UTILIZING STANDARD VIOLIN ORCHESTRAL EXCERPTS AS A PEDAGOGICAL TOOL: AN ANALYTICAL STUDY GUIDE WITH FUNCTIONAL EXERCISES

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Orchestral excerpts have been used as a teaching material by violin pedagogues to develop violin techniques in addition to scales and etudes in the twentieth century. However, instructions on developing specific techniques and the relationship to its musical content have been left out.

This dissertation provides an analytical study guide addressing the common challenges for violinists. Ten orchestral excerpts are selected from surveying frequently requested orchestral excerpts for the first violin. Through analysis of each excerpt, insight from the other violinists and pedagogues are included. Fifty-four functional exercises with comments are created to help violinists practice effectively and serve as a pedagogical tool in violin instruction.
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CHAPTER I

INTRODUCTION

Orchestral excerpts are frequently required for various types of auditions such as summer festivals, youth and college orchestra programs, and professional orchestral positions. Playing selected orchestral excerpts has, for a long time, been the preferred method to evaluate a musician’s technique and musical understanding. Since orchestral excerpts offer technical challenges and, at the same time, incorporate musical elements, they serve as a pedagogical tool to improve violin playing. Violinists often are not exposed to orchestral excerpts as part of their regular education until their studies in college. Since standard orchestral excerpts play such a significant role, they should be incorporated into violin lessons alongside scales and etudes.

Purpose

This research shows that there are currently only two books available that exclusively utilize violin orchestral excerpts as a pedagogical tool. In the first work, James E. Smith offers a large number of standard orchestral excerpts with only brief technical descriptions.¹ In the second, Susan Brown provides exercises by transforming each excerpt into a scale as an innovative approach to learning.² However, neither of these authors provides sufficient analytical descriptions or practical exercises for developing specific violin techniques. This research provides analyses and brief exercises based on ten selected excerpts in order to improve violin technique and supplement standard existing etudes in order to benefit students learning the violin.

¹ James E. Smith, Using Orchestral Excerpts As Study Material for Violin; A Progressively Graded Survey (Urbana, Ill: American String Teachers Association, 1966).
Significance and State of Research

Building a violinist’s technical foundation requires scales, arpeggios, and etudes. Technique is an essential element to master compositional works that are written for or include the violin such as concertos, symphonies, and chamber music repertoire by Beethoven, Mendelssohn, Brahms, and Sibelius, just to name a few. Scales, arpeggios, double stops, combined with bow strokes such as *detaché*, *martelé*, and *spiccato*, are some of the major technical challenges in such works. Violinists develop these techniques by studying etudes and exercises composed by violinist-pedagogues from the end of eighteenth century to the twentieth century, such as Rodolphe Kreutzer (1766-1831), Pierre Rode (1774-1830), Pierre Gaviniès (1728-1800), Niccoló Paganini (1782-1840), Henryk Wieniaawski (1831-1880), Otakar Ševčik (1852-1934), Henry Schradieck (1846-1918), Leopold Auer (1845-1930), Carl Flesch (1873-1944), Ivan Galamian (1903-1981), and others.³

Essentially, an etude is “a short complete composition designed to exercise the students in certain technical procedures, sometimes specified by the composer.”⁴ Some etudes isolate a single technique and have more of a generic nature for training purposes, such as works by Ševčik, Schradieck, Kayser, Wohlfahrt, and Kreutzer. Techniques in their compositions such as *detaché*, *martelé*, trills, string crossings, scales, or arpeggios are often written in repetitive patterns to help the student drill a particular technique.

Other etudes present technical and interpretative challenges, which can be more suitable to perform on stage. These diverse and musically satisfying etudes often carry the title *Caprice*,

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⁴ Ibid., 230.
which is in fact a “technical or virtuosic study.”

Hence, they are used as both a pedagogical tool and standalone performance piece for intermediate and advanced players. Violinist Axel Strauss, who recorded the entire Twenty-Four Caprices for Violin (1815) by Pierre Rode, states, “the Caprices provide not only great material for working on basic elements of violin technique, such as intonation, coordination of the hands, various bow strokes and bow distribution, they also can help you develop a well-balanced, singing tone.”

Well known caprices include Paganini’s Twenty-Four Caprices for solo violin (1818), Gaviniès’ Twenty-Four Etudes of Violin (1794), Fiorillo’s Thirty-Six Etudes or Caprices for Violin Solo, Wieniawski’s Ecole Moderne 10 Etudes-Caprices, Op. 10 (1854), and Alard’s Twenty-Four Etudes-Caprices Op. 41 (1921), and others.

In addition to the abovementioned etudes, violin pedagogues have written books demonstrating techniques through excerpts from the violin repertoire with instructions or exercises. Such instances can be found in Franco-Belgian violinist-pedagogue Charles Auguste de Bériot’s Ecole Transcendante du Violon Annexe de la Methode (Violin School for Artistic Playing Supplement to the Method) Op. 123 (1890). There are other pedagogical works published in the twentieth century which use violin repertoire, such as Ševčik’s Analytical Studies for Tchaikovsky's Violin Concerto, Op. 19. Within this work, Ševčik creates interval and analytic exercises by dissecting difficult passages into small fragments to master this concerto.

Example 1 shows the opening melody of Tchaikovsky’s Violin Concerto. Interval exercises

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(Example 2) are made for every interval from mm. 23 to 28 of this concerto. Repetitions and variations are applied to build better intonation. Analytic exercises are written to improve bowing, phrasing, dynamics, and articulation. By creating numerous ways to practice from simplified to original versions, Ševčík represents his insight of how to gradually accomplish each segment.

Example 1. Tchaikovsky, Violin Concerto Op. 35, mm. 19-27\(^9\)


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\(^9\) Ševčík, Solo Violin Part.

\(^10\) Ibid., 5.
Similar to Ševčík’s work, Maxim Jacobsen’s Mendelssohn Violin Concerto Op. 64, Twenty-Four Preparatory Exercises (1961) (Example 3) comprises multiple exercises from the concerto broken down into various technical angles to help master every difficult passage.\textsuperscript{11} George Szigeti, in his A Violinist’s Notebook, gives a brief commentary on technique and interpretation, and occasionally offers short exercises on how to practice passages from a vast collection of violin repertoire. In The Art of Violin Playing Book 2, Carl Flesch uses a number of short musical examples to demonstrate different techniques.\textsuperscript{12} Moreover, the series of Graded Course of Violin Playing by Leopold Auer (1845-1930), a renowned Hungarian violinist, pedagogue, and composer, provides a comprehensive and practical outline of violin study.\textsuperscript{13} In book eight of this series, Auer extracts passages from a number of existing materials, including concertos, sonatas, and caprices by other composers to demonstrate advanced techniques, such as octave playing, trills, spiccato, and harmonics. Simon Fischer, in his Practice (2004), offers 250 practice methods for traditional violin techniques by utilizing musical examples drawn from the standard solo violin repertoire.\textsuperscript{14} Every practice method is illustrated with short exercises and instructions (see Example 4). However, none of these pedagogical resources include orchestral excerpts as a tool for technical training. The introduction of orchestral excerpts into pedagogical literature has appeared only within the last fifty years.

\textsuperscript{11} Maxim Jacobsen, Mendelssohn Violin Concerto Op. 64, Twenty-Four Preparatory Exercises (C. F. Peters, 1961).
\textsuperscript{13} Leopold Auer, preface to Graded Course of Violin Playing, Book 1 (S.l.: S.n., 1926).
Example 3. Jacobsen, *Mendelssohn Violin Concerto Op. 64, Twenty-Four Preparatory Exercises*, Exercise No. 3\(^\text{16}\)

Example 4. Fischer, *Practice*, exercise for excerpt of *Sarasate Zigeunerweisen*\(^\text{16}\)

Robert Baldwin, Director of Orchestral Activities at the University of Utah and conductor of the Salt Lake Symphony, published an article entitled, “Orchestral Excerpts as Etudes” for


viola in 1995. He suggests that teachers replace part of the technical studies with orchestral excerpts in weekly lessons. This way, the student has learned the excerpts alongside scales and etudes without adding extra work and preparation. In addition, teachers assign scales and studies to their students not only to cultivate certain techniques, but also to build up the ability to play actual repertoire. By practicing orchestral excerpts, advanced students will progress their technical development while learning the symphonic repertoire.

James E. Smith in Using Orchestral Excerpts as Study Material for Violin displays the idea of adopting orchestral excerpts as a pedagogical tool. Smith provides a survey of commonly requested orchestral excerpts supplied with technical identification. He divides orchestral excerpts into different levels of difficulty and identifies the techniques in them. However, there is yet to be any practical exercise to master those techniques mentioned in his study.

William Starr’s Twenty-Six Composers Teach the Violinist (1980) encompasses a variety of musical examples. Examples include solo pieces, chamber music, and symphonic works which are also intended to be used as a supplement to scales and studies. Only six of the frequently asked orchestral excerpts are included into his book.

Another collection that is devoted to orchestral excerpts is String Players’ Guide to the Orchestra by Susan C. Brown. Brown believes that students acquire fundamental performance techniques by adapting scales and arpeggios into the pieces. She creates exercises by utilizing the rhythmic and bowing materials directly from the excerpts and transforms them into scales (see Example 5). These exercises focus on how to practice particular bowings and articulations,

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19 William J. Starr, Twenty-six Composers Teach the Violinist: Creative Etudes from Well-known Literature (Knoxville, TN: Kingston Ellis, 1980).
but do not represent the original melodic lines and other musical elements in the excerpts. For example, the preparatory exercise for the excerpt from Mozart’s *Eine kleine Nachtmusik* in Example 5 uses the same bowings as the opening motive of the excerpt. The author builds the exercise on a C major scale, shown as Scale 6. This scale helps students practice the strokes in the first two measures of the excerpt; however, there is no indication of tempo, bow placement, style, vibrato, and fingerings both in the description and in the musical score. There is only discussion from a technical perspective without the relationship to the musical content.

Example 5. Susan Brown, *String Player’s Guide to the Orchestras for Violin 1*, p.15

Orchestral excerpts can serve as a pedagogical tool by presenting specific techniques and carrying rich musical ideas from a symphonic work. For example, *legato* and string crossing techniques are recognized in *Lo stesso tempo* of the third movement from Beethoven’s Symphony No. 9 (Example 6). Smooth string crossings require the minimum movement while traveling the bow between strings.

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Example 6. Beethoven, Symphony No. 9; *Lo stesso tempo*, mm. 99-104\(^\text{23}\)

Aside from smooth string crossings, there are more elements in this excerpt, such as bow distribution, rhythmic precision, clean shifts, and continuous vibrato. It is necessary “to know how to play in the classical style and what sorts of bowing articulations are peculiar to Beethoven.”\(^\text{24}\) Violinists must consider all these elements in order to nicely shape each phrase. With adequate fundamental technique, musical intentions in this excerpt can be successfully achieved. Therefore, incorporating orchestral excerpts into daily practice will help students cultivate advanced musical ideas and will strengthen violin technique with this comprehensive method.

This research incorporates essential elements of violin playing, including left and right hand techniques, which contributes to the musical aspect of the excerpts. In contrast with the literature mentioned above, this study encompasses ten selections from the most frequently requested orchestral audition repertoire. Each excerpt is accompanied with an analytical description and functional exercises inspired by the style of Ševčik, Fischer, and Jacobsen. This study not only helps students practice these excerpts effectively, but also improve the students’ technique in the same pedagogical manner as etudes.


CHAPTER II

METHOD

Data Collection

This research garners information from a list of orchestral excerpts most commonly used in orchestral auditions over the past five to ten years. These excerpts are compiled from consulting the librarians of major orchestras, such as the Chicago Symphony, the Los Angeles Philharmonic, and the Detroit Symphony, and getting the most current information from their websites. Appendix A in this document provides correspondence with librarians. Appendix B is the list of frequently requested excerpts. All the excerpts are listed in the order of composers’ years in this chart. The list shows the orchestra, the specific passage, and number of times requested. The chapter “Audition Repertoire by Instrument and Frequency of Request” from Facing the Maestro (1983) provides lists of frequently requested excerpts categorized by instrument, which has been a model of this survey.  

Attention is given to the ten most frequently requested excerpts supplied with analytical descriptions, examples, and practical exercises in the next chapter.

Analysis and Exercises

Analysis on the technical and musical elements of ten out of the excerpts in Appendix B is presented in this research chronologically. In choosing bowings, fingerings, interpretation, and other important musical elements, I have studied sources on orchestral excerpts such as Josef Gingold’s Orchestral Excerpts from the Symphonic Repertoire (1953), William Nowinski’s

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Violinist’s Guide to Orchestral Playing, Excerpts from Standard Orchestral Literature (1961), Erich Leinsdorf’s The Composer's Advocate: A Radical Orthodoxy for Musicians (1981), and Rodney Friend’s The Orchestral Violinist (2006). Orchestral Excerpts for Violin (1998) by William Preucil is a CD recording which contains his performance and spoken commentary of selected excerpts. Preucil, Concertmaster of the Cleveland Orchestra since 1995, discusses the excerpts from technical, musical, and artistic perspectives. In addition, a variety of online sources were used including websites with text, videos and musical scores. While examining each excerpt’s bow strokes, shifts, finger extensions/contractions, fast finger patterns, and rhythms, possible solutions for emerging technical challenges are provided. I also use other resources namely, Carl Flesch’s The Art of Violin Playing (1930), Ivan Galamian’s Principles of Violin Playing & Teaching (1985), Maxim Jacobsen’s The Mastery of Violin Playing (1957), Simon Fischer’s Practice (2004), Frederick Neumann’s Violin Left Hand Techniques (1969), and James Kjelland’s Orchestral Bowing Style and Function (2003).

This research provides brief exercises in score format with analytical descriptions. The exercises created breaks down difficult passages to the most basic elements, which are inspired by Ševčik, Galamian, Jacobsen, and Fischer, so that violinists can hone one technical facet of violin playing at a time. The layout for each functional exercise in chapter three is based on Jacobsen’s Mendelssohn Violin Concerto Op. 64, Twenty-Four Preparatory Exercises (1961). Each exercise is composed of one passage focusing on one technical aspect. The passage is followed by a short description of the challenges one may encounter. Different exercises are written to illustrate how the passage can be practiced. Some exercises refer to the entire excerpt, for example Exercises 5.2C and 5.2D for the Scherzo from Mendelssohn’s Midsummer Night’s

Dream. All of the exercises are written based on the specified fingerings and bowings marked in the excerpts. However, alternative fingerings and bowings can be applied to the exercises. A chart with the ten selected excerpts under different technical categories is shown in Appendix C.

Explanation of Techniques

While analyzing the ten selected orchestral excerpts, a number of technical challenges are explained in this section.

“Collé”

Collé, meaning, “glued” is a short stroke, produced by catching the string with a sharp articulation, often described as a pinch or bite. Although Galamian states that collé is used in the lower half of the bow, it can in fact be used with any part of the bow.\(^\text{28}\) Immediately after the bite, the bow picks off the string to prepare for succeeding strokes.\(^\text{29}\) The collé has the same articulation as the beginning of a martelé. The lifting motion that completes the collé stroke makes it similar to an accented spiccato. In collé, only the fingers are used for the horizontal and vertical motions of the bow. This same finger motion is applied to the spiccato, which is shown in Exercise 10.2A in Prokofiev Symphony No.1, Mvt. I. The fingers and wrist are responsible for the quick retake when playing consecutive up bows on one part of the bow.\(^\text{30}\)

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\(^{30}\) “Retake” is when the bow lifts or circles to execute two consecutive bow strokes in the same direction: two down or two up bow strokes. After retake, the bow is replaced at the point of the initial contact to the string.
“Spiccato”

Spiccato is a bow stroke in which the bow bounces off the string through its natural elasticity, and continues the momentum with control of the right hand and forearm. It “may range from slow to moderately fast, from light pianissimo to heavy fortissimo.”31 The bow bounces between the balance point and middle of the bow. The stroke can be generated from either dropping the bow from the air or starting from the string. The type of spiccato can differ depending on musical factors, such as tempo, dynamics, and style. This can be achieved by playing on different parts of the bow, varying the length of stroke, and the amount of bow hair. The closer to the frog the bow bounces, the heavier the stroke. Bouncing the bow higher off the string gives the spiccato a more vertical motion, thus making the stroke shorter and more articulated. When playing spiccato with a more horizontal arm motion and less bow hair, the stroke has a brush-like quality, often referred to as a brush stroke. Just as playing on the string, playing spiccato with different sounding points produces different qualities of sound.32

Spiccato becomes more challenging when mixed with rhythms, slurred bowings, string crossings, and varying dynamics. For example, dynamics can affect the stability of rhythm and add to the difficulty of playing accurate string crossings. Stiff right fingers and a stiff wrist can affect the cleanness, evenness, and ease of playing in spiccato. “Clean” means that the noise of the bow hair hitting the string is reduced to a minimum and the full body of the sound is pulled out of the string. The manner of playing a clean spiccato is as follows: the bow hits the string in a near perpendicular angle, bouncing at the same sounding point, and creating a sound that projects. The bow should bounce closely to the strings to be agile. A clean and even spiccato is

32 The sounding point is where the bow touches the strings in the area between the bridge and fingerboard; also called, the contact point. Different sounding points produce different qualities of sound.
required in a number of excerpts, such as Mozart, Symphony No.39, Mvt. IV; Beethoven, Symphony No.3, Mvt. II; and Schumann, Symphony No.2, Mvt. II.

String Crossings

While crossing the strings, the bow pivots to the new string led by the vertical movement from the right arm. Clean string crossing requires quick and smooth pivoting movement right after the old note has been played. When string crossings occur to the neighboring string, the pivoting angle is “subtle” and as close to both strings as possible to execute smooth string crossings without sacrificing the clear articulation of each note. In Simon Fischer’s Practice (2004), he explains seven levels of the bow arm that is used when playing string crossings:

While playing on level 5 (A string) and about to cross to level 7 (E string), the bow should stay closer to level 6 rather than moving all the way between level 5 and level 7. While playing double stops on the A and E strings, the player needs to adjust the bow arm to level six to be able to reach both strings. Therefore, the level of the bow arm used when playing string crossings is the same as playing double stops. Exercises for excerpts from Beethoven’s Symphony No. 9 (Exercise 5.1B), Beethoven’s Symphony No.3 (Exercise 3.1B), and Mozart’s Symphony No.4 (Exercise 2.1A and 2.2B) all employed double-stops to simulate the arm level and bow angle needed when playing the string crossings on two neighboring strings.

There are clockwise or counter-clockwise movements from the wrist and bow grip when playing string crossings. Being aware of which direction the right hand moves can help relaxation and cleanness. Common mistakes include stiffness of upper arm/wrist and excessive movement of the forearm which can cause uneven or unclean crossings between two strings.

33 Galamian, “Bowing Patterns,” 65.
34 The seven levels of the bow are level 1 (G string), level 2 (G and D strings), level 3 (D string), level 4 (D and A strings), level 5 (A string), level 6 (A and E strings), and level 7 (E string).
Shifting

A shift may be facilitated by finding a transitional note or anticipatory note. Principally, the anticipatory note is unsounded.\(^\text{36}\) Exercises for improving shifting can begin with playing an audible slide in a slow tempo, for example Exercise 9.1A of the *Don Juan* excerpt. The audible slide helps the player listen and measure the actual distance between the initial note and the arrival note. While shifting slowly, the player should examine the choreography of the hand, changing hand frames, and the position of the left thumb to make sure they are relaxed and working efficiently.

“Legato”

Robin Marvin explains the *legato* style in his document:

Some basic considerations in achieving a legato style are: (1) distribution of the bow, (2) variable bow speed, (3) string crossings, (4) smooth bow changes, and (5) avoiding the tendency to crescendo during up bow or decrescendo on down bow unless needed in the musical context.\(^\text{37}\)

Well executed *legato* playing contributes to lyricism, which can be seen in excerpts such as Mozart’s Symphony No. 2, Mvt. II, Beethoven’s Symphony No. 9, Mvt. III, Brahms’s Symphony No. 2, Mvt. I, and Brahms Symphony No. 4, Mvt. IV.

Coordination

Good coordination between the left and right hand results in cleanliness in the sound, specifically during bow changes. Example 7 illustrates three circumstances of coordination.

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\(^{36}\) Robin Stowell, *Violin Technique and Performance Practice in the Late Eighteenth and Early Nineteenth Centuries* (Cambridge: Cambridge University Press, 1985), 98.

Example 7. Illustration of Three Circumstances in Coordination

To play Example 7 (1) with good coordination, the left fingers should stop the strings just before the right hand moves the bow. Example 7 (2) is a rendition of measure 1 with the left fingers stopping the string after the bow change. The lagging of the left hand is the most common cause of poor coordination. Example 7 (3) shows an exaggeration of the left finger anticipating the next note, B before the bow change. Gradually shorten the anticipated B before the bow change until it is barely audible. Practicing in rhythms is an effective way to improve coordination during shifts or string crossings. It also helps with passages that need to be played evenly. From Simon Fischer’s *Practice*:

Rhythm practice works by setting the mind a series of timing and coordination problems to solve. In solving them the mental picture of the passage becomes clearer, and the physical response to each mental command becomes quicker.\(^{38}\)

Other elements in the selected excerpts, such as precise rhythm, consistent tempo, intonation, and dynamics are discussed in chapter three.

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CHAPTER III
TEN SELECTED ORCHESTRAL EXCERPTS

Ten selected orchestral excerpts are discussed in chronological order in this chapter. The violin part of each excerpt is provided in the beginning. Common challenges are in table format followed by analysis from both musical and technical aspects. Scores from the specific passages are then shown with exercises and instructions.

Excerpt No. 1: Mozart Symphony No. 39, Mvt. II, mm. 1-27

Main challenges:
- Precise rhythm
- Intonation
- Lyricism

Other elements:
- Continuous vibrato
- Sweet sound
- Shape of phrases

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While playing Mozart, it is important to be able to demonstrate the poise and balance of the eighteenth century classical style.\textsuperscript{40} The dotted sixteenth note and thirty-second note rhythm throughout the entire movement needs to be played accurately.\textsuperscript{41} It can be mistakenly played like a triplet eighth note and sixteenth. Subdividing the melody into thirty-second notes can give violinists a clear sense of rhythm.

To achieve the elegant lyricism in this excerpt, the use of some extension fingerings can avoid shifting and interruption of the melody. Suggested fingerings are shown in Example 8. Passages played on the D string creates a more mellow tone; for example, mm. 2-3, 6-7, and 16-17.\textsuperscript{42} Although intonation can be more challenging playing on one string with extensions, the sound is richer and warmer. Moreover, a moderate speed of vibrato should be continuously applied to every note which contributes to a sweeter sound.

Example 8. Mozart, Symphony No. 39 in Eb Major, Mvt. II, mm. 1-13 with fingerings\textsuperscript{43}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{example.png}
\end{figure}

\textsuperscript{40} Donald Grout, Jay J. Peter Burkholder, and Claude V Palisca, \textit{A History of Western Music} (New York: W.W. Norton, 2006), 480-481.
\textsuperscript{42} Ibid.
Exercise 1.1A. Slow practice

During an extension or contraction, a left finger extends or contracts beyond its original position, acting as a pivot for the hand to the new position. Playing each note slowly without the rhythm gives the player enough time to be aware of the changes in the left hand frame during extensions and contractions.

Exercise 1.1B. Groupings and expanding

Exercise 1.1B. (1) splits the passage into one-beat segments to help drill each extension and contraction. Exercise 1.1B. (2) expands the groups into two-beat segments. This method of expanding and repeating each segment allows the player learn the passage incrementally.

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Exercise 1.2A. Simplified passage

The simplified passage is created by playing only the dotted sixteenth notes. It shows the outline of the melody which structures the basic hand shape needed in this passage. In the third measure of Exercise 1.2A, the contraction occurs when the second finger is placed on A flat, pivoting the hand to second position for the rest of the measure. Hearing the primary notes also helps shape the smooth melodic line.

Exercise 1.2B. Loop

Play each pattern forward and backward as a loop. The repetition keeps the left hand in one shape, which helps consistency of the intonation.

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45 Ibid.
Exercise 1.3A. Subdivision

The written out thirty-second notes represent how one should mentally subdivide the rhythm in this excerpt. This prevents the player from treating the dotted rhythms like triplets.

46 Ibid.
Main Challenges:
- Steady tempo and rhythm
- Clean string crossings
- Coordination
- Spiccato

Other Elements:
- Lively character
- Phrasing

In *A History of Western Music* the finalés of Mozart’s late symphonies are described as having “whimsy and humor.” The finale of Symphony No.39 is also lively and playful.\(^{48}\) The


sound should not be overly heavy or aggressive where \( f \) is indicated. Hence, the *spiccato* is brush-like which is produced by bouncing the bow more horizontally. Preucil suggests the *spiccato* stroke bounces closely to the strings.\(^{49}\) Upon listening to his playing in the recording, it is evident that he plays mostly on the string in the *forte* section from measure 7 onwards.

There are a number of spots which are difficult to execute with a steady tempo. Places where there are two slurred sixteenths have a tendency to rush, for example in mm. 1, 3, 5, and 6. A way to prevent rushing is to play the passage without the slur. This forces the left fingers to move with the bow change, gaining accurate left finger control. In addition, measure 15 is a place where rushing frequently occurs. The dotted-quarter note in mm. 2, 4, 10, and 12 should not be fully sustained or connected to the following sixteenth notes. This helps portray the classical style of phrasing, and facilitates starting the next phrase in time.

When playing slurred string crossings alternating between two strings (see Example 9), it is important to keep the bow hair as close as possible to both strings to move efficiently. The angle created from pivoting between two strings should be small. Therefore, the right arm will barely move vertically as if playing double stops.\(^{50}\) Passage in mm. 16-19 is awkward for both the left and right hands. Left/right hand coordination and clean string crossings are two challenges in this passage. Exercise 2.3A helps co-ordination while Exercise 2.3B helps string crossings. In these exercises, it is important for the right wrist and fingers to remain relaxed. Violinists often shape their phrases with slight dynamics, even though Mozart doesn’t indicate it. For example, in mm. 20-22, one can *crescendo* in bar 20 maintaining \( f \) in bar 21, and *diminuendo* in bar 22.


Example 9. Mozart, Symphony No. 39, Mvt. IV, mm. 20-23

![Example 9](image)

Figure 2.1. Mozart, Symphony No. 39, Mvt. IV, mm. 15-21

![Figure 2.1](image)

Exercise 2.1A. Double-stops

![Exercise 2.1A](image)

The double stops represent the string crossings occurring in mm. 15, 20, and 21. Practicing the string crossings like double stops allows the player to be aware of the right arm level.

Figure 2.2. Mozart, Symphony No. 39, Mvt. IV, mm. 22-23

![Figure 2.2](image)

For Agile Finger Movement

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53 Ibid.
Exercise 2.2A. Loop

The broken chord from the first beat of this passage is played with different note combinations to help train and facilitate the third and fourth finger movements.

Exercise 2.2B. Double-stops

In mm. 22-23, intervals of a perfect fifth should be executed by placing one finger over two strings, like playing a double stop. This exercise not only conditions the execution of the perfect fifths, but also ensures that the bow is close to both strings.

Figure 2.3. Mozart, Symphony No. 39, Mvt. IV, mm. 16-19

Exercise 2.3A. Anticipation

Poor coordination often occurs in rapid passages with mixed bowings because the left fingers are not able to react to the desired speed of bow change. This rhythm calls for the player to place

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Ibid.
each finger slightly before the bow moves. Gradually shorten the anticipated note until it is timed with the right hand.

Exercise 2.3B. Groupings

(1)

Adding rests between groups alters the rhythm of the passage allowing the player to physically and mentally prepare the next group. The rest also gives the player a chance to critique the previous group. Gradually shorten the rests until the passage sounds continuous.

Even smaller fragments can be isolated as shown in (2) of Exercise 2.3B. Measures 1-2 of grouping (2) should be practiced with both indicated bowings as reflected the actual bowings in mm. 16-17. Measures 3-4 reflect the bowings in mm. 18-19.

Grouping (3) divides each segment after the slurs, showing the start of each group alternating between up and down bows. Adding accents gives each grouping an impetus for the original phrasing.
Excerpt No. 3: Beethoven, Symphony No. 3 (Eroica), Mvt. III, Scherzo, mm. 1-119\textsuperscript{55}

This scherzo is a light-hearted sprightly movement. The spiccato used in this excerpt is slower than the spiccato in the finale of Mozart Symphony No. 39. Compared to the Mozart, the

length of the spiccato should be shorter. Multiple markings of “staccato” and “sempre pp” give a clear indication to produce a very light and short tone.\textsuperscript{56} To achieve this, the bow should bounce more vertically than horizontally. Since the dynamic is mostly pp or p, the bow hair will bounce close to the middle of the bow. When the dynamic is ff, for example in mm. 93-119, it is easier to produce a big sound by using the lower half of the bow with a more horizontal motion. Stylistically, dotted-half notes with accents or sf should taper at the end of the note. (See Example 10)

Example 10. Beethoven, Symphony No. 3 in Eb Major, Mvt. III, mm. 49-57\textsuperscript{57}

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{Example10.png}
\caption{Example 10. Beethoven, Symphony No. 3 in Eb Major, Mvt. III, mm. 49-57}
\end{figure}

Like most orchestral excerpts, it is important to keep a steady tempo. For example, repetitive eighth notes in mm. 1-8 and 15-22 often have a tendency to rush. The player should be careful not to accentuate the down bow on the weak beats so that every eighth note is played evenly. The left fingers should fall strongly in mm. 9 and 23. The strong finger action can not only maintain left hand clarity, but also avoid rushing. In measure 92, the dynamic starts from pp and grows to ff in one measure. The player should create a dramatic contrast in dynamics without rushing.\textsuperscript{58}

In mm. 112-114 the player should keep the hair as close as possible to strings E and A, which helps in executing clean and efficient string crossings. Due to the off-kilter feeling in mm. 115-117, the player can practice the passage with quarter note subdivisions to keep the steady

\textsuperscript{56} Erich Leinsdorf, \textit{The Composer’s Advocate: A Radical Orthodoxy for Musicians} (New Haven: Yale UP, 1981), 79.
rhythmic pulse. Suggested fingerings are added to mm. 57-69 to avoid excessive string crossings, which can be difficult to play evenly.

Figure 3.1. Beethoven, Symphony No. 3 in Eb Major, Mvt. III, mm. 57-69

For Clean String Crossings and Spiccato

Exercise 3.1A. Doubling

Each note is played twice. It gives the player more time to hear the intonation.

Exercise 3.1B. Double-stops

Anticipate the upcoming note which is on a neighboring string by playing two notes together like a double stop.

Excerpt No. 4: Beethoven, Symphony No. 9, Mvt. III, *Lo stesso tempo*, mm. 99-114

Main Challenges:
- Seamless string crossing and shifting
- Precise rhythms
- Intonation

Other Elements:
- Sustained sound with slow bow speed
- Shaping long phrases
- Sweet sound and vibrato

This excerpt requires great control of the bow in a slow tempo. It is important to sustain the sound, and to shape the long phrase nicely using a slow bow speed. *Son filé* exercises by

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Galamian help the development of bow control and tone production. ⁶¹ *Son filé*, is a long sustained tone where the bow draws across the string very slowly. It can be practiced on open strings in varying dynamics from *p* to *f* with *crescendo* and *decrescendo*.

Each phrase has a number of notes in one bow. The rhythmic switch between sixteenths and triplets has to be carefully counted. Galamian’s acceleration exercise from *Contemporary Violin Technique Volume One* contains various kinds of rhythmic training that could be helpful before practicing this excerpt.⁶² The bow speed in this excerpt will be slow in general but varies in many places. When many notes are played in one bow stroke, for example m. 99, the bow should travel smoothly without any disturbances in the sound. The bow arm has to be independent from the left fingers and cannot be disturbed by the left hand. While playing many notes in one bow, one can exaggerate saving the bow, for example playing the passage with only half of the bow.⁶³ Afterwards, using the entire bow will feel much easier.

Passages with constant string crossings, for instance in mm. 101, 105-106, and 112-113 require smooth right hand, wrist and arm movements to execute the *legato* lines. Exercise 4.1B shows how playing double stops can help string crossings. It is important to vibrate as many notes as possible to bring out the sweet *dolce* character. Violinists can easily neglect vibrato because there are few long notes and the sixteenth notes go by quickly. These elements must be implemented to help shape each phrase.

Finding the fingering and bowing that has fewer shifts and string crossings will help the *legato* line flow well. The music of Excerpt No. 4, shown above, has added fingerings and bowings based on my experience and suggestions from others such as Josef Gingold, William Preucil, and Helmut Mebert.

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⁶² Ibid., 64.
Figure 4.1. Beethoven, Symphony No. 9, Mvt. III, *Lo stesso tempo*, mm. 101 and 112

Exercise 4.1A. Repetition

(1) ![Musical notation](image)

(2) ![Musical notation](image)

(3) ![Musical notation](image)

Keep the bow angle between two strings as small as possible. The vertical motion from the wrist should be minimal.

Exercise 4.1B. Double-stops

![Musical notation](image)

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When crossing between two neighboring strings, the pivoting angle of the bow should be close to both strings, putting the arm level on the same plane as if playing the double stops.

Exercise 4.1C. Intonation

![Intonation Exercise](image)

While keeping the first finger down, the extended third finger should match the pitch of the previous fourth finger. In the second measure, the player should shift quickly to the first position during the sixteenth rest.

Figure 4.2. Beethoven, Symphony No. 9, Mvt. III, *Lo stesso tempo*, mm. 110

![Figure 4.2](image)

For Precise Rhythm

Exercise 4.2A. Re-articulation

![Re-articulation Exercise](image)

When switching between duple and triple rhythms with ties, it is easy to miscount. To solidify the rhythmic pulse, rearticulate the tied notes in m. 110. Then, the player can play the tie normally with mental subdivision. This passage can also be practiced with *detaché* for left hand evenness and rhythmic accuracy.

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65 Ibid.
Main Challenges:
- Light spiccato
- Clean string crossings
- Precise rhythm

Other Elements:
- Shifting
- Dynamics

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Mendelssohn’s *Midsummer Night’s Dream* has a *leggiero*, animated character. Because the middle part of the bow has lighter bow weight, it is easier to bounce the bow with the middle part of the bow to demonstrate this soft and short *spiccato*. *Spiccato* can be generated from either dropping the bow from the air or starting from the string. William Preucil suggests starting the *spiccato* from the string for the eighth notes and dropping the bow from the air for the sixteenth notes. The bow should lift after each eighth note and stay close to the string while playing sixteenth notes. Exercise 5.1A is created for the *spiccato* switching between eighth and sixteenth notes.

The rhythmic variety in this excerpt can make it challenging to keep a steady tempo for violinists. Places where the four sixteenth notes follow the eighth note, for example in mm. 17, 19, 33-35, and 37-39, are easy to rhythmically bunch together. The same tendency can occur in three successive eighth notes, for example in mm. 18, 20, 26, and 30. The tied over syncopated Ds in mm. 22 and 23 are easy to miscount if not subdivided carefully. Common rhythmic difficulties occur at the beginning of this excerpt (See Example 11).


Violinists should practice this excerpt with a metronome set to a dotted quarter note beat. As shown in Exercise 5.2D, various ways of setting the metronome on different beats will solidify the rhythm stability. 

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In mm. 41-54, it is important to choose a fingering that reduces excessive shifting and string crossings. In Example 12, the fingerings added in mm. 41-46 and 49-54 are derived from their melodic patterns. The shifting and string crossing exercises are based on one fingering possibility, but can be applied to other fingering options.

Example 12. Mendelssohn, *Midsummer Night’s Dream, Scherzo*, mm. 41-54.70

Figure 5.1. Mendelssohn, *Midsummer Night’s Dream - Scherzo*, mm. 17-2571

For Spiccato and String Crossings

Exercise 5.1A. Spiccato

Playing the simplified passage on repeated note D helps the player focus only on the *spiccato* stroke. The exercise loops the rhythm from the first two measures of the excerpt to help the player practice alternating between sixteenth and eighth notes.

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71 Ibid.
Exercise 5.1B. Expanding passage

Exercise 5.1B demonstrates how to practice the *spiccato* in m. 17 in three steps. In step (1), four sixteenth notes are played from the air, i.e. the bow is dropped from the air and bounces on the string. The player should repeat this group a number of times until finding the best contact point and amount of bow hair for the *spiccato*. In step (2), treat the eighth note rest as a preparation by gesturing an up bow stroke silently. It simulates the motion of playing up bow on the eighth note. The silent gesture helps the player learn the distance and timing that the bow needs to travel to the second beat. In step (3), play the first eighth note from the string as written in the original passage. Practicing the preparation of the second beat allows the player to be aware of precise rhythm, correct placement of the second beat, and evenness of the sixteenth notes.

Exercise 5.1C. Open strings

Playing the open strings which correspond to the notes in the excerpt allows the player to be aware of the string changes. Leaving out the left hand also makes the clean string crossings the focus of attention.
Figure 5.2. Mendelssohn, *Midsummer Night's Dream - Scherzo*, mm. 41-47

Exercise 5.2A. Shifting

In the first measure, the second finger should shift quickly and quietly right after the Eb is played. This ensures that the second finger arrives on the C before the bow moves. The rest can be gradually shortened as long as the left hand is set in the new position before the bow draws the string.

Exercise 5.2B. Rhythms

Four rhythms can be applied to the notes in mm. 41-46. It improves left and right hand coordination by changing the pace between notes. Rhythmic patterns 2-4 gradually bunch more notes together building the entire passage incrementally.

Exercise 5.2C. Subdivision

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A common problem for violinists is to play the eighth notes too long and the sixteenth notes too closely grouped. Play the theme with sixteenth note subdivisions to keep precise rhythm when playing normally. The sixteenth note subdivision can also be played by another player on note G (tonic) while the main player plays the theme.

Exercise 5.2D. Using metronomes

In this exercise, a metronome can be used in four ways. Firstly, set the metronome to dotted quarter note=85 with three subdivision clicks so that each click equals an eighth note. Secondly, set the metronome to the same tempo without subdivisions. The player should keep subdividing while listening to each click. After that, let each dotted quarter note click fall on the second eighth note, or the third note of each measure. Playing against rather than with the metronome gives an off-kilter feeling, but is good for rhythmic training.
Excerpt No. 6: Schumann, Symphony No.2, Mvt. II, Scherzo, mm. 1-55

This excerpt primarily features one type of bow technique, *spiccato*. The excerpt has a wider range in register, tempo, and dynamics compared to some aforementioned excerpts requiring the *spiccato* stroke. The bow should be entirely played off the string, except in mm. 27-28, where the stroke could be on the string for clarity.\textsuperscript{74} The dynamics are mostly above *mf* with accents in a number of spots, such as mm. 1, 3, 7, and 27-28. The player should aim for a heavy *spiccato* by playing close to the balance point, which produces a focused and articulated sound. The bow could be slightly tilted and bounce close to the fingerboard when *p* is indicated. In general, the bow should bounce close to the strings, which can facilitate smooth and clean string crossings.

Constant string crossings in this excerpt require a great control of the bow. To practice string crossings, the player can repeat each note twice in the same tempo. (See Exercise 6.3A) While the left hand is moving at half speed, the player spends more time focusing on the *spiccato*. Furthermore, the player should shape the melodic phrases, so that unintentional accents are not heard.

Schumann’s non-violinistic writing in this movement makes accurate intonation a major challenge in this excerpt. The excerpt comprises of numerous diminished seventh arpeggios, which require the left fingers to extend and contract. In Example 13, I have provided two different fingerings in measures 1, 3, 39, and 40. Both fingerings have their problematic areas.

\textsuperscript{74} William Preucil, Schumann Symphony No.2, in *Orchestral excerpts, Violin* (Tempe, AZ: Summit Records, 1998), Track 41.
For example, the top fingering in m. 1 suggests the player use the third and first fingers for the F# and Eb, and to use the second finger for the second F#. Using the third and first fingers for the augmented second creates a “contraction” for the left hand, which makes the interval easy to reach and better in tune. The same fingering is suggested to be used in measures 5 and 6, which have the same melodic patterns. However, the player needs to make sure the two F#s match in intonation since each is using a different fingering.

Example 13. Schumann, Symphony No. 2, Mvt. II, mm. 1-3 and 39-40

The bottom fingering suggests the player use the second finger for both F#s in measure 1. Using the same fingering helps the consistency of the intonation on the F#s. However, this fingering requires an extension between the first and second fingers for the augmented second interval. This can also compromise the intonation. Two options of fingerings are also provided for the A, F#, and Eb in measures 39 and 40. Both fingerings contain one extension and one contraction. If using third finger for note F#, the second finger is able to stay close to the E string for the coming notes in the same measure. This reduces excessive motion of the second finger, and thus facilitates the intonation. Violinists can choose fingerings depending on the size of the left hand and the dexterity of each finger.

It is important to keep the consistency of tempo at *a tempo* after the *poco ritenuto* from mm. 20-24 where it is a common place to slow down because the rhythm consists solely of eighth notes (see Example 14). The slowing down of the sixteenth notes in m. 20 makes it difficult to resume the original tempo.

Example 14. Schumann Symphony *No. 2*, Mvt. II, mm. 19-24

![Example 14](image)

For Smooth and Clean String Crossings

Exercise 6.1A. Doubling

![Exercise 6.1A](image)

Play with the same tempo and bow stroke as if playing normally

Exercise 6.1B. Open strings

![Exercise 6.1B](image)

Play the corresponding open strings for each note to hear string crossings.

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Ibid.

Ibid.
Exercise 6.1C. Rhythms

(1)                      (2)                      (3)                                      (4)                      (5)

Exercise 6.1C provides five rhythmic patterns. Apply one rhythm at a time to the entire passage.

This exercise should be practiced on the string in a slow tempo to ensure good left/right hand coordination.

Exercise 6.1D. Expanding passage

Add two notes at a time to a string crossing passage. This is the way to build the passage incrementally. The player should listen to the cleanness of the passage throughout.

Exercise 6.1E. Slurred bowing

The passage can be slurred four or eight notes per bow. Using slurred bowing to practice fast passages helps the player aim for legato left fingers. The left fingers should stay close to the string, and be as relaxed and smooth as possible.

Figure 6.2. Schumann, Symphony No.2, Mvt. II, Scherzo, mm. 27-28\textsuperscript{78}

\textsuperscript{78} Ibid.
Exercise 6.2A. Double-stops

Each arpeggio is played within the octave hand frame. This exercise helps tune the important first and fourth fingers, which outline the top and bottom notes of each arpeggio. While playing this exercise, the first and fourth fingers should remain on the strings while shifting up to the next octave. This hand frame should be applied to Exercises 6.2B and 6.2C. The player should listen to the pure intonation of each octave.

Exercise 6.2B. Simplified passage

Exercise 6.2B is a simplified version of the actual passage using the corresponding strings. This not only trains the left hand for intonation, but also drills the string crossings for the right hand. As Preucil suggests, this exercise can be played on the string, although his demonstration is off the string.

Exercise 6.2C. Preparation

Prepare the following arpeggio by placing the next finger on the string and pivoting the bow to the new string. This preparation takes place silently and quickly on the second beat. This ensures that both hands are well coordinated and the passage is executed cleanly.

Figure 6.2 can also be practiced with rhythmic patterns from Exercise 6.1C.
Exercise 6.3A. Shifting

Learn the distance of the shift by sounding the *glissando* between the transitional note and the arrival note.

Exercise 6.3B. Isolation

Isolate the shift without the *glissando*.

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79 Ibid.
Excerpt No. 7: Brahms, Symphony No. 2, Mvt. I, mm. 17-66 and 118-155

The printed *legato* lines over many measures are interpreted as lyrical phrases instead of actual bowings among string players. It is necessary to add bow changes to prevent the limitations and stiffness from holding a long phrase with only one bow. Bowing options have been added to the excerpt. The challenge is to keep the bow arm steady and connect each bow change as smoothly as possible while coordinating it with any shifts or string crossings. Exercise 7.1C shows how the bow travels between open strings in mm. 17-31. The mastery of smooth string crossings on open strings will facilitate the long *legato* lines that Brahms indicated.

The melody in mm. 17-31 is built with intervals, including octaves, sixths, perfect fifths, and diminished fifths, which are critical for good intonation. Those intervals can be practiced in the form of double-stop as shown in Exercise 7.1A. Exercise 7.1B breaks down the steps of shifting that occurs in mm. 23-24. Both exercises intend to help violinists achieve perfect intonation.

A number of large leaps can be seen in mm. 118-136. The dotted quarter and sixteenth note rhythm needs to be performed accurately. Since one of the common faults in audition is imprecise measurement of longer notes and rests, one way to practice the precise rhythms suggested by William Preucil is presented in Exercise 7.2A.\(^\text{81}\) An articulated *detaché* stroke is used exclusively in this passage in various levels of emphasis. For example in measure 118, Brahms indicates regular accents on the high notes and *sf* on the last eighth note followed by

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marcato. After the up bow on the low E, the bow drops from the air to re-articulate the accent on the top E after a micro-second of separation.\textsuperscript{82} Although the small separation between bow changes may not be noticeable with a fast tempo, it is necessary to articulate the accented note while crossing strings. In addition, practicing the up bow separately like collé can ensure the low E on the A string speak clearly. To execute the sf and marcato on the next note C, more arm weight should be applied after a quick retake. (See Exercise 7.2B)

Figure 7.1. Brahms, Symphony No. 2, Mvt. I, mm. 17-31\textsuperscript{83}

Exercise 7.1A. Tuning intonation with double-stops

The slur of each double stop should be played seamlessly. To help hear the purity of the intonation, this exercise can be played without vibrato.

\textsuperscript{82} It is a type of articulation in which the lower half of the bow hits the string by dropping with the arm weight from the air.

Exercise 7.1B. Shifting

The left hand shifts from fourth to second position. The exercises begin with shifting on the first finger only. When the second finger is added making the interval of a sixth, note the change from major sixth to minor sixth.

Exercise 7.1C. Crossing open strings

The player should think about the melody while playing the corresponding opening strings smoothly.

Figure 7.2. Brahms, Symphony No. 2, Mvt. I, mm. 118-125\textsuperscript{84}

Exercise 7.2A. Subdivision

Play the theme with sixteenth note subdivisions to keep precise rhythm when playing normally.

The sixteenth note subdivision can also be played by another player on note E (tonic) while the main player plays the theme.

Exercise 7.2B. Isolation

The comma represents the retake during which the arm makes a circular motion. At the end of every circular motion the bow sets on the string before drawing the sound. When the tempo is fast, the retake has to be quick; therefore the bow can land on the string by dropping.
Excerpt No. 8: Brahms, Symphony No. 4, Mvt. IV Allegro energico e passionate, mm. 33-80\textsuperscript{85}

\pbox{\parbox{1\textwidth}{
Main Challenges:
- Expressiveness
- Intonation, including extensions
- String crossings

Other Elements:
- Transitions between duplets and triplets
- Dynamics
- Phrasing
- Articulation

This movement is a chaconne constructed on an eight-measure theme. Allegro energico e passionate/ben marc. largamente in the beginning indicates a broad and passionate sound. The player should look for a sustained and focused tone production and vibrato for the expressiveness. Two bowings are commonly used in mm. 37-40: one is a separate bowing as Brahms wrote, and the other is hooked every dotted quarter note and eighth note (see Example 15).

Example 15. Two commonly used bowing styles, Brahms, Symphony No. 4 in E minor, Op. 98, Mvt. IV, mm. 33-39\textsuperscript{86}

To prevent the violinist from running out of bow, the eighth notes require a faster bow speed to match the amount of the bow that travels in the dotted quarter notes. Because a faster down bow stroke tends to protrude easily, the first type of bowing makes it difficult not to accent every eighth note in the hemiola rhythm in mm. 37-39. The second hooked bowing avoids the abovementioned problem, but could make the crescendo less convincing than the original bowing. Either way, violinists have to be careful not to let the bowing affect the intended shape of the phrase.

In mm. 56-64, the double dotted rhythms need to be executed accurately. The sound of the double dotted quarter notes should be fully sustained to continue the energy to ff in measure 62. In such a high register, the contact point between bow and strings should be near the bridge.

\textsuperscript{86} Ibid.
without sacrificing the sound quality. The hooked sixteenth notes in mm. 62-63 are played with different parts of the bow, which could be played too lightly at the tip or too heavily at the frog. The player should listen for the same sound and articulation in both sixteenth notes.

In mm. 65-80, intonation can be challenging due to a number of arpeggios and extensions/contractions of the left hand. Exercise 8.2B is created specially to train the fourth finger extension. In mm. 69-72 and 77-80, it is important to produce even and smooth string crossings with the indicated dynamics. In mm. 69-72, the off-beat melodic line alternating with the open string could cause the player to unintentionally accent the open E while trying to find the beat. By playing the passage without the open E, the player can better hear the melody thus helping steady and even string crossings (see Example 16). While using the whole bow in these bars, one should save bow in measure 72 to arrive in the correct part of the bow for the detaché in measure 73. In mm. 73-76, the transition between duplet and triplet rhythms can be challenging, combined with frequent string crossings and arpeggios. Adding accents on every eighth note beat while practicing with a metronome can establish a solid rhythmic pulse. It helps the player retain control and coordination between left and right hands.

Example 16. Brahms, Symphony No. 4 in E minor, Op. 98, Mvt. IV, mm. 69-72 (simplified version)
Exercise 8.1A. Bow distributions

To create a smooth phrase and prevent eighth notes from sticking out, the player should use a lighter and faster bow for the eighth notes while using a heavier and slower bow for the dotted quarters. By subdividing the use of the bow as the rhythm suggests, the player can better plan the bow distribution for each phrase and sustain the sound.

Exercise 8.1B. Vibrato

The * sign indicates the note is a quarter tone lower than the preceding note.

While vibrating, the finger rolls back and forth making the pitch oscillate from the main note to a lower pitch, which can be as wide as a quarter tone. Two variables of vibrato are speed and width. The fast oscillation produces fast, intense vibrato. A small deviation from the note produces a

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87 Ibid.
narrow vibrato. Playing a slow and wide vibrato gives the tone a warm quality. In any speed and width, the vibrato should oscillate smoothly to add resonance to the tone.

As indicated in Exercise 8.1B, rolling the finger a quarter tone below the main note can help develop a wide vibrato. The sextuplet and thirty-second rhythms indicate two measured speeds of vibrato. It helps the player practice vibrato in a slow, controlled fashion. This exercise also trains the left hand to vibrate continuously from note to note.

Figure 8.2. Brahms, Symphony No. 4, Mvt. IV Allegro energico e passionato, mm. 73-76

Exercise 8.2A. Extensions and contractions

This exercise breaks down measure 76 into three parts that involve extensions and contractions. The 1 with a long dash means the finger remains on the indicated note while other fingers are used. Holding the first finger down helps the player learn the distance between each finger and feel the change of hand shape during the extension and contraction.

88 Ibid.
Exercise 8.3A. Simplified passage

By playing a simplified passage from mm. 69-72, the player can focus completely on smooth and even string crossings.

Practice the exercise with three variables:

1. Tempo: quarter note=65 and quarter note=80
2. Bow placement: middle half, upper half, lower half, and full bow
3. Dynamics: $f$ and $p$

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89 Ibid.
Excerpt No. 9: Strauss, *Don Juan*, mm. 1-62

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Main Challenges:
- Rhythm
- Intonation in high positions
- Dynamics, including accents

Other Elements:
- Articulation
- Character

The heroic and brilliant character of this excerpt must be conveyed by the performer as the rhythm should be vigorously counted. Excerpts containing rests and tied notes are common places where the rhythm can be easily miscounted. The following measures have rests and tricky entrances: 5, 37, 40-41, 42-43, 44-45, and 48-50. Indications of the beat in mm. 40-45 are added in Example 17 to help counting. The tempo should be consistent with the only exception being in measure 48 where the player can relax the pace as indicated (tranquillo).

Example 17. Strauss, Don Juan, mm. 40-45\(^{91}\)

While playing in high positions in ff, the bow should remain close to the bridge with appropriate bow speed and weight to produce a brilliant sound. Since the dynamics are mostly marked ff, the player should make a distinct contrast when p or pp are marked, such as in mm. 43-44, 48, and 52-56. All accents should be emphasized and strongly articulated. It is easy for the player to overlook accents on weak beats, such as the sixteenth notes in mm. 9, 13, 15, and 21.

Intonation is always a challenge in this excerpt due to the large leaps in high positions (mm. 9-15), shifts in rapid passages (mm. 35-36), and chromaticism (mm. pick up to 52-59). Fingerings are provided in mm. 12-15. Exercise 9.1A will focus on two areas: measure 13 (D to

\(^{91}\) Ibid.)
F) and measure 15 (B to B). In measure 13, the fourth finger on D shifts four positions down to a new finger on F via a transitional note, A.

Difficult passages in mm. 35-36 and 51-59 should be divided into small groups according to the fingerings, as shown in Example 18 and practiced slowly. Different rhythmic patterns are provided in Exercise 9.3C to help left and right hand coordination.

Example 18. Strauss, Don Juan, mm. 35-36 and 51-59

The excerpt is mostly played on the string, except mm. 17-20 and the pick up to mm. 52-59. The latter is when light *spiccat*o should be applied to separate the triplet eighths. The *spiccat*o should be played in the middle of the bow with the bow slightly tilted so that less hair contacts the strings. It should still have enough bow hair to produce an elastic and crisp sound. In addition, mm. 23-26 can be played with a heavy brush stroke or on the string.

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92 Ibid.
Exercise 9.1A. Shifting

Measure the distance between two notes by hearing the *glissando* during the shift. In the second measure, the shorter travelling time between D to F trains the shifting finger to anticipate as early as possible. Although the shift can be executed with a jump in which the fourth finger does not stay on the string, this exercise helps the player recognize the precise distance, and secures the shift from D to F.

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93 Ibid.
94 Ibid.
Exercise 9.2A. Simplified passage

Recognize the intervals between the first notes of each triplet.

Exercise 9.2B. Silent note

Mute every third note of each triplet in parenthesis. Finger the passage normally with the left hand but without bowing the third note of each triplet. Apply the same method to the second and first notes of each triplet. Hearing fewer notes helps the player better focus on the intonation.

Exercise 9.2C. Loop

Play the broken chord forwards and backwards to train the extension of the left fingers. The positioning of the left arm and thumb is established when practicing this exercise. The position is correct when the fourth finger does not over straighten while playing the top note.
Exercise 9.3A. Transitional note

Anticipating the note after each rest, rhythmically place the left finger of the silent note in preparation of the note that will be played. This will improve the left hand choreography and the difficult fingering transition.

Exercise 9.3B. Groupings

Each passage is divided into smaller groups based on its fingerings and intervals. Practicing in groups helps the player distinguish the whole and half steps between each note, and memorize the passage and finger patterns easily.

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95 Ibid.
Exercise 9.3C. Adding rhythmic patterns

Five rhythmic patterns are provided in this exercise. Each rhythmic pattern should be applied to every note in the chromatic passage from mm. 52-59. It improves left/right hand coordination by varying the pace between notes.
Excerpt No. 10: Prokofiev, Symphony No. 1, Mvt. I, mm. 1-85

Main Challenges:
- Mixed bow strokes
- Rhythm
- Dynamic contrast

Other Elements:
- Intonation
- Character
- Tempo⁹⁷

As the title *Classical* suggests, this symphony was written to mimic a classical style. It catches the lightness and economy of Haydn and Mozart, yet has its own wit and charm in the twentieth century musical language. “The mood of the piece is naturally exuberant.”⁹⁸ The excerpt is littered with numerous dynamic indications, which includes accents. It is important to distinguish these dynamics as specifically as possible in performance.

Steady tempo, precise rhythm, and dynamic contrasts are essential in every orchestral excerpt, but are more problematic in this one. The challenge is being able to maintain the brisk indicated tempo while precisely executing the rhythm and sudden dynamic changes. For example, the extreme dynamics between *ff* and *p* in mm. 1 and 3 can affect the steadiness of the tempo, rhythm, and bow strokes. When there is extreme dynamic change, the arm muscle needs more time to react. The right arm should remain relaxed while dropping the dynamic from *ff* to *p*. Tension in the right arm can cause rushing in the *p* eighth notes. Exercises 10.1A and 10.1B are written to help train the muscle gradually by starting with a very small segment and expanding it little by little.

Two or more consecutive *spiccato* up bows, *collé-* *spiccato* throughout passages such as in mm. 3-4, 21-22 and 50-51 should be light, even, and articulated. Using the *collé* stroke in Exercise 10.2A is a precursor to gain better bow control of the consecutive up bow *spiccato*. From measure 45 where *sul punto del arco* is marked, playing string crossings close to the point naturally creates a bigger vertical motion for the upper bow arm, for example in mm. 46-49. The

⁹⁷ The correct tempo should be half note=100, rather than the eighth note=100.
excessive forearm motion should be limited to cross strings effectively in \textit{pp}. Hence, using only a small amount of bow is recommended for this section.

Figure 10.1. Prokofiev, Symphony No. 1, Mvt. I, mm. 1-6\footnote{Sergey Prokofiev, Symphony No.1, ("Classical Symphony"), Op.25, Mvt. I (Paris: Editions Russes de Musique, n.d.1922), first violin part.}

Exercise 10.1A. Expanding passage

One of the many challenges in this passage is to keep a fast steady tempo while executing mixed bow strokes with drastic dynamic changes. Practicing one small segment from the end of the passage and expanding it backwards one note at a time makes each elements easier to combine and execute.

Exercise 10.1B. Increasing contrasts
Four different dynamic levels are shown in the passage, starting with a moderate dynamic contrast. By increasing the dynamic contrast, the right arm muscles are gradually trained to react to the dynamic changes.

Figure 10.2. Prokofiev, Symphony No. 1, Mvt. I, mm. 11-23 and 50-52

Exercise 10.2A. Collé

While playing the *spiccato* with all up bows in measure 50, the bow should bounce in the same part of the bow (just below the middle) for every note. Thus, the bow needs to retake after every note. In Exercise 10.2A, the right hand and arm retake the bow in a circular motion. The same motion is used in a *collé* stroke. Measure 1 of the exercise derives from measure 21-22 in the excerpt. Although the bow travels during the three up bow spiccato, practicing *collé* helps articulation. Measures 2-4 should be practiced in the same way. The open strings correspond to the notes in measure 50.

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100 Ibid.
Exercise 10.2B. Isolation

Exercise 10.2B refers to mm. 11-12 in the excerpt. This bowing is drilled by focusing only on the right hand. The first step secures control of the two up bow *spiccato* in *p* only. Then the original dynamic can be added. The bow arm should quickly relax after playing the down bow in *ff*.

Exercise 10.2C. Open strings

This exercise is similar to the previous exercise, but adds an extra eighth note up bow to the repeated *spiccato* pattern. The open strings correspond to mm. 21-22 in the excerpt. The exercise should be played in *p* without any unintentional accents on the down bows. By practicing only the open strings, the player can focus on the evenness and cleanness during the string crossings.
CHAPTER IV

CONCLUSION

This research presents the idea of using standard violin excerpts as technical studies.

Each of the selected excerpts not only demands various and mixed techniques, but also is a part of exquisitely composed large symphonic works. Galamian states in his book:

Whenever technical problems are encountered, they must be analyzed to determine the nature of the difficulty: intonation, shifting, rhythm, speed, a particular bowing, the coordination of the hands and so on, or a combination of several of these. Each difficulty should be isolated and reduced to its simpler terms so that it will be easier to devise and to apply a practice procedure for it.¹⁰¹

By providing analytical and practical exercises for each excerpt, this research gives violinists a better understanding of how to establish violin techniques, and demonstrates how orchestral excerpts complement scales and etudes as an educational tool.

APPENDIX A

EMAIL COMMUNICATION WITH AMY SEDAN
Dear Ai-Wei,

I have attached both a list from this past audition (2012), as well as a list from 2005. I hope that these are helpful.

Best,

Amy

Amy Sedan
Orchestra Personnel Administrator

SAN FRANCISCO SYMPHONY

asedan@sfsymphony.org

sfsymphony.org

From: Ai-Wei Chang
Sent: Sunday, February 24, 2013 11:24 PM
To: Sedan, Amy
Subject: Questions about Audition Repertoire for Violins

Dear Orchestra,

I am Ai-Wei Chang, a DMA violin student at University of North Texas, and working on my dissertation about orchestral audition repertoire for violin right now. I am trying to get the collection of the last 5-10 years of violin repertoire from several top orchestras in America, and try to see if there is any different or change for each orchestra in these past decade. The problem is most of the orchestras only have the current list, and that is only when they have openings. Would you please help me to complete with the list of your orchestra? The information is going to be confidential and only be used for the research. Thank you very much.

Sincerely,
APPENDIX B

LIST OF FREQUENTLY REQUESTED VIOLIN EXCERPTS
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<th>Orchestras</th>
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<td>Schubert</td>
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<td>Finale: mm. 1-C</td>
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<td>Debussy</td>
<td>La Mer</td>
<td>Mvt. II: #19-20 and #33-39 Mvt. III: #47-48</td>
<td>5 -LA Philharmonic, NY Philharmonic, Pacific, Cleveland, Milwaukee -LA Philharmonic</td>
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<td>R. Strauss</td>
<td>Don Juan</td>
<td>Complete mm. 1-5 before D/ to 63/to 13 after C (First page)</td>
<td>5 -Detroit, Chicago (2), Boston, NY Philharmonic -Detroit, Cleveland, Philadelphia, LA Philharmonic (2), Phoenix, Milwaukee, San Diego (2), Pacific, Richmond</td>
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<tr>
<td>Composer</td>
<td>Work</td>
<td>Measures</td>
<td>Performers</td>
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<td>Schoenberg</td>
<td>Variation op. 31</td>
<td>mm. 391-434</td>
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<td>Pulcinella Suite Tarantella: mm. 5-#57</td>
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<td>Stravinsky</td>
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<td>Mvt. I: #7-#13</td>
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<td>Stravinsky</td>
<td>Dumbarton Oaks</td>
<td>Mvt. I: mm. 1-3 before #6 4 before #14 to #20</td>
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<td>Prokofiev</td>
<td>Symphony No. 1 &quot;Classical&quot;</td>
<td>Mvt. I mm.1-B mm. 1 to 4 after H/mm. 1-85 (or 90) mm.1-61 Mvt. II: Complete or mm. 1-20/C Mvt. IV: Complete mm. 1- H mm. 1-7 after C</td>
<td>NY Philharmonic, Detroit (4), NY Philharmonic, Milwaukee, Richmond -Phoenix</td>
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<td>Boston</td>
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<td>Copland</td>
<td>Symphony No. 3</td>
<td>Mvt. IV: pickup to 5 after #90 - #93 (or #90-99)</td>
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<td>Shostakovich</td>
<td>Symphony No. 5</td>
<td>Mvt. I: #9 - #12 mm.1- #15 mm.1- #26 #22 to 26 #29 to 39 (#32-39) Mvt.IV: 2 before 113-115</td>
<td>Chicago (2), LA Phil NY Philharmonic, San Diego (2)</td>
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Note: This table includes commonly abbreviated names for orchestras.
APPENDIX C

SELECTED EXCERPTS UNDER TECHNICAL CATEGORIES
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<tr>
<th><strong>Spiccato</strong></th>
<th><strong>Legato</strong></th>
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<tbody>
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<td>Beethoven Symphony No.9, Mvt. III</td>
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<td>Brahms Symphony No. 2, Mvt. I</td>
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<td>Brahms Symphony No. 4, Mvt. IV</td>
</tr>
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<td>Prokofiev Symphony No.1, Mvt. I</td>
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<td>Strauss <em>Don Juan</em></td>
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<th><strong>Mixed Bowings</strong></th>
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<td>Schumann Symphony No.2, Mvt. II</td>
<td>Strauss <em>Don Juan</em></td>
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<td>Brahms Symphony No. 4, Mvt. IV</td>
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BIBLIOGRAPHY

Books and Journals


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