between normal piano tuning and an equal tempered scale.¹⁰

Timbre is the perceived sound quality of a musical note, sound or tone, and it helps listeners to distinguish different instruments in the same category (for example an oboe and a clarinet). Spectrum and envelope are the two physical characteristics of sound that determine the perception of timbre.

Spectrum or the richness of a sound from a musical instrument is sometimes described as the summation of certain distinct frequencies the instrument produces. An envelope in music is the attack, sustain, and decay of a sound.¹¹ The lowest frequency is called the fundamental frequency and the pitch it produces is used to name the note. The fundamental frequency is not always the dominant frequency. The

¹⁰ Brian Tung, "Piano Tuning," in Wikipedia, May 11, 2019, https://en.wikipedia.org/wiki/Piano_tuning.

¹¹ "Envelope", Encyclopedia Britannica, accessed March 28, 2019, <https://www.britannica.com/science/envelope-sound>.

dominant frequency is the frequency that is most heard, For example, the dominant frequency for the flute is double the fundamental frequency. (Figure 3)

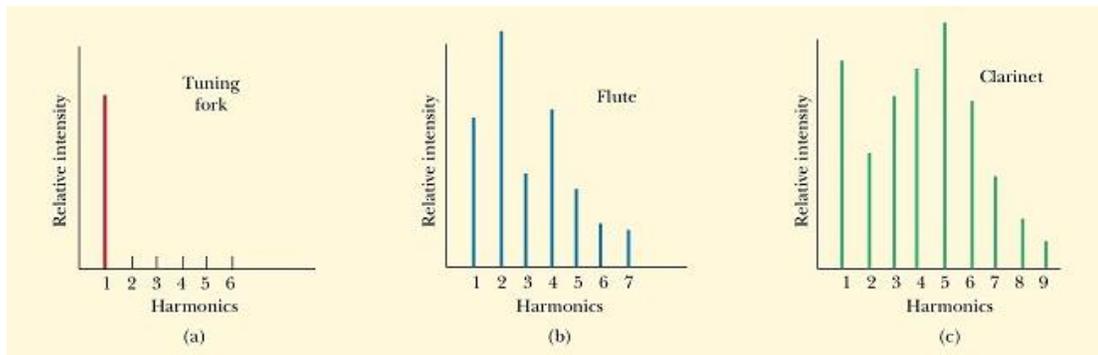


Figure 3: Fundamental frequency and the first six overtones of tuning fork, flute and clarinet¹²

Different instruments naturally will emphasize certain pitches in the overtone series giving them a unique tone that is different from every other instrument. The timbre that is characteristic of the clarinet is a result of its relatively weak even (4th, 6th and 8th) harmonics (Figure 3). The highest overtones of the piano are quieter than those of the harpsichord and they are also more distorted. Changes in overtones throughout the duration of a note are also an important part of instrumental color. For example, a plucked string from the guitar begins with many overtones and loses the higher ones as the sound dies away.¹³

¹² “Non-sinusoidal Wave Patterns”, California State Polytechnic University, accessed March 28, 2019, <https://www.cpp.edu/~skboddeker/132/notes/ch21.htm>.

¹³ “What makes instruments sound different from one another?” Grosse Pointe Music Academy, February 4, 2012, <http://www.grossepointemusicacademy.com/what-makes-instruments-sound-different-from-one-another>.

Attack

Attack is the very short period of time at the beginning of the sound immediately before it has formed its spectrum. How instruments are identified usually depends on the attack while the pitch is generally detected from the sustained part of the sound. The sense of space is determined by the sound's release. The attack phase in many instruments is inharmonic (noise). It has a very short duration (often less than 0.1 seconds), however it is a significant factor that influences our identification of the instrument. The sound of a guitar, for example, would sound like a bell without the guitar's distinctive attack.¹⁴

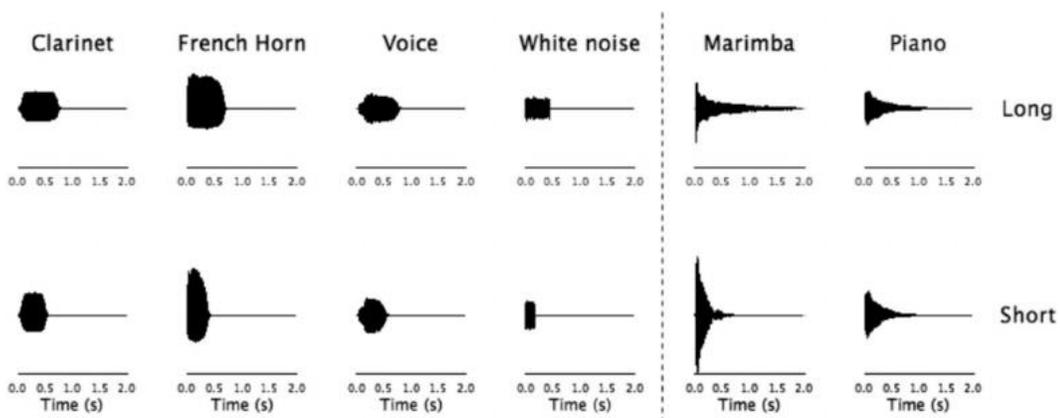


Figure 4: Sound envelope of different instrument timbres in two versions: top row is long tone, bottom row is short tone. Sounds with continual driving force are sustained between attack and decay (left of the dashed line), percussive sounds begin decaying immediately after attack (right of dashed line).¹⁵

¹⁴ “Basics of Acoustics”, Sibelius Academy, accessed March 28, 2019, <http://www2.siba.fi/akustiikka/index.php?id=38&la=en>.

¹⁵ Michael Schutz and Michael Kubovy, “Causality and Cross-Modal Integration,” *Journal of Experimental Psychology: Human Perception and Performance* 35, no. 6 (2009): 1791–1810, <https://doi.org/10.1037/a0016455>.

Balancing and blending sounds

Balance refers to the sound strength of an individual instrument compared to the others. Because the timbre and range of instruments differ, as discussed in previous paragraphs, some instruments produce a more dominant sound and can offset the overall balance of the ensemble. Therefore good balance cannot be achieved by having everyone play at the same dynamic level. Sometimes, more attention is needed to a melody, single note, or moving inner line. Achieving this might take more effort from certain instruments than from others.

There two main ways to blend sounds in an instrumental setting. One is merging the sounds of two different instruments (for example, horn and violin) in such a way that they produce a sound more interesting than the sum of their parts. In this case, the goal is not necessarily a homogenous sound but the achievement of a certain color. The second way of blending is combining the sounds of instruments into a single, homogenous sound so that no one player or section dominates. Balance and blend both depend on careful listening. Every member must know their role in the overall sound and be aware of the sound of the ensemble. Francis McBeth, composer and music educator, introduced a method to help identify correct balance and intonation. It is based on the theory that, at any given dynamic level, the higher pitched instruments should be playing softer than the lower pitched ones. This helps the players in the ensemble hear the bottom note of the chord so that they can tune to it.

The characteristics of piano sound

Sound production at the piano is the result of a pianist at a keyboard pressing or striking the keys of a stringed wooden instrument. Padded hammers are connected to the keys and make the strings and soundboard vibrate. This mechanism creates a faster attack than we associate with other instruments. The attack phase is almost instantaneous, as would be predicted for a percussion instrument. There is no phase where the amplitude is maintained. The interesting results are seen in the decay: in the first phase, the decay rate is high; in the second, the sound decays more slowly. The first phase of the decay is known as the immediate sound and the second as the resonance. This phenomenon, known as double decay (Figure 5), is an acoustical characteristic that is almost exclusive to the piano.¹⁶

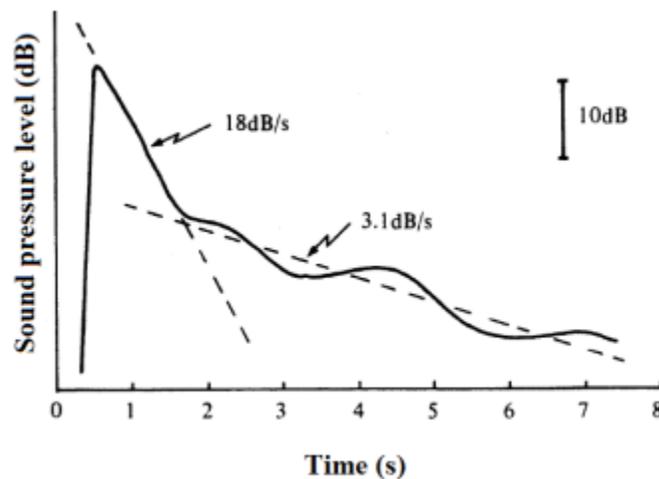


Figure 5: Double decay of piano sound¹⁷

¹⁶ Juan Jose Burred, "The Acoustics of the Piano" (Professional Conservatory of Music Arturo Soria, 2004), https://www.jjburred.com/research/pdf/burred_acoustics_piano.pdf.

¹⁷ Ibid.

The standard grand piano has 88 notes, the lowest note is 27.5 Hertz (A0), and the highest note is 4186 Hertz (C8). The piano's range evolved from only 4 octaves (49 notes) to 7-1/3 octaves (88 notes) from 1720 to 1860.¹⁸

The characteristics of string sound

A string instrument is comprised of a wooden sound box with tightly-stretched strings. These can be plucked, struck or played with a bow which causes the strings to vibrate and produce different tones. The use of a bow gives string players the ability to alter the speed of sound production. There are sounds, such as the ones produced by percussion instruments and the piano, which have a quick attack; others, such as the violin or flute, can have a softer and more gradual attack. Some sounds can be sustained (in the case of a string instrument, it depends on the bow, in the case of the flute, this depends on the musician's breath), while others disappear in time. This means that the string sound envelope, contrary to the piano sound envelope, doesn't have a decay phase. The string player needs to adjust the bow speed and pressure to imitate the piano decay as necessary.

The viola is constructed using the same components as the violin, the main difference being the larger size. Its elegant and dark timbre contrasts sharply with the violin timbre and makes the viola perfectly suited as the violin family's middle voice. Its bow is somewhat heavier than the violin bow and the horsehair slightly broader. The characteristic sound of the viola is a result of the following factors: the viola is tuned a fifth lower than the violin (C3 = 4th string, G3 = 3rd string, D4 = 2nd string,

¹⁸ Nicholas J. Giordano, *Physics of the Piano*, (Oxford: Oxford University Press, 2010), <https://nanohub.org/resources/18884/download/2013.06.19-Giordano-REU.pdf>.

A4 = 1st string). This means that the frequencies of the two instruments are in a ratio of 2:3. If this ratio were applied to the actual size of the instruments, the viola's body would have to be longer than it actually is. In other words, the viola is too small in proportion to its tuning and this is the reason for its distinctive timbre.

The cello is once again proportionately larger than the violin. Additionally, it has the same qualities as its smaller cousins and the same capability of bow control. Depending on the musical texture, all the string instruments might have to imitate the fast attack and decay of the piano as well as match its articulation. In long singing lines, they might need to do the opposite to help sustain the line.

The cello possesses a wide variety of differing tone colors ranging from the calm and solemn lower register to the passionate higher register. Its underlying character has often been compared with the male voice. The transition between registers is smooth, although the individual strings have their own character, as they do on the violin and viola as well. However the cello can fulfill two distinct roles: on the one hand, it plays the part of the solid, reliable bass instrument; on the other hand, it aspires to the passion of a heroic tenor.

The characteristics of horn sound

The sound of the French horn is produced when the player blows air into the mouthpiece of a round brass horn which uses valves to produce different pitches. In terms of articulation, wind and brass instruments basically have slurring and tonguing. Of these two, tonguing can produce the greatest variety of effects from a gentle and smooth attack played very softly, to a loud explosive sound. As we have

seen in Figure 4 in the first chapter, the French horn produces a fairly immediate sound when compared to the clarinet or voice, for example.

By placing his hand in the bell of the horn (stopping), subtle adjustments to the intonation can be made by the player producing the typically soft sound of the French horn. Intonation can also be controlled by the embouchure (altering lip tension).

The pitch range for the French horn in F is written from C2 – C6 and it is sounded a perfect fifth lower. The three registers of the French horn have distinct differences in their timbre. They range from the mellow low register to the upper register which can become intense and very brilliant depending on the intensity of the airflow.

The characteristics of clarinet sound

The clarinet is a long, tubular-shaped instrument with keys that is played by blowing a column of air through a single reed at the mouthpiece. Both in sound and playing technique, the clarinet is one of the most flexible instruments. The attack of the clarinet sound is controlled by the tongue and breath and can be very different depending on the register. A low C compared to the C an octave higher can sound as if it came from a completely different instrument. Summarized below are the clarinet registers:

Chalumeau: E3 - B-flat 4	Dark, rich, full sound
Clarion: B4 – C5	Brighter tone
Altissimo: Above C5	Brightest tone, can be shrill

The characteristics of the soprano voice

The mechanism for generating the human voice can be divided into three big parts: the lungs, the vocal folds within the larynx (voice box), and the articulators. The lung must produce adequate airflow and air pressure to vibrate vocal folds. The vocal folds (vocal cords) then vibrate to use airflow from the lungs to create audible pulses that form the laryngeal sound source. The muscles of the larynx adjust the length and tension of the vocal folds to 'fine-tune' pitch and tone.

The sound of each individual's voice is unique not only because of the actual shape and size of an individual's vocal cords, but also due to the size and shape of that person's body. The shape of the chest and neck, the position of the tongue, and the tightness of otherwise unrelated muscles can be altered. Any one of these actions results in a change in pitch, volume, timbre, or tone. Sound also resonates within different parts of the body, and a person's size and bone structure can somewhat affect the sound produced by an individual.

A soprano has the highest vocal range of all voice types. The soprano's vocal range is from approximately middle C4 to A5 in choral music, or to C6 or higher in operatic music.

Conclusion

Given the complicated and contrasting ways in which each of these above-mentioned instruments creates sound, it is fairly easy to understand that undertaking the composition and performing of mixed-instrument chamber music requires a sophisticated skill-set. Understanding the various forms of sound production can help the players better comprehend how to go about acquiring these particular skills.

Chapter 3: György Ligeti: Horn Trio

György Ligeti (1923-2006) was one of the most influential and groundbreaking composers of the 20th century. His music ranged from serialism and Dadaism to minimalism, but ultimately Ligeti's compositional approach did not align with one singular movement. Rather, he drew from multiple sources to generate a wholly original and innovative style. His emigration from socialist Hungary in December of 1956 and the completion of *Le grand macabre* in 1977 are the two key events that divided his compositional output into three periods.

The horn trio falls into his third period, one in which Ligeti became increasingly dissatisfied with atonality and shifted his harmonic language away from semitone clusters to modal scales and polytonality. There is also a reintegration of motives that resemble melodic lines. He was rediscovering key elements of harmony, melody and rhythm, but not in the traditional sense. Rather, he examined these traditional elements in the context of his earlier compositions. Instead of trying to rediscover the past, he was trying to discover new ways of treating it. Ligeti summed up this break with his previous style as such, "Now I have the courage to be 'old fashioned.' I don't want to return to the 19th century, but I am no longer interested in such categories as avant-garde, modernism, or atonality."¹⁹

As previously mentioned, the horn trio falls into Ligeti's third compositional period, arguably the most artistically interesting time in his career. Between the opera

¹⁹ Michael Searby. "Ligeti the Postmodernist?", *Tempo*, no.199 (January 1997): 11, <https://doi.org/10.1017/S0040298200005544>.

of 1978 and the composition of the Horn Trio in 1982, Ligeti had a four-year period in which he did not finish single composition. Ligeti attributed this to two factors: a prolonged illness which started approximately when he turned sixty and a self-proclaimed '*Stylistic Caesura*'. Richard Steinitz, Ligeti's biographer, notes that Ligeti didn't really explain this subject any further, provoking a great deal of speculation.²⁰

Even though he didn't write much in this period of his life, Ligeti was interested in a wide variety of musical and non-musical ideas which he continued to explore. These ranged from medieval counterpoint to the music of Central Africa, from Nancarrow's studies for mechanical (player) piano, to molecular biology and computer-generated fractals. Yet another form of influence came from the Puerto Rican composer, Roberto Sierra, a member of Ligeti's composition class from 1978-1982. He introduced Ligeti to the complex polyrhythms of Caribbean and South American music. Elements from all of these influences began to work their way into his works, including both the Piano Concerto and Horn Trio.²¹

Ligeti admitted himself that the Horn Trio is the first finished work completely in this "New Style;" a self-coined 'third way' which is neither post-modern, nor modern.²² The Horn Trio of 1982 was the result of a commission request by a colleague at the Hamburg Hochschule, pianist Eckart Besch, who asked for a trio commemorating the 150th anniversary of the birth of Johannes Brahms. To complete the group's membership, Besch enlisted horn virtuoso Herman Baumann

²⁰ Amy Bauer, "György Ligeti: Of Foreign Lands and Strange Sounds. Ed. by Louise Duchesneau and Wolfgang Marx.," *Music and Letters* 94, no. 4 (November 1, 2013): 709–12, <https://doi.org/10.1093/ml/gct110>.

²¹ Richard Toop, *György Ligeti* (London: Phaidon Press, 1999), 185.

²² György Ligeti, interview by Istvan Sziget, Budapest Radio, July 29, 1983, <http://www.ronsens.org/monkminkpinkpunk/9/gl4.html>.

and Saschko Gawriloff, the violinist who premiered Ligeti's violin concerto. The chairman of the foundation who sponsored the commission insisted that Ligeti's Trio include themes and melodies from Brahms' own music. Ligeti was appalled at this request and could not accept these terms, but compromised by inscribing the score *Hommage à Brahms*.²³ This inscription however is a slight misnomer. The logic behind this inscription is that Brahms invented this genre of chamber music, however there is little in Ligeti's Trio that can be identified as being a Brahmsian influence.²⁴ Ligeti confirmed this stating, "musically the horn trio does not have much to do with my opinion with Brahms; what is remembered from Brahms is perhaps only a certain smilingly conservative component – with a distinct ironic distance. I think [the trio] has much more to do with late Beethoven."²⁵

The connection to Beethoven is immediately seen at the very beginning of the trio with a distorted version of "horn fifths" also known as the *Lebewohl* (farewell) motive found in the opening measures of Beethoven's "*Les Adieux*" Sonata Op. 81a. This serves as the melodic/harmonic theme for the entire work, appearing at various points in each of the movements.

Just as Ligeti observed, his Trio has many of the features of a late Beethoven piece: highly fragmented melodic interplay, rhythmic complexity, a reshaping of conventional forms, and deliberate motivic development to its utmost. These elements can easily be found in the late piano sonatas and string quartets of Beethoven. Ligeti

²³ David Henning Plylar, "90 Years Concerts from the Library of Congress," December 15, 2015, <https://blogs.loc.gov/music/files/2015/12/Ruske-Frautschi-Chien.12112015.PROGRAM.pdf>.

²⁴ Mike Searby, "Ligeti's 'Third Way': 'Non-Atonal' Elements in the Horn Trio," *Tempo*, no. 216 (April 2001): 17–23, <https://doi.org/10.1017/S0040298200008457>.

²⁵ *Ibid*, 19.

further confirmed this: “For me, Beethoven’s later sonatas and quartets played a big role since my youth. They are always present”. Not only do we see a close connection to Beethoven within the first movement, but also within the third movement of the Horn Trio. This movement shares much in common with the second movement of Beethoven’s Op. 101 Piano Sonata in A major. Both the second movement of Beethoven’s sonata and the third movement of Ligeti’s trio are marked *Alla Marcia* and are similar in tempo. The detached, jerky rhythms of the Trio in this movement recall the dotted rhythms of the Beethoven sonata and both works feature a fluid legato middle section.

However, the Ligeti Trio connection to Brahms does indeed run deeper than just the beginning inscription. Just as Ligeti was completing the first movement of the Trio, his mother died at the age of eighty-nine. Brahms’ mother also died a few months before he began his Horn Trio, and the whole work, but particularly the *Adagio mesto*, was seen as Brahms’ attempt to come to terms with the grief experienced by her death. For Ligeti, the last *Lament* passacaglia movement of the Trio fulfilled this role. Just as Brahms insisted at the premiere that his Horn Trio be played on an E-flat natural horn, Ligeti required the modern hornist to use a valved instrument to play natural harmonics in a series of different keys. With this example, we can see how Ligeti is interacting with the past, filtered through a 20th-century lens. This new approach results in a wonderfully innovative and surprisingly idiomatic way to compose for the instrument.

Balance and blend

Generally, the violin's tonal blend with the French horn is more difficult to accomplish than with woodwinds. It is also highly dependent on which register each player is in, and which playing technique the strings are using (*pizzicato*, *col legno*, *etc*). The use of the mute on brass instruments makes them sound similar to the strings and improves the blend.²⁶

In addition to the sheer technical difficulty of the music, Ligeti's Horn Trio presents many challenges of balance within this ensemble. To find a homogenous sound within a group consisting of a percussion, a string and a brass instrument takes a certain manipulation of sound color and tone control from all three voices. Specifically, the horn player has to utilize a transparent, slender sound when trading lines with the violin. This is most apparent within the first movement, the trio of the third movement and the fourth movement. The horn player must also match the nimbleness and virtuosic flexibility achieved by both the violin and piano during the second movement.

²⁶ "Sound Combinations - Vienna Symphonic Library," accessed May 18, 2019, https://www.vsl.co.at/en/Violin/Sound_Combinations.

Chapter 4: Johannes Brahms: Horn Trio in E-flat major, Op 40.

Johannes Brahms' (1833-1897) Horn Trio is some distance away from the regular piano trio because of its unique instrumentation. At the time he composed it, for example, there were no other works of its type: "When he wrote this Trio during the early summer of 1865, Brahms had few models for the unusual combination of piano, violin and horn, there being no previous horn trio and no sonatas for horn and piano other than the Beethoven Op. 17, in F Major (usually played by the cello) and unknown sonatas by Lessei and Bernsdorf," which appeared in the mid-1850s.²⁷

Brahms, however, didn't set out to create something brand new when he composed this Trio. In fact, Brahms even permitted the substitution of cello for horn in the Trio's first-published edition of 1868, thereby strengthening its ties with 18th century classicism in general and the traditional piano trio in particular. The horn part however does not serve a subsidiary or accompanimental role but is equal in importance to the other instruments. In this regard, Brahms can be considered as the creator of the horn-trio genre.

Another way Brahms revealed the tension between past and present in regard to the Horn Trio is his preference for the older natural horn (Wald-horn) over the newer, more commonly used valve horn (ventil-horn) which was used in Schumann's and Wagner's compositions.²⁸ The valve-horn has characteristics such as ease of

²⁷ Christopher K. Thompson, "Re-Forming Brahms: Sonata Form and the Horn Trio, Op. 40," *Indiana Theory Review* 18, no. 1 (1997): 82–83.

²⁸ Berthold Litzmann, *Clara Schumann: An Artist's Life Based on Material Found in Diaries and Letters* -, vol. 2 (London: Macmillan, 1913), 248.

performance, accurate pitch, and musical agility. These benefits of the valve-horn made the natural horn nearly disappear.

The Horn Trio was one of Brahms's most personal works. It was written after the recent death of his mother, and his grief can be heard clearly in the slow third movement. Michael Musgrave, the notable Brahms scholar, claimed that in order to commemorate his mother in the Horn Trio, Brahms used the horn he had been taught in childhood. He also included a traditional German song in the second movement and in the finale.²⁹

All four movements are in E-flat, and out of all of Brahms's twenty-four chamber music pieces, the Horn Trio is the only piece in which the first movement is not in sonata form. The overall form of the first movement is A – B – A' – B' – A"; we can see that the development section is missing.

In the second movement, Brahms used a scherzo form. Beethoven had started using this form in place of the minuet and it had become a common feature in late-Classical and Romantic symphonies and sonatas. Scherzi are normally quick in tempo and light and playful in character. They are typically followed by a contrasting trio, after which the first section of the scherzo returns. By employing a ternary scherzo form in this piece, Brahms revealed his roots in conventions of German Classical and Romantic musical traditions.³⁰ Although the second movement is in the same E-flat major tonality as the first and final movements, it contrasts with the other movements in tempo and mood. Another distinguishing factor is the use of staccato. The staccato

²⁹ Michael Musgrave, *The Music of Brahms* (New York: Routledge & Kegan Paul, 1985), 108.

³⁰ Don Michael Randel, ed., "Scherzo," in *The Harvard Dictionary of Music* (Harvard University Press, 2003), 761-762.

applies to all the instruments so that the mood becomes light and cheerful, making this movement the most light-hearted in the entire piece.

Brahms also used a German folksong "*Dort in den Weiden steht ein Haus*" (There in the Willows Stands a House) in the slow third movement (mm. 59 to 61 in the horn and mm. 63 to 65 in the violin), employed very sorrowfully. Brahms uses a 6/8 time based on the eighth-note in a slow tempo – a meter that has certain “archaic” pastoral connotations, as does the horn itself. This movement is mystical and impressive in scope, despite being only eighty-six measures long.

As compared to the third movement, which is sorrowful and tragic, the Finale is filled with spirit and energy, as the tempo marking *Allegro con brio* suggests. The tension and darkness built up in the third movement is entirely resolved by the joyful and playful mood maintained throughout the Finale. The horn part in the second movement and the Finale is in a lively ‘hunting-horn style,’ characterized by a *non-legato* technique, quick tempo, and ascending and descending stepwise motions. However, the most significant characteristic of the hunting-horn style is the horn call itself. The Finale can be interpreted as being in sonata form although it does not exactly follow the typical format due to its short development. Typically the outer movements of a work like the Horn Trio are in sonata form, but while the first movement is not in sonata form, Brahms’ use of it in the Finale reflects common practice.

Balance and blend

Writing about his Op. 40 Trio, Brahms said: "If the horn player is not obliged by the stopped notes [of the natural horn] to play softly, the piano and violin are not

obliged to adapt themselves to him, and the tone will be rough from the beginning."

This statement gives us a clear idea of how he wanted his trio to sound: mellow and well-blended. This sonority features prominently in many of his orchestral works, and reminds us of his taste in general for mellow-toned, middle-range instruments: clarinets, horns, violas and cellos.

The combination of horn and violin would seem to pose problems of blend and balance, but Brahms recognized that they could be complementary, and the result is as natural as it is unique. Its only peer is György Ligeti's Horn Trio of 1982, a fitting modern tribute to Brahms, which similarly rises above the conventional landscape.³¹

³¹ Benjamin Pesetsky, "Trio for Piano, Violin, and Horn in E-Flat Major, Op. 40," accessed May 18, 2019, <http://benjaminpesetsky.com/writing/program-notes/johannes-brahms-trio-for-piano-violin-and-horn-in-e-flat-major-op-40>.

Chapter 5: Wolfgang Amadeus Mozart: “*Kegelstatt*” Trio, K.

498

Dedicated to pianist Franziska von Jacquin, Wolfgang Amadeus Mozart’s (1756-1791) Trio in E-flat major, K. 498 was first performed by Jacquin, Mozart on viola, and the virtuoso clarinetist Anton Stadler. Before this work, no one had written for this combination of instruments. This is probably why Mozart’s publisher felt somewhat hesitant about it; in the original publication it was designated as a piece for violin, viola, and piano or harpsichord with an “alternative part” for clarinet.

The clarinet was still a relatively new instrument at the time, so the Trio (along with the Clarinet Quintet, K. 581 and Clarinet Concerto, K. 622) helped increase the instrument’s popularity. This paved the way for future trios by Beethoven, Schumann, Bruch, and Reinecke. According to rumors, Mozart wrote the piece during a game of skittles, nicknamed “*Kegelstatt*,” the European style of bowling.

Mozart’s relationship with Anton Stadler was the main reason why he wrote the works featuring the clarinet. These pieces influenced solo and chamber literature that followed in the early 1800s inspiring works by Weber, Baermann, Spohr, and Crusell. However, the Romantic era was a stagnant period for most wind instruments, as string instruments, string quartets, and solo piano rose in popularity. There are few significant clarinet pieces between Schumann’s Fantasy Pieces (1849) and Brahms’ works for clarinet (1891–4).

The manuscript notates the clarinet part as "Clarinetto in B" and uses the written pitch. The viola part uses the alto clef. We can see in the original manuscript of the piano part a correction by Mozart where he started to write "Ce" (for "*cembalo*", the Italian word for the harpsichord) and then replaced it with "*Piano forte*". However, this same manuscript has "*Cembalo*" written in for the second and third movements.

The first movement of the Trio is not a traditional *Allegro* opening movement, but a more contemplative *Andante*. Consequently, the second movement is not a traditional slow movement, but a moderate *Menuetto*. Not surprisingly, the last movement, while lively, is not a standard *Allegro*. In short, the contrast in tempi between the movements in this Trio is not as stark as in most classical sonatas. "In order to simplify the structure, and thus throw increased emphasis upon the textural and scoring aspects of the work, Mozart eliminated the customary sonata-form movement at the start and replaced it with a flowing *Andante* of song-like character."³²

The *Andante* is written in E-flat major in a 6/8 time signature. It repeats neither its exposition nor the remainder of the movement which is unusual for Mozart's mature chamber music³³A particularly recognizable feature of this movement's first theme is the opening 'turn' which appears throughout almost motivically.

³² Basil Smallman: *The Piano Trio: Its History, Technique, and Repertoire*, (Oxford: Clarendon Press, 1990), 24.

³³ Hugh Macdonald, "To Repeat or Not to Repeat?," *Proceedings of the Royal Musical Association* 111, no. 1 (January 1, 1984): 121–38, <https://doi.org/10.1093/jrma/111.1.121>.

The second movement is written in 3/4 time and the key signature is B-flat major, which is the dominant key of the first movement's E-flat. The first part of the *Menuetto* consists of an exposition and its development (bars 13–41, also repeated). The piano's heavy bass line and the sharp dynamic contrasts set an unusual mood for this theme which is quite different from conventionally light and elegant minuets. During the development, the dialogue between the instruments becomes intensified, and Mozart shows his skill in writing counterpoint without ever sounding academic or "learned".

The trio section opens with a chromatic four-note phrase, to which the viola responds with a run of lively triplets accompanied by the piano's chromatic chords (bars 42–62, repeated). In the development of this theme, the four-note phrase and the triplets are taken up by the piano. The clarinet and viola respond with chromatically rising lines, followed by a concerto-like conversation between all three instruments. (bars 63–94, repeated).

The final part of the trio section starts with a variation of the trio's four-note phrase, which is briefly developed (bars 95–102) before returning to the brighter theme of the *Menuetto* which ends the movement without repeats.

The last movement is written in *alla breve* cut time. Conventionally, the key signature is the same as the opening movement, E-flat major. The musical form of this movement is a seven-part rondo, a rarity in Mozart's work. This seven-part structure also explains the title *Rondeaux*, the French plural form of *Rondeau*.

The structure is AB–AC–AD–A. Theme A is an eight-bar *cantabile* melody in two parts and is presented first by the clarinet, then taken up as a variation by the

piano. The melody of theme B – in B-flat major – is played once by the clarinet before the piano plays an intermezzo of several bars. From bar 36 onwards, all three instruments play short phrases of the theme in turn, followed by a piano solo until bar 50. Theme C – in C minor – is presented by the viola and it is repeated. All three instruments develop that theme in bars 77–90. This development visits the subdominant minor key of F minor before ending back in C minor. Theme D – in A-flat major – is introduced by all three instruments almost in unison, and elaborately developed in bars 132–153. The movement ends with a flourishing, operatic coda.

Blending and challenges

It is important to remember that, usually a woodwind when paired with a string usually provides the string with more volume and power. The string makes the woodwind mellower, especially when they are playing in unison. If the string is playing with a single woodwind instrument in different registers, the woodwind instrument generally sounds more prominent so adjustments might be needed.

In high registers and played forte or fortissimo, the viola is perfectly capable of matching the clarinet for intensity and brightness of sound. In piano passages, on the other hand, the viola lends the clarinet a more mellow sound. The clarinet often plays an octave above the viola and in its highest, fullest-sounding register, the sound combination generates great volume. These are important issues to keep in mind when performing this particular work.

Chapter 6: Franz Schubert: *Der Hirt auf dem Felsen* (The Shepherd on the Rock), D965

Franz Schubert (1797-1828) wrote two lieder that employ an obbligato instrument. One uses the horn, the other calls for the clarinet. Both date from 1828. Schubert wrote *Auf dem Strom* (On the River) for a concert in March of that year commemorating the first anniversary of Beethoven's death. Later that year, one of the most famous sopranos of the day, Anna Milder-Hauptmann, requested that Schubert write her a brilliant concert aria that would be suitable for large audiences. The result was one of Schubert's most popular songs, *Der Hirt auf dem Felsen* (The Shepherd on the Rock). Sadly, he died only weeks after completing the song and never had the opportunity to hear it performed. Milder-Hauptmann did not receive this song until September 1829 (almost a year after the composer died), when Schubert's brother Ferdinand copied it and Johann Michael Vogl, the composer's good friend, delivered it. The soprano premiered the song in Riga a year-and-a-half later, and also programmed it in Berlin in December 1830. By this time, the piece had appeared in print, thanks to the publisher Tobias Haslinger.

In order to express a wide range of human emotion, Schubert chose to incorporate three poems by two different poets. By doing this, he was joining a movement which had started at the beginning of the 19th century which saw a new spirit stirring. Many musicians, inspired by the literature of the day, broke away from classic forms and composed a new "romantic" style of music seeking beauty or depicting the mystical and strange side of life. This was the era in which the genre of the art song gained great importance. Its focus was on Romantic sensibilities: the

poetic and musical images of nature, picturesque landscapes, the loneliness of separated lovers and the joy of wandering.

The Shepherd on the Rock is an excellent example of this movement. It has seven verses, from which the first four and the last use poetry by Wilhelm Müller. The words for the fifth and sixth come from another poet, thought to be Helmina von Chézy. Following the piano's mysterious introduction, the clarinet begins the lied with a long-breathed, pastoral melody. Schubert uses the clarinet's entire expansive range from its bright upper register to its warm lower register. The clarinet begins before the singer. It provides numerous interludes between verses and often picks up phrases from the singer's melodic line, creating an echolike effect. The vocal melody comes from the clarinet's opening motive. As the shepherd describes singing from the highest rock, Schubert cleverly portrays the echo of his voice across the valley with the clarinet.

The lied's middle section, where the text changes from Müller to von Chézy, becomes darker. This second section expresses the sadness of life, evoking sorrow and grief as hope for the future is lost. Schubert portrays the change in atmosphere through subtle, but utterly magical, shifts in harmony. The lied's final stanza finds the shepherd renewed by the anticipation of spring. The song ends in an exciting cascade of scales and arpeggios between the soprano and clarinet.

The role of accompaniment

The importance of piano accompaniment in the development of the Lied was first revealed by Schubert. Until his time, the harpsichord and then the pianoforte had a smaller role in relation to the vocal line of a song. Schubert gave the piano equal status with the voice. The accompaniment was no longer mere background for the singer; it was now an equal partner setting up the mood, and, in a way, summing up the story of the lied in the concluding postludes.³⁴ To achieve this unity between the parts, pianists need to understand the meaning of the lyrics of the songs as well as singers understand them. They can then begin to discover the appropriate keyboard texture which best expresses the text.

In some of Schubert's songs, where the music has more of a general mood, the accompaniment follows one or two simple rhythmic patterns. Examples are found in strophic songs such as *Das Wandern*, *Heidenröslein* and *Sylvia*. In other songs, the accompaniment has a closer adhesion to the vocal line and greater flexibility of style, as in the *Wanderers Nachtlied* and *Der Wanderer*.³⁵

³⁴ Katherine B. Shippen, and Anca Seidlova, *The Heritage of Music*, (New York: The Viking Press, 1965), 136.

³⁵ Edward Dickinson, *The Study of the History of Music*, (New York: Charles Scribner's Sons, 1908), 204.

Chapter 7: Carl Reinecke: Trio for Piano, Clarinet, and Horn, Op. 274

Carl Reinecke (1824-1910) was born in Germany and studied with his father, a music teacher and writer. Although first started on the violin, he was later more interested in playing the piano and started to compose at an early age. In his early 20s, he studied with Mendelssohn, Schumann and Liszt in Leipzig. In 1860, he was appointed director of the *Gewandhaus* in Leipzig, and professor of composition and piano at the Conservatorium. He served as a teacher for 35 years, until his retirement in 1902. After retirement from the conservatory, Reinecke devoted his time to composition. During this time, he frequently undertook concert tours of England and elsewhere and was regarded as one of the finest concert pianists of the time. As a composer, he produced widely-respected and often-performed works in every genre from opera to orchestral works and chamber music. In his time, Reinecke and his music were regarded as first-rate. His Trio in B flat Major, Op. 274, was composed in 1905 and had two versions: clarinet, horn and piano, or violin, viola and piano. It is notable that he wrote this piece at the age of 82; his late pieces were still very creative and innovative. When he was a young composer, Mendelssohn and Schumann were his models however his music did not remain frozen in time. The Trio can be seen as a late-Romantic, even post-Brahmsian, work which is very effective in either instrumentation.

This particular work is one of three in this genre wherein Reinecke used wind instruments. The remaining ones are for oboe, horn and piano (Trio in A minor Op. 188) and viola, clarinet and piano (Trio in A major Op. 264). In comparison to the

cheerful miniatures with a simple harmonic plan from the first period of his career, in the Op. 274 Trio the composer created powerful, symphonic images in music.

The opening *Allegro* movement begins in a triumphant mood but then becomes more hesitant. The development is quite dramatic and the piano's full orchestral texture gets juxtaposed against the dark introspective role of the other voices. The movement is painted on a colorful tonal canvas with richness in ideas and luscious harmonic progressions and with an instrumental treatment which is very idiomatic. A unique feature of the movement is the B-flat minor-major ambiguity which is present until the closing measures.

The second movement is titled *Ein Märchen, Andante*. The piano creates the atmosphere of a fairy tale as Schumann might have written it, which is a clear reference to the aesthetics of German romanticism. The main phrase stated by the piano is accompanied very softly by the horn; it returns with greater intensity when joined by the clarinet in the final section of the musical idea. This theme comes back twice as a duet between the horn and clarinet throughout the movement, separated by developmental episodes.

The lively, flowing, rondo-like *Scherzo* brings an element of revival. The rapid rondo theme is contrasted by two episodes - Trio I, in which the main role is taken by the horn and Trio II, in which the clarinet is featured. All these sections introduce a different kind of dance.

In the finale *Allegro moderato*, the fine use of harmony and chromaticism shows the extent to which Reinecke continued to evolve in his compositional language. The character of this movement is characterized by Eastern-European

dance music. A pronounced emphasis on the second beat lends a *pesante* atmosphere to the opening segment. However, this character later transforms into a more familiar Reinecke device with triplet figurations, imitative dialogue and rich chromaticism.³⁶ Without doubt, this trio is one of the finest of its type.

Blending and challenges

When playing in unison, the blend of horn and clarinet can be quite mellow-sounding. The timbre increases in brightness as the clarinet range goes higher. The clarinet playing one or two octaves above the horn also produces a more robust sound, which Reinecke uses in the recapitulation of the first movement, in which the two instruments are in unison two octaves apart. The horn's warm mellow sound blends well with woodwinds, one of the reasons the horn always has a role in woodwind quintets.

³⁶ "Horn in Trios", Crystal Records cd cover.

Chapter 8: Ludwig van Beethoven: Clarinet Trio in B-flat major, Op. 11

The Piano Trio in B-flat major, Op. 11 by Ludwig van Beethoven (1770-1827) was composed in 1798 in Vienna. According to Carl Czerny, it was probably written for Joseph Bähr, a well-known clarinetist of the day. The piece is one of Beethoven's nine early chamber works involving woodwind instruments which were novel and popular at the time. These nine works were written between 1792 and 1800. By far, Beethoven's most popular piece during his lifetime was the Septet, Op. 20 of 1800. It was so popular that, in 1805, he arranged it for piano, clarinet and cello as the Trio in E-flat major, Op. 38. The Op. 11 Trio was published for piano, clarinet, and cello with an additional violin part substituting for the clarinet (the cello is sometimes substituted by the bassoon). The key of B-flat major was presumably chosen to facilitate the quick passages in the B-flat clarinet, which had not yet benefited from the development of modern key systems. Most of Beethoven's compositions from this period still respected the traditions and aesthetics of the times, with a few notable exceptions in which he stretched the boundaries of form and expressiveness. The Trio, being an early composition, falls into the more traditional category, and to help ensure its success, Beethoven based the last movement on a well-known tune (*Pria ch'io l'impegno* - "Before beginning this task, I need a snack") from Joseph Weigl's popular comic opera *L'Amor Marinaro* (The Corsair in Love). Johann Hummel and Joseph Wölfl both composed variations on the melody shortly after Beethoven, and Paganini created a *Grand Sonata and Variations* for Violin and

Orchestra much later in 1828. Beethoven dedicated the score to his patroness Countess Wilhelmine von Thun, who had also supported Mozart, Haydn and Gluck.

The Trio's sonata-form opening movement begins with a bold, march-like phrase presented in unison as the first of several motives of the main theme group. The complementary themes are introduced with surprisingly chromatic melodic lines following a short silence. The movement's development section largely consists of the main theme's striding motive.

The *Adagio* second movement is in E-flat major, and starts with a cello theme that is a modified version of the *Tempo di Menuetto* of Beethoven's Piano Sonata Op. 49, No. 2, written in 1796 but not published until 1805. The Mozartian melody is first sung by the cello and later is shared with the clarinet. In the final *Allegretto*, Weigl's simple theme is stated first by the piano, followed by the clarinet. The piano has the first variation to itself, and the second has the clarinet following the cello in canon while the piano is silent. In the last variation the piano leads to a brief G major *Allegro* in 6/8, but quickly returns to the original key. The movement ends with a coda full of surprises using dynamics, a stylistic trademark of Beethoven's.

Specific challenges

To find the right balance between the cello and clarinet is crucial in this work: the clarinetist needs to discover an intimate sound that does not overpower the cello. In this trio, Beethoven uses the clarinet oftentimes to punctuate phrases, while not necessarily using its singing tone to advantage. Pieces by composers like Brahms or Schumann, in which clarinetists play much longer phrases, are more suitable in demonstrating the singing nature of the instrument. In addition, Beethoven's chamber

music with clarinet has little of the tempo flexibility that Brahms' works have. This will often require the clarinet player to use a faster attack than would be optimal. Clarinetists are not the only instrumentalists who find Beethoven's music difficult: many pianists, violinists and cellists claim that Beethoven's writing can be challenging to master, both technically and musically. Knowledge and time are needed to thoroughly understand Beethoven's works and develop a convincing interpretation.

Beethoven is a particularly uncompromising composer in that he fits the instrument to the idea, rather than the idea to the instrument. Works by composers such as Ravel, Rimsky-Korsakov and Tchaikovsky are sometimes easier to interpret, as they often wrote for the instruments more idiomatically. For Beethoven, the musical material would not be limited by the instruments and sometimes instrumentalists have to struggle more in order to perform his works compellingly.³⁷

As a virtuoso pianist himself he wrote demanding piano parts, exploiting the features of the newly-developing instrument during his lifetime. He wasn't always happy with the speed of these advancements, though. His dissatisfaction and frustration with the pianos available to him is outlined in Jan Swafford's new biography: "What Beethoven wanted from pianos, as he wanted from everything, was more: more robust build, more fullness of sound, a bigger range of volume, a wider range of notes. As soon as new notes were added to either end of the keyboard, he used them, making them necessary to anyone wanting to play his work."³⁸ He often

³⁷ Emilio Borghesan, "Why Beethoven's Clarinet Parts Are So Challenging", 2014, <http://www.emilioborghesan.com/practice/2014/9/23/why-beethovens-clarinet-parts-are-so-challenging>.

³⁸ Camellia: "Jan Swafford's Essential Beethoven Biography", 2015,

wrote for the piano with a full orchestra in mind switching back and forth between contrasting light and full textures.

In the Trio Op. 11, Beethoven preferred contrasting piano solo sections with *tutti* sections or occasionally having the clarinet accompanied by only the cello. However in the development section of the first movement, the piano is always present and Beethoven never used the clarinet and cello combination only by itself. Moreover, he did not use the piano and clarinet combination a great deal, but he did use the piano to accompany cello lines frequently. The reason for this could be that on period instruments the piano sound is thinner and it does not have the same sustaining power as the modern piano has. Moreover, the upper- and mid-registers of the piano (where the melodic material is developed) are in the same register as the clarinet, and the timbre of the two instruments do not complement each other. Beethoven clearly wanted a full robust sound; thus, the clarinet is only used for melody or for sustained notes filling in the harmony. At the same time, the cello's high register is used for melodic purposes while the other registers are used for figuration or for sustained notes to fill in the harmony.

Beethoven wrote the Op. 11 Trio in similar fashion to a triple concerto in which the piano solo sections are contrasted with *tutti* sections. The solo sections appear in all three instruments while accompanimental figures are very orchestral in nature and can be independent from a specific instrument. A bass figure can be played by the cello or the piano's left hand and harmonic-filler lines can be played by either the cello or the clarinet while the piano is playing the melody. Beethoven

<https://www.kcrw.com/music/articles/jan-swaffords-essential-beethoven-biography>.

effectively tried to reduce the symphony-orchestra texture to three instruments. It is notable that he transcribed his first two symphonies for piano trio thereby taking advantage of the commercial needs for amateur chamber music at the time.

Chapter 9: Johannes Brahms: Clarinet Trio, Op. 114

While composers had already begun to write music for the clarinet during the 18th century, it was not until the 19th century that the clarinet started to be more popular among composers of the day. This was mainly due to two factors: first, the further development of the clarinet in the first half of the century which led to a more reliable and agile instrument, later combined with the Boehm fingering system, adopted from the flute; second, the tonal qualities of the clarinet were more suitable to express the wider variety of emotions as music shifted from the formality of the Classical era to the Romantic.

Similar to the late-Classical and early-Romantic composers, Brahms strove for the unification of multi-movement structures. That kind of unification can be found as thematic quotations across movements in most multi-movement works by Brahms. The thematic relationships are especially strong between first and last movements: examples include the C major Piano Trio Op. 87 and the Clarinet Trio Op. 114, in which the themes of the last movement may be seen as variations of the themes in the first movement. Brahms used sonata form for the first movements of all but one of his chamber works, the Horn Trio, and for the last movements of all but eight.

Brahms was always fond of the clarinet, but had never used it outside orchestral works. He did not write in the virtuoso manner of many earlier clarinet works, rather exploring the instrument for its expressive potentialities. He dedicated four works to Richard Mühlfeld who was a virtuoso clarinetist and inspired Brahms

to write for the clarinet even after his purported retirement. Only Mozart, Weber and Spohr dared to write pieces for solo clarinet prior to Brahms.³⁹

The Clarinet Trio in A minor, Op. 114 was written in the summer of 1891 and is considered by scholars as part of a rebirth for the composer who had declared in 1890 that his String Quintet in G Major was his final work. The Trio calls for clarinet, piano, and cello and is one of the few along with Beethoven's Op. 11 in that genre to have remained in the standard repertoire.

Op. 114 is in four movements, marked *Allegro*, *Adagio*, *Andante grazioso*, and *Allegro*. Eusebius Mandyczewski, a friend of Brahms commented in a letter to him about the Trio: "The inventive conception of the themes, born of the spirit of the wind instrument and, more especially, the harmonious blending of the tones of the clarinet and the cello, are magnificent; it is as though the instruments were in love with each other". Even in his first clarinet work, Brahms understood the instrument, its flexibility, and the timbre in its three distinct registers: the violin-like soprano, the full yet somewhat mysterious mid-range and the dark and soulful *chalumeau*, the depth of which was the appropriate voice for Brahms' resigned musical statements.

The first movement is in loose sonata form, meaning that the structure of the movement differs slightly from the traditional sonata layout. Brahms wrote this movement with the A clarinet's range in mind, and he used the entire range of the instrument. Along with the extended range, he also utilized long, melodic lines with interplay between the cello and clarinet. Later in the movement, he used fragmented

³⁹ Monika Augulyte, "The late period of Johannes Brahms and his viola sonata Op. 120 no. 1" (University of Music and Performing Arts Graz, 2016), 4, <https://fedora.kug.ac.at/fedora/get/o:22923/bdef:Content/get>.

rhythms with arpeggios and pedal points. In doing so, he revealed his inexperience at writing for the clarinet in a chamber setting, but he also achieved continuous and clear writing for this unique set of instruments.

The second movement's exposition was written with the clarinet playing in the *clarino* and *chalumeau* registers while the melodic line featured smaller intervals. However later Brahms reverted to the way he used the clarinet in the first movement, with leaps and arpeggiations as a transition to a new theme. Brahms used interesting harmonic and rhythmic modulations in the latter half of this movement. These elements, along with the unique form combined to create a solemn mood for this movement.

In the third movement, Brahms wrote in a folk-waltz style for the clarinet giving it a cheerful feel. We can observe again arpeggiated figures in the clarinet which lead the other instruments to a slightly more energetic middle section before relaxing back to a short return of the movement's opening material.

The fourth movement really showcases the uniqueness of the ensemble. Brahms's innovative use of rhythm is much more evident here than in the other movements, interweaving 2/4 and 6/8, with just an occasional 9/8, and using syncopation between the clarinet and the cello.

Instrumental interaction

Brahms used short motivic exchanges intertwined between the instruments to facilitate motion. Throughout the entire first movement, he never used the clarinet and cello combination without the piano. The solo piano moments were written as more sparse and consisted of short phrases usually in dialog with *tutti* phrases. He

used the clarinet and cello for the long melodic lines accompanied by the piano. *Tutti* sections were much longer compared to what we have seen in the Op. 11 Trio by Beethoven. These long phrases, up to nineteen measures at a time, occur only once in the exposition and once in the recapitulation; the rest of the sections consist of short dialogs between the instruments. The development is mostly comprised of long stretches of *tutti* sections.

Brahms used the instruments more idiomatically and divided the instrumental roles more equally than Beethoven. The phrases were more intertwined and the piano had fewer solo sections. The occasional longer solos of the other two instruments are contrasted with long stretches of harmonically and rhythmically dense *tutti* sections. Brahms used the low register in the piano often, with the cello in higher registers and the clarinet above. At times he separated the piano voices to the outsides of the register and had the cello and clarinet remain in the middle, sometimes even having the cello above the clarinet.

Chapter 10: Conclusion

One of the great advantages of playing chamber music is that musicians are always learning from each other, independent of the instrument on which they perform. Members of an all-string group might have very distinct ideas about balance and intonation, but ensembles that involve wind instruments need a flexible approach. In particular, gauging dynamic levels in the individual instruments' lines requires careful planning. In a traditional piano trio, string players have less freedom in exploring exotic colors on the soft side of the spectrum, and in mixed trios the wind instruments involved might, in many ways, determine the specifics of the sound spectrum.

Common problems in mixed groups include intonation, balance, gauging of dynamic levels and projection of the different instruments. Some wind instruments (for example the clarinet) tend to sound sharp in the low register and flat in the high register. Each wind instrument has a natural range of dynamic levels that needs to be acknowledged. Most horn players' *piano* sound would qualify as a *mezzo-forte* by a string player.

Everybody in the group has to be aware of the various instruments' requirements for tone production. The matching of colors and articulation and the smooth passing of melodic lines introduces additional challenges. When playing in a mixed group, the goal is not always the homogenous sonority of a string quartet. From the musical context, one has to decide when to try to smooth the differences

between instrumental colors and when one might actually want to emphasize those differences.

From the composer's point of view, the essential problem in writing music for strings or winds with piano is similar to the player's issues; namely that the sonorities do not readily mix. Despite this problem, chamber music with piano has a well-established and important role in the repertoire, and the greatest composers were able to find ways for contrasting instruments to occupy the same musical space. The resulting repertoire is rich and rewarding and, particularly for the collaborative pianist, is a wonderful lesson in learning the skills needed for all other repertoire in the vast arena which encompasses the collaborative arts.

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