AN EXAMINATION OF THE KEYBOARD TECHNIQUE OF BACH, HAYDN, CHOPIN, SCRIBIN AND PROKOFIEV

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ABSTRACT

In this research paper, I will explore the keyboard technique of each composer presented in my recital: J.S. Bach, Franz Joseph Haydn, Frederic Chopin, Alexander Scriabin and Sergei Prokofiev. I hope to elucidate the physical approach used by each composer, and show in turn how that same approach influenced the music of each composer by analyzing the pieces performed in my recital. To understand the distinct technique of the composers, it is important to know some context. The instrument each composer wrote for necessarily influenced their technique and resulting composition. However, the instrument cannot explain every facet of technique, and it becomes necessary to understand the underlying aesthetics of technique.

Moving chronologically from Bach to Prokofiev, a general trend of expansion in the use of the hand and arm will be seen throughout. Keyboards became louder and heavier in touch and the hand faced greater reaches in every generation. The technique of Bach and Haydn was largely focused on compact and relaxed hands with distinct finger movements, while Scriabin and Prokofiev at the other end require sweeping gestures that occupy the entire arm. However, it would be too easy to present this progression as a story that technique is only getting better and better, implying that the older composers were inferior to the later. That is simply false. Instead, extended study of each composer shows that many technical principles are universal. The baroque keyboardists were likely playing with more weight than popularly imagined and one cannot play Scriabin with mittens on the hands.
Bach: *Wohltemperierte Clavier Book I*, Prelude and Fugue in B-flat minor, BWV 867, 1722

The keyboard technique of Johann Sebastian Bach (1685-1750) was fundamentally different from modern piano technique, especially in matters of physical approach to the keys, articulation and fingering. Ultimately, his technique was very well-suited to the music he composed, a repertoire abundant in rich counterpoint but also brilliant passagework. Perhaps the largest factor in shaping Bach’s technique lay in the instruments he was playing. The harpsichord, clavichord and organ bare only a resemblance to the piano. Their actions are very light compared to a modern piano, but more importantly, the interaction of the sound-producing mechanism with the key depression is different, affecting the physical approach of the performer. The harpsichord and clavichord were most likely the instruments used to perform the Well-Tempered Clavier.

The harpsichord’s sound is produced via a plectrum which is placed under the strings. As the corresponding key is depressed, the plectrum rises until it is against the string. It is at this precise moment that the finger of the performer meets resistance. This means there is always a minimum force required to send the quill past the string. Further resistance can arise if the harpsichord is set to play two strings. Irregularities from key to key may create greater resistance as well. Troeger writes in *Technique and Interpretation on the Harpsichord and Clavichord* that “however light the action and the player’s touch, a good follow through past the pluck to the bottom of the key descent is necessary at all times.”\(^1\) Conversely, one should never play too heavily, which will create undesired percussive noise from the key hitting wood and jangles from inside the mechanism. Troeger also warns against “unwarranted associations of touch and tone;”\(^2\) the player’s key stroke should remain at a consistent strength, as lighter or heavier playing will only hamper the flow of music from the harpsichord.

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\(^1\) Richard Troeger, *Technique and Interpretation on the Harpsichord and Clavichord* (Bloomington, Indianapolis: Indiana University Press, 1987), 23
\(^2\) Ibid, 24
general physical approach to the key stroke should come almost exclusively from finger action. The role of the rest of the arm is to remain relaxed and to position the hand as it travels over the keyboard.

The clavichord’s sound-producing mechanism differs from both that of the harpsichord and the piano. Key depression directly controls a tangent, causing it to strike a string. The strike resembles a piano’s hammer, but there is no rebound, so that the tangent remains in contact with the string as long as the key is depressed. This causes the string to vibrate on either side of the tangent, creating a relatively weak sound. Because the tangent travels in direct proportion to the force applied to the key, a dynamic range is possible, albeit one ranging from extreme pianissimos to maybe mezzo forte. The enduring contact of the tangent is important in allowing the player to influence the tone past the moment of attack. The pitch can be slightly altered via a wiggling of the key, called bebung in German. This causes the tangent to press on the string and thus altering the tension and pitch. The clavichord action is very light, and unlike the harpsichord, there is no sudden moment of resistance. It would be nearly impossible for the player to press a key so lightly that sound is not produced; rather, the player must avoid over playing any key. If a key is depressed too strongly, the tangent and string ricochet, creating an unpleasant buzzing. Troeger writes that “the effect of a tangent ricocheting from its strings (‘chucking’) is feeble and rasping, similar in a general way to harp strings buzzing against the player’s fingers or to lute or guitar strings too weakly stopped on the frets.”3 The touch for clavichord should always keep the fingers in contact with the keys, so that they are pressed rather than being struck from the air. Because the quality of sound is dependent on continued pressure from the player, the touch differs from the harpsichord, allowing for well-regulated transfer of weight from the wrist to the fingertip.

3 Ibid, 27
Bach’s technique was perfectly crafted to these instruments. On a surface level, much of Bach’s playing was characterized by a lack of excess movement. This was true of his hands and the rest of his body. Johann Forkel (1749-1818) recounts that “Seb. Bach is said to have played with so easy and small a motion of the fingers that it was hardly perceptible. Still less did the other parts of his body take any share in his play.”

Faulkner notes that “Bach’s preference for the clavichord... for the formation of technique... is also indicative of a quiet technique; it is extremely difficult to control the tone of this instrument in any other way.”

Carl Philip Emanuel Bach (1714-1788), son of J.S., corroborates this view, writing that “a good clavichordist makes an accomplished harpsichordist, but not the reverse.” The clavichord helped form technique by encouraging a closeness to the keys, both in hand position and carefully controlled weight on the keys.

Bach’s hand position is described by Forkel: “The five fingers are bent so that their tips come into a straight line.” Bach also preferred keyboards with a short key length, making the shift from one manual to another easier, but also enabling many accidentals to be played without excess finger movement to reach them. Faulkner also notes two authentic portraits of Bach that clearly display his right hand. He writes that “the hand appears rather large and broad, and the fingers are quite fleshy and not particularly long.” It is interesting to think that large hands, such as Liszt and Rachmaninoff possessed, were not well-prized by performers of the early keyboards; rather, a compact structure was more useful in achieving agility and grace.

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5 Quentin Faulkner, *J.S. Bach’s Keyboard Technique: A Historical Introduction* (Saint Louis: Concordia Publishing House, 1984), 17


7 Forkel, quoted in *The Bach Reader*, 307

8 Faulkner, *J.S. Bach’s Keyboard Technique*, 18

9 Ibid, 18
Related to the position of the hand was the means of keystroke from each finger. Multiple sources describe a stroke in which the finger depresses the key, and instead of releasing by an upward motion, the fingertip is instead drawn in toward the palm so that the fingertip slides off of the key.\footnote{Ibid, 18-19} This motion describes an effective coordination of stimulus and relaxation for the muscles, but also reveals aspects of articulation. Forkel states that “in the transition from one key to another[using this keystroke]... the two tones are neither disjoined from each other nor blended together.”\footnote{Forkel, quoted in The Bach Reader, 308} The normal articulation did not aim for legato. The norm was somewhere in between legato and staccato playing. Experimentation with this keystroke reveals that it encourages a deeper weight into the keys, giving solidity to the performance. This keystroke ensures that the harpsichord player aims their finger past the pluck of the string, and the clavichord player maintains a solid contact with each sustained tone.

In terms of fingering, Bach was important to the development of many modern conventions, while still using earlier styles as well. Ralph Kirkpatrick wrote that “Bach can be said to have straddled the transition between ancient and modern fingering.”\footnote{Ralph Kirkpatrick, Interpreting Bach’s Well-Tempered Clavier: A Performer’s Discourse of Method (New Haven, London: Yale University Press, 1984), 22} Fingering before Bach used predominantly the middle three fingers of each hand. This may have been to avoid creating excess tension, as the thumb is apt to do. As a result of avoiding the thumb, finger crossing became common, such as 2 over 3 or 3 over 4, especially in scale figurations. Practically anathema to modern technique, these fingerings were useful for preserving a compact hand position. These finger patterns also helped to regulate fine articulation detail. However, Bach greatly expanded the use of the hand, employing the thumb and little finger as frequently as the rest. In particular, he uses the thumb in its modern role, as a pivot point to move the hand to new positions. Other features of Bach’s fingering include the successive playing of two keys with
the same finger and greater freedom in allowing the thumb and little finger to play accidentals as necessary.\textsuperscript{13}

The Well-Tempered Clavier consists of two books, the first compiled in 1722 and the latter about two decades later. Each book is comprised of twenty-four prelude and fugue pairs which encompass every major and minor key, making for a total of forty-eight. The first pair of each book begins in C major, and alternating minor and major modes, the pairs ascend chromatically, displaying the ability of keyboards to play in any key when properly adjusted from just intonation. The prelude and fugue in B-flat minor no. 22 in the first book is particularly important, being one of the most remote keys on the keyboard. Others had written similar collections, such as Johann Caspar Ferdinand Fischer’s (1656-1746) \textit{Ariadne Musica} published in 1702. This collection did not include certain keys however, including B-flat minor, C-sharp major, E-flat minor, F-sharp major and G-sharp minor. More than just representing new tuning systems, the distant keys were also important to keyboard technique. Greater chromaticism was possible, enlarging the possibilities for figurations and modulations, and the hand had to learn to navigate unusual topography.

The prelude is contrapuntally dense, written mostly in four parts and built off of a three note figure and various permutations thereof. The main technical challenge to the performer lies in appropriate fingering, and articulation of voices that allows for the counterpoint to stand out. Of course, these are interrelated problems. The first two measures, seen in example 1, demonstrate some of the difficulties. There are three distinct musical ideas in these two measures. On the bottom is a repeated B-flat in eighth notes, a kind of basso continuo. In the middle, chords punctuate every first and third beat with eighth note pick-ups on the ands of beats two and four. On the top, a melody in thirds rises by sequence.

\textsuperscript{13} Faulkner, \textit{J.S. Bach’s Keyboard Technique}, 23
Example 1. Bach BWV 867 Prelude in B-flat minor mm. 1-2

The performer must play with such an articulation as to preserve the independence of each part. The bass line, by repeating the same pitch, suggests a more detached articulation. Certainly, a continuous sounding would be impossible without the aid of a damper pedal. A detachment in this bass line helps lend it a weight; the performer can even emphasize the shortness of off-beats to create emphasis on the strong beats. As for the middle part, a smoother connection from the eight notes to the quarter notes helps to off-set it from the bass. Finally, the melody should be connected from the sixteenth notes to the following eighth notes, but then detached from there. This gives an attractive shape to the melody, but also lets it get out of the way of the middle chords.

The other related aspect to articulation is fingering. There are instances which require either finger crossing, or even sliding the same finger from accidental to natural, in the pursuit of maintaining a supported hand position, which in turn encourages good control of articulation. However, there are also passages that require the hand to stretch well outside of the closed position. The RH in m. 5 and mm. 14-15, examples 2 and 3 respectively, shows this stretching.

M. 5 has the RH fifth finger holding a high C, while the other fingers play descending thirds on the first beat. That pattern is then inverted on the next beat. These stretches force even a large hand into unusual positions. M. 14 presents a similar stretch. From beat one, the RH fifth finger holds G-flat while the thumb plays G-flat an octave lower, then playing F and A-flat. A stretch of a ninth was unusual for general Baroque and Classical practice. It is possible that the quarter note does not have to be held for the full value, allowing for the hand to quickly contract down towards the third.

The fugue, in five voices, expounds on the same problems. Finding a consistent articulation for each part is again vital. The subject for this fugue gives clues for determining articulation. The subject consists of a descending fourth on half notes, followed by a quarter rest, and then four quarter notes.

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15 Ibid
16 Ibid, 79
starting up a ninth and descending by step. The first two intervals are very important, being almost the only leaps throughout the fugue. To help bring out the heads of each entry, the performer can slightly detach the first note from the second (the second note is automatically detached by the quarter rest), giving an emphasis to each subject entry. The quarter notes can be played legato.

Much of the secondary material is derived from the second half of the subject, when it isn’t simply a free counterpoint. The writing resembles choral writing, making a sustained legato appropriate. There are places that require shorter notes because of necessary hand lifts, such in m. 62, seen in example 4. The RH, short of performing a very quick finger substitution on the A-natural, must lift to play the following three beats. Instances such as this give clues as to certain slurs throughout the work, but they remain only that, clues. Multiple, reasonable articulations could be realized, and it lies outside the scope of this paper to confirm only one interpretation.

Example 4. Bach BWV 867 Fugue m. 62

Perhaps the greatest difficulty in accessing the technical challenges of the fugue is that it resists the capabilities of keyboards. Kirkpatrick cites Nicolo Pasquali (1717/18-1757) who discusses the unnaturalness of fugue on the keyboard. He wrote that “many passages in Fugues and other Compositions in three or four parts, cannot be played on the harpsichord, neither as they are written,
nor with a good Tone.”\textsuperscript{18} Kirkpatrick concedes, writing that “viewed from a certain aspect, the keyboard fugue is one of the greatest monstrosities that has ever been invented. It is indeed, as he [Pasquali] says, a challenge to the imagination. He perhaps forgets that the imagination delights in such challenges.”\textsuperscript{19} Bach’s keyboard writing often presents the performer an imaginative challenge, more than a physical one.

\textit{Haydn: Keyboard Sonata in F major, Hob. XVI: 23, 1773}

Of the composers presented in this research paper, Franz Joseph Haydn (1732-1809) possessed a more modest command of keyboard technique. While he must have been capable at the keyboard, the few sources describing his playing place him in the context of playing small parts in orchestra or as accompanist to various singers.\textsuperscript{20} The study of Haydn’s keyboard writing still gives an insight to how keyboard technique changed from the Baroque. The textures largely abandon dense, vertical arrangements, to figurations geared toward horizontal exploration. Further, the overall musical style showed signs of the new fortepiano. The invention of the fortepiano around 1700 was highly fortuitous for the evolution of keyboard music. Classical period music came more and more to be defined by contrasts of texture and dynamic, both in larger sections and in discrete musical gestures such as the two-note slur. This emphasis on contrast created a music that the fortepiano\textsuperscript{21} was better able to realize than the harpsichord and clavichord. However, the piano did not immediately displace the Baroque keyboards. I will briefly trace the piano from its invention to its general acceptance in the 1770s. The early models were weaker in tone than the harpsichord, and the key mechanism had many problems. Various piano makers eventually solved the problems of the piano, so that the piano came to combine

\textsuperscript{18} Kirkpatrick, \textit{Interpreting Bach’s Well-Tempered Clavier}, 39
\textsuperscript{19} Ibid, 40
\textsuperscript{21} I will replace fortepiano with piano from here on out.
the dynamic expressivity of the clavichord with a power that equaled and soon outstripped the harpsichord. This later piano allowed for new styles of keyboard writing, and also opened up larger performing venues to the piano.

Bartolomeo Cristofori (1655-1731) was the original inventor of the piano. Scipione Maffei (1675-1755) labeled it the *gravicembalo col piano e forte*, or harpsichord with soft and loud, from which the designation of fortepiano originated, and ultimately shortened in most languages to simply piano. What made the piano different from keyboards before it was the mechanism, which had hammers fly up to strike the strings. The basic idea seems simple, but pursuing it raises problems. For one, the hammer must set the string to vibrating, but then must also leave the string so the vibration is not immediately dampened. The clavichord model, in which the fully depressed key always places the activating force in contact with the string would not work for a piano. Instead, the piano action only moves the hammer so far; what is needed instead is enough force for the hammer to be sent flying towards the string, and then the hammer is free to fall after the strike. The other problem is damping. The key depression is also in control of a damper for the string, so that it is raised off the string while the key is held, and falls again upon release of the key. This action of the piano allowed for dynamic gradation like the clavichord, but added much more strength. The clavichord’s ‘chucking’ effect was also eliminated, although the piano could still be put under too much duress.

There were still problems with the early piano, and it fell to others to improve the ground design. Gottfried Silbermann (1683-1753) became familiar with Cristofori’s design, and made improvements beginning in the late 1720s. Rosenblum states that piano building spread to London in the 1760s, due to “a group of immigrants who left their native Saxony as a result of the Seven Years’ War. Several... are thought to have been apprentices of Silbermann.”

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building were established in Vienna, Austria and in Augsburg, South Germany. Finally, in the 1770s, the piano became the primary keyboard instrument, although it still coexisted with the harpsichord and clavichord.

Haydn's keyboard music spans this change of keyboard. According to Maurice Hinson, Haydn's keyboard works up to 1766 were conceived on harpsichord or clavichord. After this date, Hinson writes that “around 1767 Haydn’s sonatas take on a larger scale and definitely break with the harpsichord idiom. He began to view his sonatas not primarily as teaching vehicles but as artistic forms to be developed on their own terms.” Hinson does not specify that the idiom break confirms the influence of the piano, but it can be concluded that Haydn wrote compositional details that fall outside of the harpsichord’s abilities. These details included dynamics, articulations and even larger compositional structure. While it cannot be proven that Haydn was actively concerned with the piano or composing from one before 1788, the keyboard writing from 1767 was developing a style that the piano realizes best. Christa Landon, editor of the Urtext edition of the Haydn sonatas writes that “the entire question of what instrument to use seems to the editor to be primarily of historical interest and one whose importance is generally exaggerated... When there is any doubt about which instrument is advisable for works not explicitly composed for the Hammerklavier, the editor would recommend performance on a fortepiano or clavichord (or, of course, a modern piano).”

This new style utilized greater contrasts, both between movements and also within them. More and more, sonata form was being built from contrasts. This emphasis on contrast, both in small and large scales, was different from general Baroque practice, in which a single sentiment is explored within a movement. Harpsichords can only make timbral changes with large enough pause to do so. But as

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23 Ibid, 32
25 Ibid, 5
26 Rosenblum, *Performance Practices*, 20
music shifted away from Baroque aesthetics, contrast became more important, and harpsichords faced more and more difficulty with effectively representing mood contrasts with appropriate timbral change. Dynamic flexibility became vital to realizing not just large-scale structure, but also the smallest details. Articulation presents one of the most common features of Classic period music in the form of the two-note slur. These gestures are more prevalent in Classic period music, and the early piano was particularly apt for realizing the strong-weak, short-long effect of the two-note slur.

Besides dynamics, the new musical style was also manifest in the textures and figurations used. Homophony was the norm, with the left hand being relegated simple accompaniments to the right hands’ playing of light melodies over it. Some of this stylistic shift was the result of an expanding middle class, as Loesser writes of this rise in Germany in *Men, Women and Pianos: A Social History*. Towns such as Hamburg, Berlin and Leipzig saw substantial economic growth. The effects of this growth saw the middle class come into positions of bureaucratic power and benefit from expanded leisure time. The leisure of the middle class allowed for families to partake in artistic pursuits, such as music, changing the target audience for composers from wealthy courts and church congregations to a more general public, one that was thirsty to experience the music as performers. The tastes and abilities of the middle class amateur influenced the music composers wrote for them.

Haydn’s piano sonata Hob. XVI: 23 demonstrates these compositional details, and also shows changes of technique. The sonata is in three movements, with the first and last being in F major and the middle one in F minor. Part of a set of six sonatas in Haydn’s first official publication, the manuscript title page reads as “Pour le Clavecin ou Fortepiano.” (for harpsichord or piano) This was a common designation, perhaps as a means to be inclusive towards the buying public that owned many types of keyboards.

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The first movement, a sonata-allegro, is abundant in arpeggio and scale figurations. The first theme (mm. 1-12) has a sparse LH, playing intervals or single notes mostly to flush out the harmonic context of the theme. The RH plays a jaunty melody built of short, graceful gestures in succession. The editor of the Vienna Urtext edition seems to suggest a slurred quality to these gestures by placing staccatisimo marks to the last note of each one. A dynamic shape is implied by each gesture, and an overall phrase structure is also illustrated. The first theme ends with two note slur in both hands closing to a cadence in the tonic. The bridge theme (mm. 12-21) presents a more steady pulse, with the LH supplying a rocking sixteenth note accompaniment. The RH explores contrasting articulations, with staccatisimo sixteenth scales followed by slurred groups. Finally, the key of the dominant is prepared and the bridge cadences in m. 21.

The second theme (mm. 21-33) displays brilliant thirty-second note passage work in the RH, further demonstrating the evolution of fingering from early keyboard music to J.S. Bach and on. The thumb gets a very active role, allowing the hand to traverse multiple octaves. Some of the figures here benefit from small wrist rotation, to ensure an even execution. While Classic keyboard technique largely resembles Baroque technique, such as striving for a quiet hand, many of the trends of Classic period music had players covering more and more of the keyboard through various scales and arpeggios. As the music expanded, expansions in the use of the hand naturally evolved to accommodate the changing music. Though early pianos had a much lighter and shallower action than the modern, these expansions of hand use still evolved naturally; and on a modern piano, larger gestures are required.

The thirty-second notes continue through the closing theme (mm. 33-46), requiring lots of thumb crossing. An interesting articulation marking occurs in the left hand in m. 38. Haydn wrote tenuto for the LH, indicating the notes are to be held for their full value. This indicates a general trend that unmarked notes are to be played with a certain amount of detachment, probably depending on their
respective length. The exposition soon comes to a close as the LH drones a titillating figure of an octave C alternating with a B against the RH cadential eight-note chords. The remainder of the movement naturally uses many of the same musical ideas in various combinations and keys.

The second movement presents a strong contrast to the first. Whereas the outer movements are instrumental in nature, the middle is like an arietta. The melody often flows simply over an arpeggiated accompaniment. However, the accompaniment sometimes halts on a single note or chord, while the melody dramatically expands. These moments are evocative of cadenzas in opera, where the singer improvises, seeming to momentarily freeze the phrase progression. Because of this vocal style, this movement has the most to benefit from being performed on the piano.

The articulation of this movement corresponds to a singing style. The general articulation assumes a ‘heavier’ or more legato playing. This is confirmed by the staccatisimo marks found in m. 14, indicating a detachment that is the exception in this movement. The figurations of this movement encompass wide stretches of the keyboard. In mm. 9-12, the RH works from a D-flat to an F3 and then back up to A-flat5. A pliable wrist goes a long way towards a graceful execution of these expansive figures that take up at least half of the older keyboards range.

The third movement resumes the lightness of the first movement. Articulation plays a more prominent role in this movement. The general articulation is detached, but there are many indicated slurs, giving a dance-like motion to many phrases. The slurs are even structural, defining the cadence of the closing theme. Mm. 48-52 and the analogous measurers in the recapitulation, mm. 143-147, present four two-note slur cadences in a row, as the LH iterates the tonic between the slurs. For the exposition, this inconclusive ending prepares the listener for the repeat and also the continuation into the development. However, this same ending creates a delightful effect for concluding the sonata, as
the ear expects to hear more, and the sonata is only able to end as the listener perceives that nothing more is coming.

Chopin: Ballade no. 2 in F major, Op. 38, 1839

Frederic Chopin (1810-1849) helped form a new style of pianism. Having only limited training from Wojciech Żywny (1756-1842), a violinist, and later from Polish composer Józef Elsner (1769-1854) at the Warsaw Conservatory, Chopin displayed remarkable facility as a pianist and composer from an early age. Gerig remarks that Chopin’s technique was inextricably bound to his composition.30 If his technique had been lesser, or of a different nature, his composition would have been altered accordingly.

Chopin’s compositions clearly demonstrate the advancements of technique he achieved. The special facets of this technique include original figurations, exceptional dynamic shading, and ingenious fingerings. These technical details are enforced by a new, physical approach to the keyboard, one in which the hand is not always quiet and all the members of the arm participate in tone production. This new approach was vital to piano playing, and one that can partly be understood through the developments that both the piano and musical taste went through from the time of Haydn to Chopin.

Rosenblum cites Malcolm Bilson’s measurements of the early pianos: “A Viennese piano of Mozart’s time had a key dip of ‘about 3 millimeters and it takes roughly 10-15 grams to get it down,’ whereas our modern piano has a key dip of ‘about 9 millimeters and it takes roughly 55 grams... to push it down.”31 Marcel Lapointe, describing a Pleyel piano such as Chopin played on has a key dip of 8

30 Reginald R. Gerig, Famous Pianists and Their Technique (Bloomington, Indianapolis: Indiana University Press, 2007), 160
31 Rosenblum, Performance Practices, 32
millimeters, and presumably takes somewhere between the 15 and 55 grams to push down each key.\textsuperscript{32}

The heavier key action was directly influenced by each component part of the piano’s construction becoming heavier or bearing more tension. Piano makers were expanding the pitch range, and there was a general want to increase the dynamic potential upward. As well, the standard A increased by fourteen vibrations per second.\textsuperscript{33} Loesser describes that “more tone required heavier hammer heads hitting harder on the strings; strings then had to be thicker and heavier to take the blows; but these then, in turn, required tighter stretching.”\textsuperscript{34} The wooden frames and support of the early piano soon became insufficient under this duress. The use of iron as a part of the supporting structures was the solution.

The piano directly inspired Chopin’s technique, both physically and aurally. Chopin’s espousal of a sensitive and active arm technique was a natural response to a weightier instrument, but also a means for achieving a greatly diversified sound spectrum. His main goal in seeking a variety of sounds was to emulate the vocal style of opera, and in particular, the \textit{bel canto} singing. Eigeldinger writes that “it was on the singing styles of Rubini, of Pasta, that Chopin based his own style of \textit{Pianistic declamation}.”\textsuperscript{35} To achieve this, a huge variety and intermingling of dynamics and articulation was required. This was in many ways contrary to many teachings, which called for equalization of sound from all the fingers. Instead, Chopin utilized the physiology of the arm, keeping the wrist and elbow pliable and utilizing the peculiarities of each finger.

I will explore specific facets of Chopin’s technique through the second Ballade Op. 38.

Eigeldinger relates that early lessons with Chopin focused on “a maximum of suppleness... and a

\textsuperscript{33} Loesser, \textit{Men, Women and Pianos}, 301
\textsuperscript{34} Ibid, 302
The cultivation of sensitivity of hearing and touch.\(^{36}\) The first, suppleness, involves the free use of the arm and ingenious fingerings to achieve many varied figurations and effects. This suppleness allowed the performer to add new movements to the pianists’ technique. Eigeldinger, speaking of fingering, says that “It was precisely by breaking many a Classical rule that Chopin opened new horizons with his revolutionary way of fingering.”\(^{37}\) Sensitivity of hearing gave a goal to achieve in sound, and sensitivity of touch was the means to achieve that goal. This goal was a varied and tasteful range of dynamics and articulations. Dynamics are a necessity for Chopin for conveying the structure, not simply an option as they might in an early Haydn sonata. Dynamics become crucial to the presentation of musical content. Sound quality is now as important to thematic material as the harmonic and melodic content itself. Finally, all of the above is unified by the pedal. Many of the figurations are simply impossible without the pedal. Chopin uses it to capture large sonorities across the keyboard, and enable fingering and phrasing that cannot otherwise be connected by the hand.

The very opening of the Ballade demonstrates the fundamentals of Chopin’s teachings. The ballade begins with an andantino of forty-six bars, featuring a constant, rocking quarter and eighth note rhythm. The first two bars act as a pick up, with seven repeated octave C’s, before blooming into a four-part texture. This opening demonstrates how Chopin was concerned with tonal variety, and how to let the piano emulate the shapes of vocal sounds. The problem is achieving a dynamic shape that avoids any bumps, as the piano is apt to produce under a careless ear. Simply playing each note according to its metrical placement is likely to produce unwanted accents, due to the effects of the piano’s dying tone. Instead, a viable option is to start from the softest possible sound, and crescendo gradually towards the first chord. The pianist must then create seven different sounds, a real challenge to ones ears and sense of touch.

\(^{36}\) Ibid, 17
\(^{37}\) Ibid, 19
With the first chord, the andantino floats along in a chorale texture. Sensitivity of touch again is a necessity. Another facet of Chopin’s technique is seen in the fingering. Many of the chord changes require finger substitutions, and often many in a row. A student of Chopin’s said “he changed fingers upon a key as often as an organ-player.” The wrist must always be supple, allowing for distant chords to be accessible in a legato manner. The andantino ends with a wide-spread F major chord, with A on the top. The A repeats six times, another moment to elicit the pianist’s sensitivity.

The following *Presto Con Fuoco* section (mm. 47-82) demonstrates the more physical extensions of Chopin’s technique. The figurations here sweep across more than half the keyboard at a time. The RH begins this section with a five-note figure that repeats itself down an octave two times. The figure itself requires only a moderate stretch, with the fifth and fourth fingers starting on A and F respectively, and the third and second fingers and thumb playing E, C and A. The main difficulty lies in making the shift to the next octave. The pianist must quickly play the A with the thumb and then pivot the fifth finger to where the thumb just was, in the space of a sixteenth note. This arpeggio figuration requires the wrist to be constantly in motion, to help span the five note pattern and to help the fifth and fourth fingers to vault over the thumb to reinstate the pattern an octave lower. This finger sequence with the fifth crossing over the thumb was one of Chopin’s innovations in fingering. Next, at m. 48, the RH elaborates a diminished chord, rocking from the thumb to the second and fifth fingers. Each beat starts an inversion higher, so that a left-to-right motion of the wrist and elbow is used on each beat. It is interesting note that the two figures described, and many more, use immediate repetitions of discrete physical gestures.

Rhythmic interplay is also created by these repetitious gestures. In m. 47 the LH confirms a 6/8 meter with three eighth notes and a dotted quarter, but the RH plays across the rhythmic grain. By

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38 Ibid, 48
creating a gesture that spans four sixteenth notes, the RH has a natural tendency to play three distinct beats, creating a two-against-three feeling between the hands. A similar feeling follows in m. 48, where the LH plays groups of three descending sixteenths, again creating accents counter to the RH which plays groups of two sixteenths. The genius of these figures is that they create complex rhythms even if the performer is unaware of it.

This same section also demonstrates the newer freedom of the LH, both in accompaniment and melody. The primary melodic material occurs in the LH, while the RH is merely a chordal effect above it. Such an inversion of musical texture was uncommon in previous centuries, and the majority of musical training would have emphasized accompaniment and figured bass for the LH, and passage work for the RH. The LH takes on rapid and complex accompaniments in mm. 63-79. The figurations are mostly scales with a bass punctuation on each down beat.

Another moment of interest in this section occurs in mm. 79-80. The RH plays a scale fragment with the first through fifth fingers, replicating a pattern that Chopin’s students play in the very beginning lessons. The special aspect of this pattern is that the first and fifth fingers play on white keys, while the others play on the black keys. The first scales that Chopin taught use this pattern, such as B major, because the physiology of the hand naturally matches it, with the short fingers playing on the nearer white keys and the longer fingers comfortably reaching the black keys. It was rather C major that was taught last, as being the hardest scale to play evenly.

The coda of the Ballade, mm. 169-204, challenges the endurance of the performer’s RH with an almost unbroken stream of double sixteenth notes. The majority of the intervals are immediately repeated, compounding the physical strain. These double notes are simply unplayable with an incorrect physical approach. Trying to play each sixteenth with a single gesture is impossible; the hand will seize up, slowing the tempo and causing undue strain to the hand and arm. Instead, the performer must find
gestures that group two or more sixteenths together. The most successful gestures combine the interval changes rather than the repeated intervals. As such, one could implement an unwritten articulation into the score, so that the eighth note beats are slurred. Finding points of rest for the hand is also crucial. The phrasing of the right hand does give moments as long as a sixteenth to release tension in the hand, allowing for a fresh approach to each group of notes.

From m. 185, the physiological use of the RH changes. The second and third, or fourth fingers play an interval, followed by an octave with the thumb and fifth finger. This figuration gives the performer a rest, by allowing two distinct muscle groups to interchange for each other. The wrist is able to participate with an up-down motion between the interval and the octave respectively. This figuration continues through m. 188. From m. 189, the figuration is altered. In mm. 189-190 and 193-194 the second finger and thumb play a descending scale, with the fourth and fifth fingers playing a chord with the second finger. Again, the performer has recourse to two distinct muscle groups in alteration. The second finger moves not separately, but rather as a member with the fourth and fifth fingers, and the thumb moves separately. The wrist moves up on the chords and down towards the thumb. Mm. 191-192 and 195-196 again draw on the same gestures of the hand, but describe instead broken chords. With variations on a basic physiological arrangement, Chopin achieved three separate figurations, including broken chords, scales and arpeggios.

Chopin’s technique was the result of a discerning ear coupled with a highly cultivated coordination of all parts of the arm and hand. Seeking first a musical goal, the body served him in that search, and in so doing, Chopin created a multitude of new effects and textures. To this day, if one can play his etudes, one is well prepared to tackle almost any repertoire.
Scriabin: Etudes Op. 8, nos. 1 and 12, 1894

The etude began its life as short study pieces created as the base technical studies of a student. The piano was the primary vehicle for the genre, as the most popular instrument for middle class families. Many of the first examples of studies or exercises were produced in the late eighteenth and early nineteenth centuries, with the first examples being written by composers and pedagogues such as Muzio Clementi (1752-1832), Johann Cramer (1771-1858) Carl Czerny (1791-1857) and Ignaz Moscheles (1794-1870). These early examples were designed to accompany texts and methodologies of piano technique, and so the technique is revealing of the composers style of playing. The early etudes were never really meant for public performance. Eventually, however, composers of the early nineteenth century developed etudes of a slightly different style. These etudes meld musical content with that of technical concern, creating the concert etude. Chopin was among the first pianists to create a repertoire of concert etudes. His unique and virtuosic technique is apparent through the etudes, and only a few handfuls of people could play them in the years after their publication. Alexander Scriabin (1872-1915) contributed to the etude repertoire with his Op. 8. While a composer’s technique is apparent in all their writing, these etudes allow us to more easily isolate special features of Scriabin’s technique.

Scriabin was a composer-pianist who modeled himself in his early years after Chopin. His music later took on a unique tonal idiom based on fourths and the ‘mystic chord’. His music is often characterized by multiple rhythmic textures, thick chords, and remote key signatures. The first two traits together. To reach so much of the keyboard, the arms necessarily grew more active.

Scriabin’s early piano training was with Nikolai Zverev (1832-1893), a strict disciplinarian who was also currently teaching Sergei Rachmaninoff (1873-1943). Other famous Zverev pupils included Konstantin Igumnov (1873-1948), Alexander Siloti (1863-1945) and Alexander Goldenweiser (1875-
Scriabin later began his studies at the Moscow Conservatory with Vasily Safonov (1852-1918). The influence of Safonov can be seen in this quote by Mark Meichek describing Scriabin’s posture at the keyboard: “As a pianist he was a typical product of the Safonov school, with a lifted wrist, freely positioned, only slightly curved fingers, a light but very quick and exact stroke of the lifted finger;” and about pedaling: “His use of the pedal [was] entirely unprecedented... extremely precise and original, the result being a sort of special, transparent sonority of the instrument... Scriabin actually mixed harmonies, creating by the use of the pedal unusual combinations of sounds.”

The wrist position reveals that Scriabin’s seat at the piano was higher than those described previously. Also, the ‘only slightly curved fingers’ seems to describe that the fingers were not held curved more than a natural, relaxed hand position would place them. From this position, one can extend the fingers flat or draw them into a greater curve, depending on the current need. Scriabin’s music often explores obscure keys, requiring a flat-fingered approach to help navigate the textures. Also, much of Scriabin’s writing covers extensive portions of the keyboard, and requires multiple, rapid movements of the arm to simply reach the next note. Flat fingers can help to secure a purchase on each note, by providing a larger finger surface on the key.

The pedaling described in the quote reveals a few things. He pedaled liberally, as a means of accruing large sonorities across the keyboard. Along with capturing these same sonorities, many tones that would traditionally be considered clashing are captured in the pedal, producing the “unusual combinations of sounds.” His pedaling was used to maximize the sustaining ability of the piano, and also increase nuances of dynamic shading in the different lines, through flutter-pedaling and similar techniques. This preponderance for large swaths of captured sound reveals aspects of Scriabin’s

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compositional mind. He said that “melody is unfurled harmony, and harmony is furled melody.” While an unusual position that shifts the temporal succession of events in music, it wasn’t entirely unheard of. Arnold Schönberg (1874-1951) posits similar ideas in his Harmonielehre. For Schönberg, this led to atonality, for Scriabin, it led to his own unique tonal system and the ‘mystic’ chord.

The pedal also influenced the hands approach. Leikin observes that “[h]e[Scriabin] disliked lingering on the keys; he preferred to continue the sound on the pedal while his hands hovered above the keyboard.” Leikin quotes Leonid Pasternak’s (1862-1945) account of Scriabin’s playing, in which Scriabin played “Not by falling on the keys... but in the opposite way, by pulling away from the keys and lightly soaring above them.” This way of playing gave Scriabin a way of playing a note, chord or gesture and immediately relaxing the arm in preparation for the next notes. This promoted an elastic wrist and arm, helping to create organic motion. This freedom of motion through the air is influenced by another aspect of Scriabin’s technique.

In the year before his final piano examination at conservatory, Scriabin’s right hand suffered an injury that prevented its use. While he did regain its use through perseverance and careful exercises, he complained throughout his life about pain in his right hand. Leikin notes that his writing for the right hand reflects the injury by preferring “Abbreviated three-note chords... instead of full four- or five-note chords in the RH part.” While his right hand was disabled, he continued to practice with the left hand which greatly expanded its technique. Scriabin contributed a prelude and nocturne for the left hand alone, and many of his works put comparable demands on each hand.

40 ibid
41 Anatole Leikin, The Performing Style of Alexander Scriabin (Santa Cruz: Ashgate, 2011), 37
42 ibid
43 Ibid, 25
44 ibid
The first and last etudes of Op. 8 will demonstrate many of the technical details observed above. Op. 8 no. 1 immediately shows the flexibility of the LH. The LH rambles out quarter notes in the bass, often in large intervals that even the large-of-hand must break. Of the fifty simultaneous intervals in the left hand, twenty-seven of them range from sevenths to thirteenths. The most common interval is that of the twelfth; Scriabin’s reach was reported to have been only a ninth. This kind of writing absolutely defies a finger-centric technique. Instead, to play these passages that are outside the furthest reach of the hand, the performer must rely on an almost constant movement of the arm. Scriabin’s propensity for leaving notes quickly to move through the air again would be appropriate for this passage. The RH part is a triplet with a repeated interval followed by a single upper note. The reach required for each triplet is at the edge of what the hand can reach, encouraging the performer to employ a constant left-to-right motion with the wrist. This wrist motion promotes release of tension by not overextending the hand for 16 measures.

At m. 16, the middle section starts. The triplet figuration is alternated between the LH and RH every two measures. The RH and LH play melodic lines when the other has the triplet figure. After brief development of the new melody a cadence returns the music to the opening A section. At m. 38, the harmonic direction takes a detour, beginning a crescendo from piano to forte and louder that ends in a sforzando, tonic cadence. The rhythm of the LH in mm. 39-42 changes from quarters to eighths, creating a compound melody. With each of the melodies largely written in octaves, the LH is forced to shift more than an octave to reach each note of the melody. There is a direct parallel between the difficulty and the emotional effect of the passage. Scriabin wrote that “Any passage, any melodic gesture expresses a certain will. An intensely difficult passage or gesture better conveys the intensity of will.” After the cadence, the loudest part of the etude, a brief coda (mm. 43-52) ensues, utilizing the technique established in the opening measures.

Ibid, 50
Etude Op. 8 no. 12 is a study in arm weight, with both hands playing material that is only partially achievable by the fingers alone. The LH, for example, begins with a triplet figuration that encompasses anywhere from an eleventh to a seventeenth in any given beat. While fingering is still essential in condensing the required jumps to a minimum, the hand still needs to be positioned over each note via the wrist and elbow. The RH, playing the melody throughout, is entirely in octaves except for eight notes near the end, simply because the overlap of melody and accompaniment restricts octaves. The constant octaves create a problem of endurance, because the hand must remain open for almost two minutes, and second, the shaping of the melody cannot be helped with finger choices, but almost entirely by varying the arm weight applied to each octave.

Pedaling is also a topic of study for the etude. Without it, of course, the product of both hands would be miserably unconnected. The performer then has to determine how much pedal to apply. Typical and conservative pedaling rules would encourage the change of pedal on every octave and chord change. However, details throughout the score would suggest a much more generous application of pedal throughout. For one, the bass octaves are a separate musical line from the triplet figures, needing to be held by pedal until each change. Another aspect is that the speed of the RH octaves effectively prohibits the foot from achieving clean pedal changes (as many as four in barely over half a second). Standard pedaling is simply not an option. Instead, the solution is to apply longer holds and flutter pedal in combination.

Flutter pedal is partially a solution, because different parts of the keyboard respond differently to the pedal. Generally, the higher the notes damp more quickly after a sudden pedal change. Conversely, the lower notes are more likely to remain after a similarly quick pedal change. This difference between registers works very well in this piece, because the left hand part requires,
generally, more sustain than the right hand. As the performer flutters, each hand receives different proportions of sustain.

Remembering that Scriabin was known to apply pedal generously and in unique arrangements, we must conclude that his compositions were influenced by his pedaling habits. This etude is no exception. The harmonic and melodic components are well built to accommodate more pedal, as demonstrated by the first nine measures. In those nine measures, the LH plays only six different chords. The duration of each chord lasts from one to three measures. Every successive chord is also built with multiple common tones of its predecessor. What dissonances there are in the LH fade away in time to clear the sounding of new chords. The RH melody in no way interferes. Looking at the melodic idea of mm. 2-3, we see how the constant dynamic fading of the piano allows this melody to exist under a long pedal. The first half note, a dissonant appoggiatura, significantly fades by the third beat. The third beat is also the dynamic low point of the melodic idea. From here, the melody rises in pitch and dynamic up to the down beat of the next measure. By playing the crescendo carefully, each successive note is able to supplant the previous note dynamically, so that the ear follows only the rise and not the total effect.

Another idiomatic feature of Scriabin’s writing is seen in the repeated triplet chords of the latter half of the piece. This texture affords many opportunities for coloration and dynamic control both overcoming the dynamic shortcomings of the piano, but also utilizing the piano’s percussive attack to advantage, creating here a shimmering and fiery effect. In Scriabin’s Welte recording, he increases the tempo significantly until it comes to a head on the last two measures. His average tempo is 138 to the quarter, but the last measures reach 240 to the quarter, after a fierce accelerando beginning at m. 35. The increase of tempo is greatly aided by the texture of this section; the constantly moving accompaniment is changed instead to chords that the hand can reach. The effect of a rushing towards

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46 Ibid, 45-47
the end, of flying, is seen in other works of Scriabin, including the fourth sonata and the last movement of the piano concerto.

Scriabin, as performer and composer, drew on Chopin in his early writing, including the Op. 8 Etudes. However, he doesn’t just assume qualities of Chopin, but extends them to romantic extremes. As elegant as Chopin was, Scriabin was as dramatic. The rubato was extreme, and the technique pushed the hand and arm past what Chopin might have deemed good taste. Perhaps it was in this striving that Scriabin’s musical style developed along unique paths. However, Scriabin’s piano technique remained true to romanticism, which conceived of the piano as a singing instrument.

Prokofiev: Piano Sonata no. 2 in D minor, 1912

Sergei Prokofiev (1891-1953) departed drastically from the pianism of the late nineteenth century, establishing a style of pianism that anticipated many modern practices. His pedaling, phrasing, rhythm, dynamics and articulation were largely a break with late Romantic practices. He conceived of and utilized the piano sound differently than his contemporaries. His piano sound was often described as percussive and dry. Prokofiev’s piano compositions are of a decidedly original and modernistic streak, and his pianism suited them. Francis Maes, in A History of Russian Music: From Kamarinskaya to Babi Yar, writes that “Karatiugin... called him the ‘antithesis to Scriabin- and thank God that the antithesis has appeared’.” Prokofiev’s music is exceptionally clear in its writing. The percussive quality of the hammers hitting strings is often utilized rather than hidden. The pianism of Prokofiev can be understood through his music. Prokofiev describes his music through four main lines which are classicism, modernism, toccata/motor elements, and lyricism.

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Classicism is seen in the forms Prokofiev adheres to (sonata-form, rondo, ternary etc.), but also in the presentation of material.\textsuperscript{49} There is often clarity of parts and phrases. In practical terms, this means the pedal use is modest, and often in contrast to impressionist practices. While the classic line generally describes structure, the modern line influences the content, mostly through expansions of harmonic language, melody and dramatic expression.\textsuperscript{50} With new expressions, Prokofiev’s pianism naturally included a much wider timbral palette. Alexander Glazunov (1865-1936), adjudicating Prokofiev in a piano examination, described this expansion: “An original virtuoso... he is trying to produce the effects, which are often beyond the piano’s abilities, often at the expense of beauty of the sound.”\textsuperscript{51} Another, much less enthusiastic account from a \textit{New York Times} reviewer said “the piano stinks, wails, shouts, fights back and seems to bite the hands which assault it.”\textsuperscript{52} Although notes from an adjudication and a review for the general public are dissimilar sources, they still show two of many more responses to Prokofiev’s sound which explored non-traditional effects.

The toccata/motor line, deemed the least important by Prokofiev,\textsuperscript{53} uses ostinato figures and other repetitive features. These motor elements often make demands on the pianist’s stamina and sense of touch. A particular articulation often goes with the ostinato, requiring the performer to equalize every note. This equalization is reminiscent of certain Classical schools of piano technique that sought to equalize the fingers in strength. However, Prokofiev’s figurations are often much more robust, and his instrument is much heavier in action than the older pianos, thus requiring an active arm to supply strength through the hand. The fourth line is lyricism, which Prokofiev laments that “For a long time I was given no credit whatsoever.”\textsuperscript{54} Lyricism is often an underrated aspect of Prokofiev’s music.

\textsuperscript{49} ibid
\textsuperscript{50} ibid
\textsuperscript{51} Ibid, 38
\textsuperscript{52} Ibid, 39
\textsuperscript{53} Ibid, 11
\textsuperscript{54} ibid
The most important difference was a general approach to melody that was more objective and restrained than in the Romantic tradition.

For understanding Prokofiev's physical approach to the keyboard, a film of him playing is revealing. In the film, he plays Scene 5 of his opera *War and Peace*, a waltz of rather more melancholy character. He sits far enough back from the keys that his elbows easily come several inches in front of his torso. The wrist is generally even with the keyboard and also displays exceptional flexibility. He often lifts the hand from the keys by raising the elbow, and as he does the wrist is limp, hanging downward. The melody is subtle in its shaping, stands clear above the LH, but does not dominate. The LH is clear and nuanced. Later, the RH plays two melodies. These two melodies and the accompaniment are presented almost equally, and each part displays an independent rhythmic life through the careful accentuations Prokofiev provides. Boris Asafiev (1884-1949), a former classmate of Prokofiev, later described Prokofiev's accents in a review, saying they range "from hardly audible and scarcely noticeable pushes to pricks and passing-by stresses to temperamentally and powerful strokes. The accent in Prokofiev's performance becomes the most valuable shaping element, bringing sharpness, capriciousness, and a special dry spark to his playing." Certainly, Prokofiev's music requires rhythmic life and a vigorous technique, but the video also shows that Prokofiev played with an elastic quality. This elastic use of the arm reminds one of the descriptions used for Chopin's technique.

The second piano sonata was written in 1912, and dedicated to his friend and fellow student Maximillian Schmidthof (18??-1913). Written in four movements, the sonata is largely classical in form. The forms are classic, the phrase structure presents a clear progression, and the textures present clear lines. As well, the classical element is present in the contrast Prokofiev develops. The opening and closing sonata-form movements display very distinct first and second theme areas, and the inner

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56 Boris Berman, *Prokofiev's Piano Sonatas*, 39
movements each explore varied moods. Each contrasting element belongs more firmly to one of the described lines. The performer must develop distinct uses of the keyboard for the different lines throughout.

Prokofiev’s musical and pianistic style are apparent in the first theme. A melody and its counter-melody, marked non legato, enter immediately in the RH. Underneath them the LH plays Alberti-inspired triplets against the RH duple, without any articulation markings. The overall effect is terse, angular and sharp. The lack of legato influences the physical approach to the keys. Keyboard technique is equally about depression and release of the keys. A legato passage simply maximizes the time spent on the key and shortening the time off of the key, and even combining tones together via finger pedal technique. In this decidedly non-legato passage, the fingers must be active in the release of each note.

The theme derails short of a proper cadence in m. 8 and begins a new idea. A syncopated ostinato on C# and D# is set against a motive of accented quarter notes. This passage reflects Prokofiev’s toccata line. The idea develops before dissipating in m. 19. The main theme restarts in m. 20, this time completing itself and reaching the dominant chord. The expected tonic does not follow, however, and instead a low, fortissimo triad on G is sounded in m. 31, ending the first theme.

In these 31 measures, not a single part is marked legato, and Prokofiev uses many articulation markings that call for detached playing. This is in contrast to common Romantic period practice, which assumes legato playing as the default. This preponderance of detached playing suits Prokofiev’s classicism, and the motoric and modern elements, providing clarity of construction and utilizing the percussive qualities of the piano to highlight rhythm and express the non-beautiful.

The following bridge theme and second theme span the distance between Prokofiev’s percussive and lyrical writing. The bridge theme (mm. 32-63) features running eighth notes in the RH against gently rocking quarters in the LH. Also, the chord from m. 31 is held by pedal through m. 34. This
is the first pedal indication in the score and its placement creates the most connected sound yet in the beginning of the bridge theme. The pedal comes off right as a second eighth-note line begins in the RH, so that clarity between parts can remain. Pedal should still be applied throughout the theme though, to continue the connected sound established at the beginning. Even though there is no proper melody, the second theme is anticipated by the two note slurs from E to D# starting in m. 48.

In m. 64 the second theme gives the first truly legato melody in the sonata. The dynamics, seen in example 5 illustrate the melodic shaping and phrase structure of the melody. The first four measures, for example, is comprised of two one bar ideas followed by a two bar idea. The diminuendo on the first two bars separates them, but a crescendo and subsequent decrescendo connect the following two bars. After two phrases and a short extension of eight, ten and three measures respectively, the closing theme ensues. The texture of the writing becomes highly disjointed, with non-legato chordal punctuations and violently slurred groups of sixteenths interjecting.

Example 5. Sergei Prokofiev Piano sonata no. 2 in D minor, Op. 14 mvt. 1 mm. 64-68

Prokofiev’s range of technique is not only apparent in this movement, but even defines the compositional drama of it. The themes are polarized not just by the material, but also the articulation, so that the pianist must delineate the themes from each other by a varied range of touch. The rest of the sonata will bear this out.

The second movement, a scherzo in ABA form, represents the toccata line. The A section is characterized by continuous eighths in the RH, which the LH crosses over and back in every measure. The RH chords beginning in m. 9 require a fine finger control to bring out the melodic lines within. The top voice repeats while the bottom two descend. Then, the bottom voices hold while the top voice descends. This pattern persists from mm. 9-12, then again from mm. 13-16. The worst leaps occur in mm. 13-15, seen in example 6. A staccato touch is absolutely necessary, as a means of maximizing the time off of each key to allow for the large lateral distances the LH must traverse.

The B section provides a technical and rhythmic contrast with slurs in each hand, in example 7. The pianist must utilize exceptional sensitivity and flexibility of the wrist to voice these parts and angle the RH appropriately for each chord. At the end of this B section, the difficulty of the RH increases, by expanding the pattern an octave on every other slur, seen in example 8. The B section soon winds down in tempo and the A section returns, nearly identical to the earlier statement except for dynamic changes and the opening phrase starting the RH an octave lower.

Example 6, mvt. II, mm. 12-15

\[\text{Example 6, mvt. II, mm. 12-15}^{\text{58}}\]

\[\text{Ibid, 30}\]
Example 7, mvt. II, mm. 29-32

Example 8, Mvt II. mm. 48-52

Example 9, mvt III. mm. 1-6

59 Ibid, 31
60 Ibid, 32
The third movement illustrates Prokofiev’s lyricism, requiring a fine control of softer dynamics and the ability to play long, lyrical lines without disruptions. Clarity must be maintained between multiple parts. The first measures show this. A rocking accompaniment suggests a tonality of G# minor in mm. 1-2. Then an apparent melody enters on beat four of m. 2. Every two notes have a crescendo or diminuendo beneath it, giving a lamenting character to the figure. Finally, in m. 4 on beat four, the true melody enters. This is the second of three melodies to use legato markings in the whole sonata. The three parts must be played with three levels of dynamics and sense of legato for each part to remain distinct. Prokofiev was a master of lyrical playing. Dmitri Kabalevsky (1904-1987) wrote about Prokofiev’s performance of his third piano concerto that "With his extraordinary pianistic talents, Prokofiev revealed that rich lyrical feeling in his music which we had failed to notice until then."  

Prokofiev’s playing avoided exceptional rubato and textual modification, which can threaten the musical structure of a piece, but his playing still possessed a strong core of lyricism. It can also be noted that much of Prokofiev’s writing incorporates complex rubato and other romantic trends directly into the score, simply tempered by a classical restraint.

The fourth movement, another sonata form, provides a raucous ending to the sonata. Octave triplets begin the movement, reminiscent of the first movement opening. This is followed by a descending octave bass line and rising slurred chords. After building this tension for four measures, both hands play from the top of the keyboard a cascading quasi arpeggio down five octaves to A. The technique for these measures encompasses active finger work on the triplet figure, fast position changes on the rising slurs in the right hand and an extended arpeggio technique requiring a flexible wrist for both hands. The elbow must move efficiently for the rising slurs, the wrist is crucial to the arpeggios and the fingers must move precisely for the triplet figure. As well, the span of keyboard played also requires

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the pianist to sit far enough back so the elbows are not trapped by the torso. A full-bodied technique is present in a short twelve measures. From the pick-up to m.18, the first theme begins. The LH plays the triplet figure introduced before, while the RH plays a “tarantella-like” theme.\textsuperscript{63} The theme features an abundance of two-note slurs beginning on off-beats and rapid hand crossing.

The bridge theme begins at m. 34. The triplet motion is continued, with the RH playing chords on the first and third subdivision of each beat. A new accompaniment, subdivided into even eighths, interrupts the bridge theme, heralding the entrance of the second theme in m. 58. Boris Berman writes that “mockingly coy, it [the second theme] resembles cabaret music.”\textsuperscript{64} Much of the melody is staccato, again encouraging active fingers and wrist. A particularly troublesome spot occurs in m. 94 to the downbeat of m. 95. The RH plays a third on B and D#, followed immediately by a rising three note arpeggio on the E above. After the arpeggio, an interval an octave above the arpeggio is played before the RH must then shoot down three octaves to play C in the next measure. The RH must occupy four different placements on the keyboard in under a second. The LH also has to make leaps at the same time, greatly increasing the odds of striking wrong notes.

Starting on m. 97, the eighth-note accompaniment is played under the triplet figure of the bridge theme, creating tension by interposing the contrasting subdivisions of the first and second themes against each other. The RH displays constant leaps in mm. 105-112. The right arm’s motion during this passage is very regular, resembling something machine like, with the elbow making a constant counter-clockwise motion.

The rest of the movement ensues using largely the technique already discussed. The development overlaps themes so that each hand must often play with differing articulations. Eventually, the development builds to the same introductory material at the top of the movement. The

\textsuperscript{63} Boris Berman, Prokofiev’s Piano Sonatas, 64
\textsuperscript{64} Ibid, 65
The recapitulation presents the themes as expected from traditional sonata writing. This path is diverted near the end of the second theme, leading to the end of the sonata. Mm. 305-319 are analogous to mm. 81-95 in the exposition. However, the first theme is interposed with the second theme, requiring exceptional dexterity and coordination. In m. 307, the RH must play the second theme staccato and simultaneously play the slurs of the first theme. Then, in mm. 309-311, the bottom half of the RH holds a chord while the upper half plays the skipping slurs of the first theme. Mm. 313-319 are perhaps the most difficult in the whole sonata, requiring careful voicing to preserve the integrity of each theme, and extremely fast and accurate position changes in every measure, seen in example 10.

Example 10, mvt. IV, mm. 313-319

![Example 10, mvt. IV, mm. 313-319](image)

The coda follows, using a pastiche of different themes from the movement. Finally, the arpeggio of the beginning and the end of the development crashes a final time before an abrupt cadential progression ends the sonata on a low open-fifth and octave.

As seen in the sonata, Prokofiev’s musical style is tied up with his pianistic style. His striving for an objective, but rhythmically vital musical style influenced the tone he produced from the piano, often departing from the subjective romantic traditions and creating a sound that was often drier. This was probably the cause for many to call his playing percussive. Critics were reacting to the uncensored dynamic pokes of the piano, but this is only a small part of Prokofiev’s technique. He considered melody

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65 Prokofiev, *Collected Works*, 51
perhaps the most important part of his craft, as seen throughout his pianistic output. As for Prokofiev’s physical technique, his fingers produced a clear articulation, his wrist was highly flexible, and the seating position is relatively far back from the keyboard, allowing the hands to make large leaps and transfer weight to the key-bed. While Prokofiev didn’t necessarily expand the pianistic technique, he does use techniques in many varied combinations. He shows a propensity for consecutive chords and intervals, calling for a loose arm and articulate fingers, and also many leaps of the hand. These same passages are often staccato in nature, allowing the pianist to utilize the time off of notes to move and leap to new positions, often with many leaps happening consecutively.

Moving chronologically from Bach to Prokofiev, we see how keyboard technique evolved. The use of the body was continually modified from one composer to the next, in response to a changing keyboard and differing musical concerns. With the shift from baroque keyboards to the piano, the action of the keys changed the approach to sound production, and as the piano developed into the modern grand, the weight and depth of the keys generally increased, necessitating changes in technique. The scope of the keyboard also expanded from about four octaves to just over seven, creating a larger space for composers to utilize.

Having an understanding of a composer’s technique provides a framework for the pianist to better realize their compositions. Knowing what the highest note of Haydn’s piano was shows how he utilized his entire keyboard, and the modern day pianist can bring out the excitement in Haydn’s work of stretching towards a limitation. Knowledge of historical technique addresses other practical matters, such as pedaling, fingering, and articulation. The difficulty arises from being responsible for a multitude of different technical styles, and often playing them on a piano the composer never heard. The pianist must develop a large tool-set of technical abilities to responsibly approach different musical styles.
Technique is invariably related to interpretation. Gerig states that “technique and personal interpretation are absolutely inseparable.” Allowing that a written composition is a fixed form of an interpretation, the personal life of the composer has an influence on their technique and interpretation. Further, it would be remiss to understand the composer’s life outside of historical context. The development of a multi-faceted technique includes a study of history, allowing for a more genuine approach to older musical styles. If a pianist develops their technique ahistorically, then they are liable to treat every piece in the same fashion. This approach ignores essential components of composition and technique, blindly appropriating the music of others. The answer is not, however, to suppress one’s own identity and interpretation, but to rather harness that identity and create a dialogue between it and the composition. In this way, a pianist can authentically connect to a composition.

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66 Gerig, Famous Pianists, xiv


