

**The Baroque Violin: Technique, Sound, and
Replication with a Modern Set-up**
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Emotion and Gesture in Seventeenth Century Music
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Dr. Linda Austern

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The Baroque bow is superior to the modern bow for the music of its time. But if you think of Paganini and all the tricks of his day, you couldn't get that bounce and ricochet with the Baroque bow. Just as you can't play the chords of Brahms or Sibelius with a transitional bow. Their music has a drama and power that can only be achieved with a Tourte.

-- Rudolf Hopfner, director of the instrument collection in Vienna's Kunsthistorische Museum

Introduction:

Few people would disagree that Baroque music of the seventeenth century sounds very different than Romantic era music. But what makes it so different? The seventeenth and eighteenth century was a period of musical transformation. As style and aesthetic preferences changed, musical instruments and techniques adapted to fit the new demands. The violin we know today developed during the end of this period because of an increased desire for greater volume. The new construction of the instrument was also accompanied by changes in techniques and methods used to convey musical emotions and affect.

It is important to note that neither the Baroque nor modern violin is inherently superior, but when it comes to bringing out the subtleties and characteristics of the different styles, each is perfectly suited to its own music. In studying Baroque approach, one must be willing to lay aside twenty-first century technique and experiment.

The Baroque Violin:

Much variation may be observed in the construction of Baroque violins. However, there are several important characteristics that distinguish it from the modern violin.

Most outwardly noticeable is the Baroque violin's lack of a

Figure 1: Baroque vs. Modern Violin



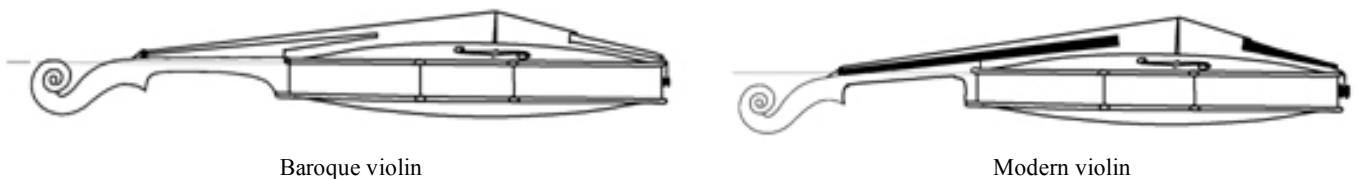
Left: Baroque violin, Timothy Johnson (Stradivari: P mold)
Right: Modern violin, Timothy Johnson

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chinrest (see Figure 1). The chinrest was not used until the time of Louis Spohr in early nineteenth century (Baroque Band, 2013). It developed as a result of the increasingly more complex left-hand techniques being used.

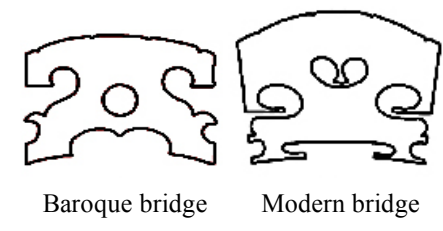
Baroque violins also have a shorter neck and fingerboard. The Baroque violin's neck is 12 centimeters long, whereas modern violin's neck is 13 centimeters long (McLennan, 2008, p. 121). The modern fingerboard is 4-5 centimeters longer (Baroque Band, 2013). This increased the string length of the modern violin. Additionally, the neck of the Baroque instrument enters the body at an angle closer to straight (see Figure 2). The neck of the modern instrument enters the body at a 7-degree angle (Donington, 1963, 465-466). This change increased the string tension, allowing for the louder and bolder sound desired during the Romantic era and required by larger concert halls. Because the Baroque violin was usually a non-solo instrument played in small concert halls or private homes, a more intimate sound was desirable.

Figure 2: Neck Angle Baroque vs. Modern



The adaptations made to the bridge during the end of the eighteenth century greatly impacted string tension and thus the sound quality of the modern violin. Baroque violin bridges are shorter, thicker, and less curved than the modern bridge (see Figure 4). This means the vibrating mass is slightly heavier and more rigid, which leads to a darker tone quality. The curvature of the Baroque bridge is consistent, creating more equal string tension (50 Newtons on the top

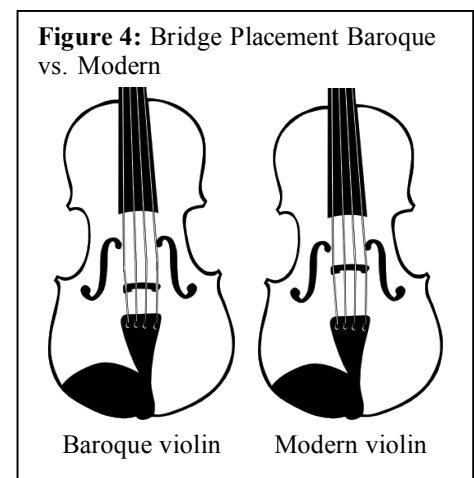
Figure 3: Bridge Shape Baroque vs. Modern



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two strings and 40 Newtons on the lower two strings). Modern bridges are “more arched and the string clearance varies increasing from the E string to the lower strings” (McLennan, 2008, p. 56). As a result, the tension decreases from the 78 Newtons on the E-string to only 38 Newtons on G-string (McLennan, 2008, p. 56-59). The large change in tension creates noticeably different sound qualities across the strings. The G-string is generally the richest, darkest, and warmest. Romantic writing often exploits this characteristic as an expressive device, asking for a certain string colors (indicated *sul G*) in different sections. Because Baroque string tensions are much closer to that of the G-string on the modern violin, this might suggest the lower register has a sound quality more like that of the whole Baroque instrument. This has the possibility to impact the modern violinist’s fingerings choices when playing Baroque music.

Another major difference deals with bridge placement. The modern bridge is placed in-between the violin’s f-holes. However, it was common for Baroque bridges to be placed below the f-holes (see Figure 4). This position not only made it easier for the strings to sound, but also gave the notes a “strong fundamental sound similar to modern playing over the fingerboard” (McLennan, 2008, p. 124). Therefore, one way



to create a more “Baroque” sound is to experiment with playing farther from the bridge. This will give the modern instrument a somewhat darker and less biting sound.

One final difference between the Baroque and modern violin is the type of strings they use. Baroque violinists used gut-core strings, whereas modern violinists typically use either synthetic-core or steel-core strings. Gut strings have a very warm sound and slow response. As mentioned above, they are typically strung at a lower tension, which makes them more pliable

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and able to create subtle changes. Gut strings are less powerful, but produce a sound rich in overtones (Zaret, 2012). Steel strings, on the other hand, have a clean, pure sound with fewer overtones. Note attacks are often harsher and more powerful sounding. Finally, the tone is generally brighter. Synthetic core strings (typically made out of nylon) represent a mixture between steel-core and gut strings. They have more power and a faster response than gut strings do. However, the sound is less complex (Zaret, 2012). The switch from gut to steel strings once again reflects the Romantic-era's preference for power. A study found synthetic strings were on average 4½ decibels louder than gut strings (McLennan, 2008, p. 113-120). This might suggest that a player use less than full volume when playing Baroque music on steel or synthetic strings.

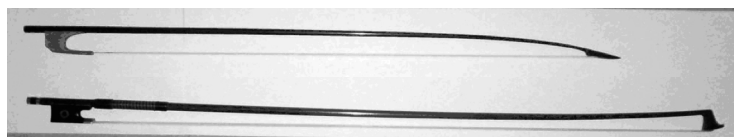
The Baroque Bow:

The bow arm is the single most important element of violin technique for the expression of style since it produces the sound shapes that make a style meaningful.

-- David Douglass, 2012, p. 170

The Baroque bow is significantly different in a number of ways. Although bow measurements were not standardized until Francois Tourte in the early nineteenth century, the Baroque bow was considerably shorter than the modern or Tourte bow (see Figure 5). It was typically around 61 centimeters in length (Schröder, 2007, p. 13), but could be as short as 51 centimeters (Dolmetsch, 1915, p. 454). It had a balance point near the frog. In contrast, the Tourte bow is a standard 74 centimeters in length, with a balance point 19 centimeters from the frog. The additional length makes modern bows much heavier at 58-63 grams versus the Baroque bow's 37-42 gram weight (Schröder, 2007, p. 14).

Figure 5: Bow Shape Baroque vs. Modern



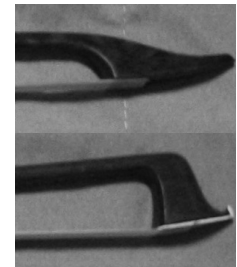
Top: Baroque bow, Hans Reiners
Bottom: Tourte bow, Garner Wilson

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The lightness of the Baroque bow made playing rapid string crossings and detached notes easier. It also allowed separation to be created without lifting the bow (off-the-string strokes are needed to create a similar type of separation with the Tourte bow). Additionally, the heaviness of the Tourte bow requires the player to use small forearm and wrist movements to make style changes. In contrast, the light Baroque bow allowed players to use large whole arm movements without sounding harsh. Small wrist and hand movements were then used to create very subtle changes that are impossible with the Tourte bow (Babitz, 1970, p. 18). Interestingly, the added length and weight of the Tourte bow made “new strokes such as the martelé, staccato, and spiccato bowings” (Schröder, 2007, p. 13) possible. The extra mass is also advantageous because it enables more force to be achieved by the weight of the bow itself. Therefore, less additional pressure is required from the player in order to produce a loud, “Romantic” sound (Friedrich, 2013).

The Baroque bow was shaped very differently than the Tourte bow. The stick curved outward, finishing in a fine point. As a result, the tip was considerably lighter than the frog. This led to a natural unevenness in bow strokes – the down-bow being much stronger. The Baroque era exploited this property to the player’s advantage by arranging bowings so that down-bows (stronger strokes) landed on strong beats. Additionally, the tension on the hair was lower because of the outwardly curved stick. Consequently, every note “seems to breathe the first tone it gives” (Donington, 1973, p. 88). Even the strongest attacks have a “small, even if barely audible, softness at the start of the stroke” (Mozart, 1756, p. 97). This gives Baroque music a sweet, singing quality, in which *messa di voce* swells (small crescendo-decrescendo) are heard on longer notes.

Figure 6: Tip Detail Baroque vs. Modern



Top: Baroque bow
Bottom: Tourte bow, Alfred Lamy

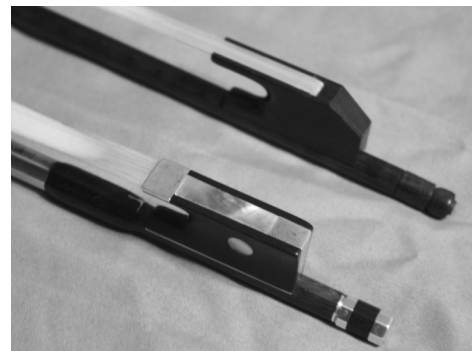
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The Tourte bow is heated and bent into an inward curve. As a result, when the hair is tightened, the curve becomes partially straightened, creating a tension that causes the bow to act like a spring (Roda, 1959, p. 51, 90). This makes bounced strokes (*sautille*, *spiccato*, etc.) possible. The Tourte bow also has a hatchet head (see Figure 6). This head enlarged the space between the hair and the stick at the tip. Consequently, the tension of the bow hair is more even throughout its length. This enables the modern violin player to create a continuous tone, where bow changes are virtually imperceptible – a very desirable quality in Romantic music.

The Baroque bow was almost exclusively made out of snakewood, whereas the Tourte bow is typically made out of pernambuco. Because pernambuco is less dense ($0.90\text{-}1.22\text{g/cm}^3$) than snakewood ($1.38\text{-}1.40\text{g/cm}^3$), it is generally more flexible. This creates an ideal balance of hair tension and control required for the bouncy strokes and sustained tone of Romantic repertoire (Roda, 1959, p. 66-67).

Finally, the Tourte bow added a silver covering (called the ferrule) to the end of the frog (see Figure 7). It covered the hair, keeping it flat. This enabled the bowmaker to create a wider ribbon of horsehair. The Baroque bow typically has between 80-100 hairs, whereas the Tourte bow has 150-200 hairs (Boyden, 1965, p. 112). This gives the Tourte bow more grip on the string, making louder dynamic levels possible. Study results showed that reducing the width of the bow hair “either by tilting or by a modification of the bundle of bow hair gives a boost in high-frequency partials [overtones]” (Schoonderwaldt, Guettler & Askenfelt, 2003, p. 4). Additionally, smaller bands of hair produce a more brilliant and free tone quality

Figure 7: Frog Detail Baroque vs. Modern



Top: Baroque bow
Bottom: Modern bow, Alfred Lamy

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(Schoonderwaldt, Guettler & Askenfelt, 2003, p. 3). Because both of these qualities are characteristics of Baroque gut string sound, these findings suggest that a player using a modern set-up may come closer to a characteristically Baroque sound by tilting the stick to decrease the width of hair that is contacting the string.

It is also important to note that because the Baroque bow has no ferrule, as pressure is added, the ribbon of hair becomes circular shaped. Having the hair in this configuration makes creating initial attacks very difficult. For this reason, the martelé stroke is not possible with the Baroque bow (Friedrich, 2013). Consequently, performers should take great care to avoid this stroke in playing Baroque music.

Holding the Instrument:

One common violin hold during the seventeenth century involved resting the violin on the chest (see Figure 8). The violin was “cradled on the upper arm and drawn in toward the armpit” (Douglass, 2012, p. 170). Because the instrument and bow arm are extremely low, the hold frees the arm muscles, allowing the player to work without holding his arms up as he does with the modern violin hold. Consequently, the player can throw his complete arm weight into creating bow strokes, which was an important technique used to accent or relax certain beats within a dance.

Additionally, in this position, the violin was free to move as well. This gave the player a second variable with which to create nuances in the music. Furthermore, the ability to rotate the instrument allowed the player to control the angle at which

Figure 8: Baroque Chest Violin Hold



Gerard Dou, *Violinista* (1665)

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the bow contacts the instrument. This kept “the mechanics of the bow arm consistent over the entire range of the instrument” (Douglass, 2012, p. 175). These factors gave the Baroque violinist a huge range of expressive devices not open to players using a modern hold.

The second common violin hold was used during the later portion of the seventeenth century and is similar to the modern hold in that the violin is moved up to the shoulder. While similar in this regard, the Baroque shoulder hold is still significantly lower. It is also freer because the chin does not clamp down on the violin as it does in a modern hold (see Figure 9). Mozart’s treatise on violin playing, explains “the violin is quite unconstrained; held chest high, slanting, and in such a fashion that the strokes of the bow are directed more upwards than horizontal” (Mozart, 1756, p. 56). While the shoulder position did open up new possibilities for “melodic gymnastics”

Figure 9: Baroque Shoulder Violin Hold



Michel Corrette , *L'Ecole d'Orphée*
(1738)

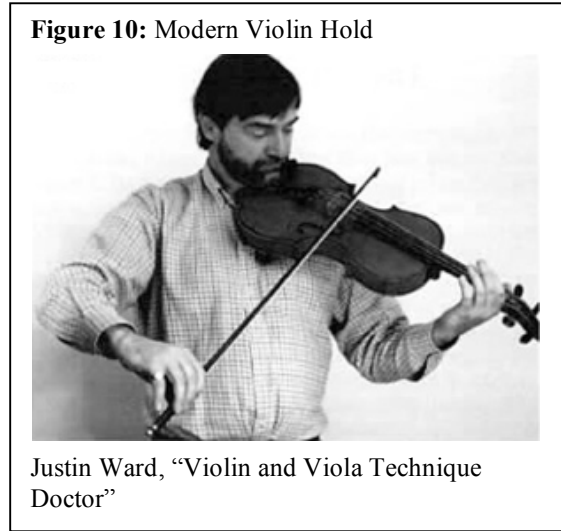
(Douglass, 2012, p. 177), Mozart notes that it is still “somewhat difficult and inconvenient for the player as, during quick movements of the hand in the high position, the violin has no support and must therefore necessarily fall unless by long practice the advantage of being able to hold it between the thumb and the index-finger has been acquired” (Mozart, 1756, p. 56).

Romantic music of the late eighteenth century, which experimented with higher positions and quick movements, necessitated a new violin hold that allowed these techniques to be executed with ease. The modern violin position places the violin on the shoulder, holding it firmly in place with the chin. This frees the right hand from supporting the instrument and makes the back of the instrument roughly parallel to the floor. It also requires the right elbow to be held

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up and away from the body (Galamian, 1962, p. 44-64).

This make shifting quickly much easier. However, because the chin holds the violin in place, it becomes locked into one position, preventing the player from utilizing some of the Baroque era’s expressive motions. Additionally, bow strokes with this hold became much more horizontal than vertical. This removes some of the natural heaviness of the down-bow stroke, but at the same time increases gravity’s effect on the bow.



Bowing Styles:

Two overarching styles of bowing prevailed throughout the seventeenth century. The first, known as French or “Lullist” style, was codified in the prefaces to three collections by Georg Muffat (a seventeenth century composer). The governing tenant of French style bowing is that all players must “bow the most important notes of the musical meter, especially those which begin the measure and which end a cadence, and thus strongly show the motion of the dance in the same way” (Andrijeski, 2012, p. 196). As a result, what distinguishes this style from the Italian style is the “Rule of the Down-Bow.” This rule exploits the natural heaviness of down-bow and lightness of up-bow by requiring “the first note of a measure that begins with out a rest,

whatever the value, [to] always be played down-bow” (Andrijeski, 2012, p. 196). Other notes in the bar were to be alternated in such a

Hierarchy of Beats				
	Pulse 1	Pulse 2	Pulse 3	Pulse 4
2 pulses per measure	downbeat, strong	upbeat, weak	---	---
3 pulses per measure	downbeat, strong	upbeat, weak	upbeat, weakest	---
4 pulses per measure	downbeat, strongest	upbeat, weak	secondary downbeat, strong	upbeat, weakest

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way that strong beats received down-bows and weak-beats received up-bows. The hierarchy of beats within different meters is described in the table on the previous page.

In the French style, retakes were very common across barlines. Double up-bows (*craquer* bowing) were often used to prepare down-bows on the downbeat in triple meter. Additionally, in the French style, syncopations, dissonances, and the beginning of ties were to be played strongly. Resolutions of dissonant intervals were also played strongly. This may seem surprising because it requires the player to lift the bow before the resolution. However, it prevents resolutions from being played so weakly that the effect of the sweet consonant sound is lost (Friedrich, 2013).

This concept stems from Baroque theory of affect, which sees sadness as pain followed by joy (Descartes & Voss, 1989, p. 86-87). Furthermore, if the bow is lifted in a staccato style (as Muffat suggests), the note will continue to ring (Boyden, 1965, p. 265).

Italian violin music focuses less on the emphasis of music's rhythmic properties and more on its expressive properties. As a

result, Italian style bowings are extremely free. Writing on the Italian style of bowing generally supports the basic down-bow rule as enumerated by Muffat, however, it is “not interested in coordinating bow directions between all of the parts” (Andrijeski, 2012, p. 200). What is most important is creating a cantabile style that mimicks the phrasing and sound of the voice. Consequently, bow directions were generally alternated freely causing downbeats to fall on up-bows. Furthermore, longer slurs were often used to create a more sustained, singing feel. Excerpt

Excerpt 1 – 14. *Les Marmintons* from Georg Muffat's *Florilegium Secundum: Fasciculus II. Laeta Poesis* (1698)

French Style:

Allegro



Italian Style:

Allegro



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1 shows an example of the differences between French and Italian style bowings. Tracks 1 and 2 of the accompanying CD show the aural differences of these two bowing styles. Note how the French style (Track 1) is lighter and more bouncy sounding. There is also a much heavier emphasis on downbeats. The Italian style bowing (Track 2) creates a longer, more fluid line.

Modern bowing styles reflect a mixture of French and Italian style. There is great emphasis placed on uniformity, and the “Down-bow Rule” is generally supported. However, like the Italian style, modern violinists have greater freedom to break the “Down-bow Rule” when necessitated by the musical line. The most important difference, however, is the importance of the legato style in modern playing. Modern violinists go to great length to make imperceptible bow changes – something that was impossible with the Baroque bow. Therefore, Baroque bow strokes are naturally “somewhat more articulated than modern strokes” (Boyden, 1965, p. 263). Furthermore, metric accents are generally downplayed in an attempt to create long, smooth melodic lines (Babitz, 1970, p. 18). Tracks 3 and 4 show the Muffat excerpt played with a modern, Romantic style. Notice how connected the notes are. With this bowing, the lightness disappears. Tracks 5 and 6 use a modern bow to imitate Baroque style. The bow is lifted from the string to create a lighter feel. However, note that the separation sounds more militaristic due to the immediate and intense initiation of notes and lack of a natural decay.

Articulation

Articulation is the key to Baroque music. It's all about how short, how long, how separated, or how connected something is. That is how Baroque composers and performers convey different ideas.

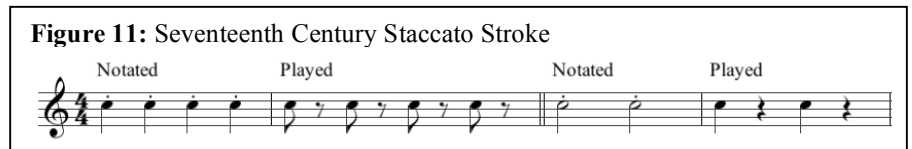
-- Susanne Friedrich

Articulation goes somewhat hand-in-hand with bowing style and technique, but one should considerate it a separate concept because different articulations can be created with any

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style of bowing. While certain styles make different articulations harder or easier, articulation can always be varied. Diversity of articulation within a single piece, movement, or measure was highly desirable in the Baroque era. While it is certainly not undesirable today, it seems that modern musicians often tend to focus more on maintaining consistent articulations and varying dynamics, vibrato, and bow speed to create interest.

Part of the challenge for the modern violinist is that the interpretation of strokes has changed since the Baroque era. Although *détaché* still means detached or separated, to the modern violinist, it generally implies nothing more than not slurred. Therefore, with the modern bow and Romantic style that encourages imperceptible bow changes, the *détaché* stroke sound very legato (Boyden, 1965, p. 263). In the seventeenth century, *détaché* indicated notes played with an audible separation. Additional confusion surrounds the staccato stroke. During the seventeenth century, staccato indicated notes separated by silence. Today, rests would likely indicate this aural effect (see Figure 11). Baroque staccato was bowed in the lower half



with little pressure. The bow was lifted off the string at the end of each stroke. In contrast, modern staccato strokes are generally stronger and heavily articulated. The bow remains on the string, rearticulating but not separating notes with silence (Galamian, 1962, p. 78). These differences in articulation and separation should be taken into consideration by modern violinists playing Baroque music. A lighter staccato like that of the Baroque style may be achieved by playing lightly in the lower half, with a brushed motion (usually called brushed spiccato).

Other important articulation considerations depend on context. Because articulation, dynamics, and bow direction were not typically written into scores, the performer must

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understand how techniques were used during the Baroque era. In general, pick-ups were short, but still led to the downbeat. Faster notes (sixteenths, thirty-seconds) were played with a smooth, on-the-string stroke. Slower notes (quarters, eighths) were played in a detached manner. Scalar lines (rising or falling) were connected, but not slurred. Skips of a third or more were played in a separated manner (Friedrich, 2013).

Transition between connected and separated notes quickly was imperative in Baroque music because articulation often changed within lines. The lightness of the Baroque bow made this easier. Therefore, modern players must take care to seamlessly transition between strokes.

Interpretive Comparison of Bach's *Violin Concerto in A minor, BWV 1041*:

Bach's *Violin Concerto in A minor, BWV 1041* is usually dated around 1720 (during his time at the Cöthen court). However, the exact date is unknown. It is a three-movement work following the fast-slow-fast model. Its use of ritornello form and emphasis on strong melodic lines are very much inspired by Antonio Vivaldi. However, Bach uses the voices to play with form. While most concerti of the time relegated the tutti and soloist to separate and clearly defined sections, Bach blurs the boundary to create a cohesive work (Roeder, 1994, p. 66). The soloist frequently interrupts the tutti. The tutti voices often converse with or punctuates the soloist's lines. The solo and ritornello sections are often elided, creating subtle entrances that break down the defined sections. This technique plays with the Baroque audience's expectations, creating an affect of wonder – an emotion defined as “the sudden and unexpected arrival of the impression that alters the motion of the spirits” (Descartes, 1989, p. 58).

The first movement is given no tempo marking; however, it is usually played *allegro* or *allegro moderato*. The overall affect is one of joy, which represents a “delightful excitation of

the soul” (Descartes, 1989, p. 69) stemming from enjoyment of the good. There are also moments of lightheartedness, which is a type of joy, whose “sweetness is increased by the remembrance of evils we have suffered” (Descartes, 1989, p. 132). This can be seen in the way Bach prolongs lines, denying the listener momentarily of the gratification that comes from cadences.

The first movement has three ritornello sections (m. 1-23, 51-84, and 142-181), and two solo passages (m. 23-55 and 84-145). The first ritornello section features a half-cadence in measure eight, followed by a string of sequences. A trill in measure 17-18 delays the expected cadence, prolonging the ritornello section. This is an example of both wonder and lightheartedness. The opening ritornello ends in E major (dominant), which is unusual because modulations were typically left up to the soloist (Roeder, 1994, p. 75). The last ritornello section resolves the opening idea to A minor, providing closure.

The first solo section opens with material that sounds new, but is drawn from the ritornello. The neighbor tone sixteenth notes are drawn from measure 5 of the ritornello, and the upward leap from measure 24-25 and 26-27 is drawn from the opening ritornello figure (it is also mimicked in the tutti). The tied notes are a variation on the material beginning in measure 8. Bach’s use of the tutti to punctuate the solo line and provide inspiration (see measure 32-43) exemplifies his unusual treatment of the two forces. The unexpected interjections often create dialogues during held notes (see measure 25-28), which further blurs the distinct roles.

Measure 43 transitions the movement from A minor to C major (relative major). In measure 51, Bach elides the end of the solo section with the beginning of the ritornello section, providing a smooth connection between the previously divided sections. This again would provide Baroque listeners with an affect of surprise, as they heard the ritornello suddenly

blossoming out of the solo line. Again straying from traditional form, Bach begins the second ritornello in C major rather than E minor, but modulates there as in the first ritornello. Also unusual are the soloist's dialogic interjections seen in measures 61-62, 65-66, and 73-77.

The second solo section begins in E minor (dominant) and goes through a series of rapid harmonic developments. Ritornello material from measure 4 is turned into a long modulatory sequence interspersed with other material also drawn from the ritornello. The one distinctly soloistic phrase occurs in measure 135-139. The ritornello tries to begin in measure 122, but dies out. It reappears at measure 141, eliding the final solo section with the last ritornello.

I have chosen to compare five interpretations of Bach's *Violin Concerto in A minor*. Two performers specialize in historically informed performance. The other three are classically trained "modern" violinists. Two of the modern violinists play on modern set-ups –one in a Romantic style and the other not. The third plays with a modern violin, steel strings, and a Baroque bow. As points of comparison, I will first be looking at the overall sound and affect created by the performers. I will then examine how the performers brought out the interplay between the soloist and ritornello forces as described above. I will also note where time is taken and where emphasis is given to draw out key features or affects within Bach's composition.

All five soloists utilized slightly different bowings, but followed the basic "Down-bow-Rule". This gave natural emphasis to downbeats and other important moments (see measures 4-7). Weak beats were usually played up-bow, but were taken down-bow if they tied across a barline or beat. Double up-bows and retakes were not very prevalent because the movement is in simple duple meter (2/4) rather than triple meter. However, Manze, Lamon, and Fischer used a retake to approach the trill at measures 17, 72 and 159. This gave it extra weight and emphasis.

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Andrew Manze (Track 7)

Andrew Manze is an English violinist and conductor. After studying at Cambridge University, he became involved in historically informed performance. He is renowned as one of the leading specialists in Baroque performance practice. He directed the Academy of Ancient Music in 1996 and the English Consort from 2003-2007.

Manze's performance of the first movement of Bach's *Violin Concerto in A minor* used a period instrument (gut strings) and Baroque bow. The violin was held low, but on the shoulder. The lack of a chinrest provided Manze with great freedom of movement. Consequently, the overall sound was light, but full of energy. There were clearly audible separations between notes. However, they did not feel clipped; they tapered off naturally. This characteristically Baroque articulation gave musical figures space to breathe. The audible separation between longer notes added a bounciness that amplified feelings of joy. Pick-up notes were played short, but with a sense of direction. In contrast, sixteenth note passages were usually played in a more connected manner. However, the degree of connectedness varied throughout passages to maintain a light feeling and provide interest. For example, the sixteenth notes leading to the tie in measure 25 were much less connected. Altering the length of the sixteenths at this moment emphasized the build to the tied note. In extended sixteenth note passages, the first of each set was emphasized or lengthened to show direction. While the dynamic often grew to create interesting lines, it seemed to grow and then return to a quieter dynamic. This contrasts Romantic playing, which tends to continuously build rather than pulling back in order to grow more.

Messe di voce swells were also apparent on Manze's sustained notes. As a listener, this created a more contemplative feel. It was as if a memory entered the performer's mind, swelled, and then passed. The memories were often triumphant like the rising sequence of measures 51-

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53. In these moments, Manze created the triumphant feel by growing dynamically and emphasizing each new swell slightly more. Other times, the figures were more sorrowful. For example, in measures 80-83, Manze and the ensemble gave the falling sixteenth note figures a bit of extra emphasis by lengthening the first note. They also backed off slightly on the rising figures, making the falling motion sound more significant and pervasive than the rising one. By emphasizing the fall, Manze brought out the affect of lightheartedness.

A similar idea was used for sixteenth note sequences (measures 4-6). Here the ensemble lengthened this first note of each group and increased the dynamic to intensify the line. Notably, in measures 89-99 Manze goes against the listener's expectations, remaining quiet and delaying the build until the last three measures. This adds to the drama and surprise (affect of wonder).

Manze also highlighted surprising and interesting parts (noted above) through his use of tempo and dynamics. For example, he takes extra time to sit on the trill at measure 17. This plays with the listener's expectation in several ways. First, the pace of the rhythm up to this point has been relatively quick (mostly sixteenth notes) and flowing. By taking time, Manze alters the expected flow, creating interest. Additionally, the Baroque listener expected to hear a cadence at this moment. The trill highlights the fact that the piece is not cadencing, but instead extending the line. Emphasizing the trill elevates the surprise, creating an affect of wonder. The unusual interplay between the tutti and solo lines is brought to life by Manze's ability to gracefully taper at the ends of his lines, making transitions seamless. This makes the unexpected blossoming of ritornello sections from solo lines all the more surprising. One great example of this was measure 55, where the soloist's descending arpeggio begins the ritornello section.

Furthermore, there was a lot of subtlety in Manze's use of varied dynamics, articulations, and inflections. This provided interest and created a sense of freedom. At times it seemed as if

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Manze was improvising rather than reading notation. One example was measures 148-150, where the soloist restates familiar material from the first solo section. Here, instead unfolding the same way, Manze allows the growing energy and dynamic of the line to propel his movement forward, resulting in a joyous outburst (the big broken chord) at measure 150.

Jeanne Lamon (Track 8)

Jeanne Lamon is an American violinist and conductor. She earned her Bachelor of Music degree from Brandeis University. After graduating, she played in various European orchestras, returning to the United States in the mid-1970s to establish a career as a Baroque specialist. She has been the director of Tafelmusik Baroque Orchestra since 1981.

Lamon's performance of Bach's *Violin Concerto in A minor* used a period instrument (gut strings) and Baroque bow. Her violin hold was on the shoulder, but low and free. Her interpretation had many similarities to Manze's in terms of the overall sound and affect. It was light and full of energy. There was usually a clearly audible separation between longer notes, but this was varied to create interest. For example, ties were sustained and more connected. This brought out the momentary displacement of the beat. Lamon's sixteenth notes were more legato than Manze's. This created a long, flowing line, but tended to cause the light, bouncy, joyous feel to get lost in longer passages. Pick-up notes were played short, but with a sense of direction – just like we heard in Manze's performance.

In general, the quick, subtle dynamic and articulation changes within lines were not as noticeable. She seemed to focus on big scale dynamics, creating long, but slightly more stagnant lines that made the piece less free and improvisatory sounding. For example, in measure 89-99, Lamon plays the first sixteenth note of each group in a connected fashion. The lack of clearly

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audible silence prevented her from lengthening successive groups in order to add intensity to the growing line. Instead, she was forced to use bow speed and dynamics to create emphasis.

Consequently, this build sounded far less convincing than Manze's.

Lamon used many similar techniques to bring out important details in the work. For example, she took time on the trills (measures 71-72 and 159-160), which surprises the listener and emphasizes the extension of the phrase. She interestingly chose to move through the first trill (measures 17-18) without taking time or giving much extra emphasis. This made the other two trills even more noticeable and dramatic. Cadential figures were made apparent by adding extra weight and pulling back on the tempo slightly. This was very effective and helped delineate key structural points within the piece.

As in Manze's interpretation, the transition between soloist and tutti forces was very smooth, creating a sense of wonder as they join, converse, or bloom out of one another. One of my favorite phrases in Lamon's interpretation was measure 43-49. Here she emphasized the newness of this soloistic figure by shaping the first bar in an intense, but questioning manner. The following bar was shaped as an answer, emphasizing the three lower notes with a slight accent. This phrasing created an interesting dialogue or argument within the solo line. It also brought out the deeper register of the violin, which really had not been heard up until this point. Therefore, this shows how Lamon's interpretation created an affect of wonder.

Anne-Sophie Mutter (Track 9)

Anne-Sophie Mutter is a German violinist. She began playing at the age of five, studying at the Winterthur Conservatory, and making her public debut with the Berliner Philharmoniker at

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the age of 13. Although Mutter's repertoire includes many classical pieces, she is particularly well known for championing contemporary music.

Mutter's performance of Bach's *Violin Concerto in A minor* used a modern instrument (steel strings) and Baroque bow, with a high shoulder hold. The CD liner notes talk extensively about the combination of Baroque and modern equipment:

Clarity and lightness should be achieved through sparing use of vibrato and through flowing speeds. In the fast movements in particular, ... it is especially important to adopt a sensitive approach to the original phrasing: "Can one achieve this phrasing with a modern bow? The answer is an unequivocal no. That is why I was previously able to realize only some of these phrase markings using a modern bow – although they were technically still just about possible, they did not sound right. On this occasion both I myself and the orchestral players all used copies of Baroque bows and in this way achieved a very different tonal concept." Conversely, Anne-Sophie Mutter decided against using gut strings: "I am sure that Bach's musical ideal was free from the problems of poor intonation and the other shortcomings associated with gut strings. For 20 years I have been using a soft wound A-string that offers more warmth and in certain ways comes closer to the aesthetic of the fully rounded tone that is associated with gut strings."

-- Mutter, *In Tempus Praesens* Liner Notes, p. 5

To Mutter's credit, her interpretation was similar aesthetically to that of the two Baroque performers in many ways. For example, she played longer notes in a detached manner and sixteenth notes more connected. The pick-ups were also short. However, because of the steel strings, her overall sound was louder, brighter, and more sustained (even on detached notes). Consequently, even though the light openness remained, the sound lacked some of the quiet, transparent subtlety and bounce of the Baroque instrument performances.

Another similarity between Lamon and Mutter's interpretation was the treatment of the trilled figures and the tutti/solo dialogue in measure 43-49. However, because of the clarity of sound and ease of creating attacks with steel strings, the quick diminuendos at the ends of phrases were less successful. Therefore, transitions seemed less seamless and more like a passing of ideas. This was noticed most easily in the second ritornello section. Here Mutter ends her

interjections with broken octave eighth notes that overlap the tutti entrance (see measure 63).

Both Lamon and Manze played these figures in such a way that the bottom eighth note was barely audible, allowing the tutti players to drive the motion forward. While the lower note was dramatically softer in Mutter's interpretation, the attack was still very crisp and audible.

In the opening figure I was bothered by the clipped sound of the quarter notes. Instead of decaying naturally as Manze or Lamon's strokes had, the notes were cut off rather sharply (in a staccato-like fashion that would not have been used in Baroque playing). This made hearing the overlapping dialogue between the continuo and strings difficult because each entrance became a declamatory statement rather than part of a longer line. Additionally, Mutter talked about her use of vibrato as ornamentation. However, vibrato seemed to appear only on sustained tones. This certainly provided interest, but didn't always seem like the most logical notes to highlight with ornamentation. I expected to find vibrato at cadences, high points, or unusual entrances. Yet, in Mutter's interpretation, these places were relatively vibrato-less. It would have made more sense to only ornament the notes that marked the tops of phrases (as Manze and Lamon did).

One very interesting part of Mutter's interpretation was in measures 117-122. Here Mutter really emphasized the last two sixteenth notes of the first measure and then the moving sixteenths in the following measure. As a listener, this highlighted the connection between the soloist's line and the continuo figure in measures 8-11 (see Figure 12). By emphasizing these notes, Mutter brought out an unusual connection

Figure 12: Connection between Solo and Continuo Parts
Violin Solo m. 117-118

Heard as:

Continuo m. 10-11

between the soloist and tutti voices that none of the other performers highlighted. For the Baroque listener, this place would have been rather surprising and would have incited wonder.

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Julia Fischer (Track 10)

Julia Fischer is a German classical violinist and pianist. She began playing at the age of four, studying at the Leopold Mozart Conservatory and Munich Academy of Music. Fischer's performance of Bach's *Violin Concerto in A minor* is performed on a modern instrument (steel strings) and modern bow, with a modern shoulder hold.

Fischer's sound approximated the sound of a Baroque set-up nicely. Her sixteenth notes remained fairly connected, but were still light. The eighth notes and sixteenth notes were played in a detached manner. They decayed naturally and were not clipped like Mutter's. However, the decay was significantly less than that heard in Manze or Lamon's performance. The detached stroke also sounded slightly more vertical than the very soft, brushy separation of Manze, Mutter, or Lamon's interpretation. This most likely stems from the fact that modern bow mechanics allow the hair to grip the string more, producing a more immediate and full attack. Soft, breathing attacks were much easier to accomplish with the Baroque bow.

Generally, the articulation of note values did not vary too much throughout individual lines. However, Fischer really brought out different lines and ideas through added weight and dynamic levels. One example was measures 21-22, where Fischer added extra emphasis to the downbeats (as French bowing naturally did), growing to the tied note and then backing off. This created a wave-like effect highlighting the syncopation – an unexpected displacement of the beat that excited the soul and incited wonder. Unlike the others, Fischer does not treat vibrato as an ornament because it is more or less continuous. This being said, the way Fischer is able to alter the intensity of her vibrato allows it to act like an ornament on important notes.

Fischer conveyed the affect of lightheartedness through her use of lower strings and higher positions to create a soft, but dark sound on falling lines. This was contrasted with a

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bright tone quality, huge build-ups, and a sustained tone on rising lines. By pulling back on the descent, the rising figure felt even more sweet, fulfilling, and dramatic. One example is measures 159-167. Interestingly enough, although the final six bars fall in pitch, Fischer emphasizes the upward motion, only pulling back and lengthening on the last few notes to indicate the cadence and provide finality. This maintained the light, joyous feel of the piece despite the fall to the end.

Henryk Szeryng (Track 11)

Henryk Szeryng is a Polish violinist, who began studying music at the age of 5. He studied at the Conservatoire de Paris and made his solo debut with the Warsaw Philharmonic at age 15. When Szeryng died in March 1988, he was heralded by the *New York Times* as one of the “most elegant representatives” (Holland, 1988) of the Romantic school. He was known for the purity of his playing and well-organized phrasing. “In the Romantic tradition, Mr. Szeryng applied his long, lyrical style to Mozart, Bach and Vivaldi as well as to Brahms and Tchaikovsky” (Holland, 1988). His vibrato was broad and sweet. His performance uses a modern instrument (steel strings) and a modern bow, with a modern shoulder hold.

Right from the start, Szeryng’s playing sounded very different. The notes were extremely connected, and bow changes were barely noticeable. The sound was sustained throughout, so there was no natural decay. This created long phrases and a completely different affect. The light, bouncy, joyous feel created by the detached notes is gone – replaced with one that is more intense and brooding. One great example of this is the figure written at measure 44. In the other performances, this figure was very playful sounding. However, without the lift and lightness, the playfully, questioning nature disappeared. Instead, the sound was more passionate and troubled. It was also much less free and improvisatory.

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Additionally, the half step figures and minor harmonies seemed much more pervasive (e.g. measures 24-29). Consequently, the overall affect was more sad and sorrowful. Descartes stated that in sadness, “the pulse is weak and slow” (Descartes & Voss, 1989, p. 73). While there was a clear sense of beat in Szeryung’s interpretation, his extremely connected and Romantic style bowing minimized the effects of metric accents and the hierarchy of pulses within the measure. Additionally, Szeryung tempo was considerably slower than that of the others.

Another aspect of Szeryung performance that connected to Descartes was the idea that sadness is a complex emotion that is often followed by or mixed with a feeling of love or joy (Descartes & Voss, 1989, p. 86). There were several moments where the violin shone through, emphasizing major tonalities and an openness of sound. One example was measure 51-53, where the violin line rises with each held tone. By drawing out these tones with intense vibrato, Szeryung built a triumphant sound from the initial sorrowful tones.

Because Szeryung used a sustained and connected tone, he was unable to lengthen or shorten notes to create different emphases and affects. Instead, he used mostly dynamics to bring out lines and increases in intensity. Dynamic changes tended to occur over larger sections of music and did not ebb and flow like those in Manze’s performance. Another way that Szeryung created variation was through his use of bow speed. Important notes that had been lengthened in the various Baroque and Baroque-style interpretations were given an added initial burst of bow speed. This created an analogous feeling of weight, while maintaining the sustained quality.

Szeryung’s interpretation really highlights how Baroque articulation and bow technique move the passions in very different ways than Romantic articulation and bow technique do. However, we also see that both styles can create similar affects using different techniques.

Although both interpretations are applicable, Szeryung's playing sounds very different than what would have been heard during Bach's own time.

Tips for Modern Violinists

This next section includes a list of tips and tricks for approximating the sound of a Baroque instrument using a modern set-up. They have been gathered from a number of sources including my own experimentation, conclusions from my research, and suggestions given to me by Baroque musicians (Susanne Friedrich and Gary Clarke). It is by no means meant to be an exhaustive list, and it should be noted that nothing beats experimenting with gut strings and a Baroque bow. However, when this is not possible, my list will give you a place to start:

1. Listen a lot! Get recordings of different consorts playing a variety of Baroque pieces in different genres and national styles. Or even better, go see a local Baroque ensemble and observe their playing techniques.
2. Play in first position as much as possible. When shifting is necessary, crawl with your fingers to reach the note. Baroque violinists didn't have the same grip on the instrument that modern violinists do, so large, leaping shifts were difficult and dangerous.
3. Use lots of open strings (even modern ones!). Baroque players liked the openness and brilliance of open strings.
4. Limit your use of vibrato. During the Baroque era vibrato was used as an ornament. It was not used constantly as it is today.
5. Keep it light! Play in the lower half with a brush stroke for staccato, and let your détaché strokes breathe. Remember that sautillé, martelé, and other strokes with harsh attacks were not possible with the Baroque bow.
6. Because of the bow mechanics, Baroque notes have a natural swell to them. To imitate this, try to avoid the Romantic technique of making bow changes inaudible. Instead, begin notes with softness and grow into them (often termed *messa di voce*). This should be especially apparent on sustained notes.
7. Tilt your bow about 45 degrees. This will reduce the amount of hair contacting the string, producing a lighter, freer, and more brilliant tone – all characteristics of Baroque music.
8. Don't play at full volume. Baroque instruments were naturally softer, but they were also typically played at less than full volume. This meant that dynamics could be used to expressively highlight important notes or phrases.
9. Experiment with your bow hold. You can hold it higher up on the stick. This will shorten the bow, make it lighter, and move the balance point closer to your hand. All of which make the bow more Baroque-like in feel. However, you can also hold the bow at the balance point BUT with the frog in the air as if it were the tip (in other words, backwards). This will give you a sense of the clear articulation that Baroque bows have.

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10. Keep your arms as free as possible. Try not to hold them up. Let the weight of your whole right arm guide your down-bows.
11. Violin technique was supposed to mimic the voice, so sing the melody.
12. Experiment with lower holds. Begin by removing the chinrest and holding the violin on the shoulder without using the chin. Also try the low chest hold. This will probably be difficult at first, so stick with it.
13. Remember that whatever you do, technique is a tool that should services whatever emotional or rhetorical ideas and gestures you want to convey.

David Greenberg, a Baroque violinist, was also kind enough to share some information on how he approaches Baroque music:

My approach for effective rhetorical playing is a 3-tiered operation:

1. *Really feel an emotion, gesture, or character in the arriving musical moment,*
2. *Allow the body to physically express that emotion through an appropriate and effective physical gesture or movement; and*
3. *Take care of any technical issues that might get in the way of the effective communication of this point in the story. This includes regular musical hygiene (scales/exercises) and specific issues like difficult moments of intonation, shifting, bowing, tonal effects, or other technical challenges.*

Greenberg's approach encourages the performer to first think about emotion and affect and then about how this can be conveyed through technique. Furthermore, because it de-emphasizes practicing specific or planned phrasing, the music feels more free and spontaneous. Greenberg also highlighted the fact that this approach could be applied to any instrument or type of music, making it great for the modern violinist tackling Baroque music (Greenberg, 2013).

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CONCERTO I.*

Violino concertato.
Violino I.
Violino II.
Viola.
Continuo.

7

14

22

Solo

piano

piano

piano

* Vergleiche Band 17, Seite 199.

4 39

Musical score for measures 39-35. The score is in 4/4 time and consists of four staves. The right hand (treble clef) plays a continuous sixteenth-note pattern. The left hand (bass clef) plays a steady eighth-note accompaniment. Dynamic markings include *(piano)* and *piano*.

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Musical score for measures 36-42. The score is in 4/4 time and consists of four staves. The right hand (treble clef) continues with a sixteenth-note pattern. The left hand (bass clef) continues with an eighth-note accompaniment. Dynamic markings include *forte*.

43

Musical score for measures 43-49. The score is in 4/4 time and consists of four staves. The right hand (treble clef) plays a sixteenth-note pattern with some slurs. The left hand (bass clef) plays a steady eighth-note accompaniment. Dynamic markings include *piano*.

50

Musical score for measures 50-56. The score is in 4/4 time and consists of four staves. The right hand (treble clef) plays a sixteenth-note pattern. The left hand (bass clef) plays a steady eighth-note accompaniment. Dynamic markings include *forte*.

57

Musical score for measures 57-63. The score is written for four staves: two treble clefs (right hand) and two bass clefs (left hand). The music features complex rhythmic patterns, including sixteenth and thirty-second notes, and various articulations such as slurs and accents.

64

Musical score for measures 64-70. The notation continues with intricate rhythmic figures and dynamic markings. The right hand part shows a dense texture of sixteenth notes, while the left hand provides a steady accompaniment.

71

Musical score for measures 71-78. This section includes trills (tr) and dynamic markings. The music is characterized by rapid sixteenth-note passages in the right hand and more rhythmic accompaniment in the left hand.

79

Musical score for measures 79-86. This section features dynamic markings of *piano* and *forte*. The right hand part includes trills (tr) and complex rhythmic patterns. The left hand continues with a consistent accompaniment.

87

Musical score for measures 87-93. The system consists of four staves. The first staff (treble clef) features a complex, rhythmic melody with many sixteenth and thirty-second notes. The second and third staves (treble and bass clefs) provide harmonic accompaniment with longer note values. The fourth staff (bass clef) has a simpler bass line. The word "piano" is written in the second and third staves.

94

Musical score for measures 94-100. The system consists of four staves. The first staff continues the complex, rhythmic melody from the previous system. The second and third staves continue the harmonic accompaniment. The fourth staff continues the bass line. The word "piano" is written in the second and third staves.

101

Musical score for measures 101-107. The system consists of four staves. The first staff features a complex, rhythmic melody. The second and third staves provide harmonic accompaniment. The fourth staff has a bass line. The word "forte" is written in the first, second, and third staves, and "piano" is written in the second and third staves.

108

Musical score for measures 108-114. The system consists of four staves. The first staff features a complex, rhythmic melody. The second and third staves provide harmonic accompaniment. The fourth staff has a bass line. The word "piano" is written in the first and fourth staves, and "forte" is written in the second, third, and fourth staves.

Musical score for measures 115-121. The score is written for four staves: Treble, Violin, Viola, and Bass. The key signature has one sharp (F#). The tempo is marked *piano*. The music features a complex texture with rapid sixteenth-note passages in the Treble and Bass staves, and more melodic lines in the Violin and Viola staves.

Musical score for measures 122-128. The score is written for four staves: Treble, Violin, Viola, and Bass. The key signature has one sharp (F#). The tempo is marked *forte* in measures 122-127 and *piano* in measures 128-131. The music features a complex texture with rapid sixteenth-note passages in the Treble and Bass staves, and more melodic lines in the Violin and Viola staves.

Musical score for measures 129-135. The score is written for four staves: Treble, Violin, Viola, and Bass. The key signature has one sharp (F#). The tempo is marked *forte*. The music features a complex texture with rapid sixteenth-note passages in the Treble and Bass staves, and more melodic lines in the Violin and Viola staves.

Musical score for measures 136-142. The score is written for four staves: Treble, Violin, Viola, and Bass. The key signature has one sharp (F#). The tempo is marked *forte*. The music features a complex texture with rapid sixteenth-note passages in the Treble and Bass staves, and more melodic lines in the Violin and Viola staves.

Musical score for measures 142-149. The score is written for four staves: two treble clefs (right hand) and two bass clefs (left hand). The music features a complex rhythmic pattern with many sixteenth and thirty-second notes, often beamed together. The key signature has one sharp (F#).

Musical score for measures 150-156. The notation continues with intricate rhythmic patterns and melodic lines across the four staves. The key signature remains one sharp.

Musical score for measures 157-163. The music becomes more dense with rapid sixteenth-note passages. A *piano* dynamic marking is present at the bottom of the system. The key signature is one sharp.

Musical score for measures 164-170. The piece concludes with a *forte* dynamic marking. The key signature changes to two sharps (F# and C#). The score ends with a double bar line and repeat dots.