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An Analysis of the Violin Concerto of Johannes Brahms

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Abstract

An Analysis of the Violin Concerto of Johannes Brahms

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The violin concerto by Johannes Brahms is a part of the major repertoire of violin literature. It was written for a Hungarian virtuoso violinist, Joseph Joachim. Joachim's input on this violin concerto is tremendous and the cooperation between Brahms and Joachim can be seen in their correspondences. The fact that this violin concerto was written for a most famed and virtuoso violinist of that time suggests its difficulty. The concerto requires tremendous technique from the violinist performing the work. An added problem to the difficulty in technique is that the technique

used is very unviolinistic. It is almost pianistic rather than violinistic when arpeggios are used in the exposition of the first movement. Despite the virtuoso and pianistic nature of the technique, it serves the music. There is no meaningless technique which is why this piece is among the major violin works.

The main body of this dissertation is a comparison of fingerings in eight different editions. The fingering is a topic that many great pedagogues have written about. The importance of choices in fingering is passed on from teacher to student in every studio. The fingering should provide a technically easier solution to the problem, while still serving the music. However, there can be many different fingerings which serve both technique and music. The rationale for the ultimate fingering is presented here. Also, many well-known formulas in violin fingering are described according to the examples that are given. The search for the best fingering for oneself can be an arduous task, however the knowledge gained by trial and error forces one to be more aware of different fingerings and their influences on violin playing.

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Acknowledgment

I would like to thank Professor Ronald Patterson and Professor Craig Sheppard for their time, guidance, direction, and thoughts in the preparation of this dissertation. I would also like to thank my other committee members, Professor Toby Saks, and Professor Lawrence Halpern. I would also like to sincerely thank Mr. and Mrs. Brian Watson for their careful reading and many thoughtful comments and corrections. Lastly, I would like to thank my mother and brother for their love, concern, support, and encouragement.

Dedication

To my mother and brother

Introduction

The violin concerto by Johannes Brahms is a monumental work. Since its controversial inception, it has become a part of the major literature for violin. It is highly regarded for its embodiment of musical nature, with virtuosic technique which only serves the music. Due to this, it joins the other violin concertos by Beethoven, Mendelssohn, Tchaikovsky and Sibelius as being a most studied and played piece.

In chapter one, the close relationship between Joseph Joachim and Brahms is looked into, and the outcome of their long correspondences which steers and helps create the piece is described.

In chapter two, the concerto is analyzed for its form. Knowledge of the form helps to organize the piece in our minds, and affects our interpretation of the piece.

In chapter three, the fingerings from eight different editions are compared. The topic of the fingering has been written on by many great pedagogues and soloists. To mention a few of them, they are Carl Flesch, Ivan Galamian, Joseph Szigeti, and I. M. Yampolsky. The right fingering helps create a wonderful musical line and eases the difficulty in a certain passage. Carl Flesch notes, "Technically it should be governed by the rule that calls for a minimum expenditure of effort. Musically it should carry out the intentions of the composer and thus conform to the rules of a stylistically

correct performance."[1] Another great pedagogue, Ivan Galamian says, "Musically, the fingering should assure the best sound and finest expression of the phrase; technically, it should make the passage as easy and as comfortable as possible."[2] Both pedagogues suggest great ideas about the ideal fingering. However, if there is one ideal fingering, would it suit everyone? Why are there eight different fingerings intended as their own ideal fingering by each of the editors? These questions will be debated as the different editions are compared. In addition, many formulas pertaining to particular problems will be suggested.

Chapter I

Historical Background

Johannes Brahms composed his violin concerto in 1878 during his summer months stays at Pörtschach on the Wörthersee. The violin concerto was among many other works Brahms had composed at Pörtschach in the years of 1877 - 79. Other works that were composed in that period are 18 songs of opp. 69 - 72 of 1877; symphony no. 2 in D major, op. 73; motet 'Sarum ist das Licht gegeben'; in 1877 - 78, five of the eight piano pieces of op. 76; in 1878 - 79, violin sonata no. 1 in G major, op. 78 and in 1879, the two rhapsodies for piano, op. 79.

The concerto was first performed in Leipzig Gewandhaus on the New Year's Day of 1879 by Joseph Joachim, to whom the piece was dedicated, with Brahms conducting. Joachim had great influences on Brahms over the composition of the concerto. From the time Brahms began working on the concerto in August of 1878 until it was published in October of 1879, they had correspondence and meetings to further improve the piece. Malcolm MacDonald describes some of their correspondences,

> "Principally Brahms involved him in the evolution of the solo part, and Joachim provided alternatives and variants to Brahms's original conception wherever he deemed a passage unwarrantably lacking in 'violinistic' qualities, or requiring enhancement in terms of the instrument's

> capabilities to bring out its musical essence in the most effective way. He also suggested adjustments in the orchestral textures - usually thinning them out to provide a better balance so the violinist would not have to 'force' his tone in order to be heard."[3]

Joachim's knowledgeable suggestions as a violinist to Brahms in composition of the violin concerto was one of the factors that influenced Brahms. Here again, their arduous and demanding work is described by John Horton.

> "On the whole, Joachim was pleased with the solo part, but confessed that he could not judge the work fairly without a score and playing it through under concert conditions. Brahms, as usual urged him not to be too lenient, saying that he would have preferred to go through the work with a less accomplished player to make sure that his demands were reasonable; it was well known that few living violinists could equal Joachim's command of virtuoso double-stops and extensions and fewer still had his musical insight."[4]

The other factor that influenced Brahms in his composition of the violin concerto was Joachim's background. As Joachim being a Hungarian, Brahms composed his third movement of the violin concerto in the manner of 'alla zingarese', in Hungarian manner. This was done out of respect for Joachim, who dedicated his own violin concerto in the Hungarian manner to Brahms.

The violin concerto is a symphonic work. It had four movements in its conception, however the slow movement and scherzo were later replaced by what is known as a 'poor Adagio' in Brahms's own description of the movement in his correspondences. The four-movement concerto would have been

very symphonic in structure if Brahms had retained it as it was. Although, the structure has been changed to a regular three-movement concerto format, the character of the violin concerto is symphonic. The second symphony composed a year before the violin concerto in 1877, at the same summer resort of Pörtschach - am Wörthersee in Carinthia, shares the same character with the violin concerto. They share many things as described by Michael Musgrave,

> "in the common moods of their movements, symbolized by shared key, metre, triadic shape of opening themes and orchestral colour - warm lyricism coexisting with a rhetorical manner which results in identical rhythmic figures at one point....they complement each other as different expressions of this aspect of Brahms's mature language."[5]

Malcolm MacDonald even points out that the violin concerto is a natural successor to Symphony no. 2,

> "In fact the concerto is in many ways the natural successor to Symphony no. 2 - in the same key, D major - and the similarities are especially strong in the first movement, whose resemblance to that of the symphony Clara Schumann commented upon the first time Joachim and Brahms played it over to her. Here again is a spacious and apparently leisurely 3/4 design, warmly romantic in its instrumental colouring, its themes built upon a triadic foundation and though not especially extended in themselves, seamlessly evolving one from another into huge paragraphs, and seldom far removed from the character of a calm yet passionate waltz."[6]

Brahms was well honored by society. In 1874, Brahms received the Order of Maximilian - 'much to the disgust of Wagner'[7] and in 1877 Cambridge University tried to award Brahms the honorary Doctorate in Music. It was not given because Brahms didn't like the sea-crossing which, prevented

him from traveling there to receive the award. In 1878, Brahms received a gold medal from the Royal Philharmonic Society of London which didn't require him to be in England to receive the award. In 1879, University of Breslau awarded Brahms an Honorary doctorate. The certificate, which referred to him as 'vir illustrissimus....artis musicae severioris in Germania nunc princeps' ('First among contemporary masters of serious music'), was criticized by Wagner in his article 'Über das Dichten und Komponieren'.

The violin concerto had been praised for its virtuosity and symphonic qualities and put beside Beethoven violin concerto, however it was criticized by biographers of Brahms and violinists. Emil Krause, the biographer of Brahms said 'inexorable and imposing gravity'[8] and 'clumsy and almost devoid of flexibility'[9] for its grand expression. Josef Hellmesberger, the violinist said, Brahms's violin concerto, op. 77, was a concerto 'not for, but against the violin'[10] and Bronislaw Hubermann, the violinist, said that it is 'for violin against orchestra - and the violin wins!'[11]

Chapter II

Structural Analysis

First Movement

The first movement is in a sonata form. It begins with a first theme material in a lengthy introduction by the orchestra. The theme develops and reaches the quiet section in measure 41 which leads to the second theme material in measure 65. The second theme material dies away and the orchestra suddenly bursts to prepare for the entrance of the solo violin. The solo violin enters with a strong statement in martelé followed by a series of chords which bring on the long arpeggio section. After the long arpeggio section, the solo violin finally reaches the first theme in measure 136. The first theme is worked out with its beautiful melodies until it reaches the strong chords in measure 164. The chords again turn to the arpeggio section which further works out. The second theme is introduced in measure 202 with the orchestra and is quickly passed onto the solo violin in measure 204. The solo violin bursts in with a theme in chords that was presented in the orchestral introduction. This leads to an intense section that finishes the exposition. The development section has a soulful melody that soon turns into a dreamy passage. After a sudden forte section, the solo violin enters with an angular material. The recapitulation

begins at measure 389. The coda begins at measure 527 following the cadenza.

Second Movement

The second movement is in three-parts. The A section begins with the melody by the solo oboe with orchestral accompaniment. Finally, the solo violin takes over the melody in measure 32. The B section begins at measure 56 with a passionate solo violin melody. After an undulating and fiery section, the solo violin returns to the A section in measure 78 with the melody played by the orchestra.

Third Movement

The third movement is in a rondo form. The A section begins with a cheery theme by the solo violin and crisp accompaniment underneath it. After a theme played as a double-stops by the solo violin, the B section begins in measure 35 with light solo violin and accompaniment. This soon turns to a series of scales in legato which brings in another rhythmic melody by the solo violin. The solo violin reiterates the main melody in measure 93 which indicates the return of the A section. After the condensed version of the A section, the C section begins in measure 108 with graceful arpeggios. In measure 143, the solo violin enters with the materials from the B section. Finally, the solo violin brings in the main melody from the A section in measure 187. The A

section leads to a new section that starts with solo violin alone in measure 222 where the materials are worked out. This section again finishes with a small cadenza by the solo violin in measure 266. The coda begins at measure 267 with a faster tempo marking. In the coda, the melody from the A section is rhythmically reshaped with a quarter note and a triplet. The coda finishes with subito forte chords.

Chapter III

Comparison of Editions and Critical Annotations

In this chapter, the fingerings of eight different editions of the first movement will be compared. They are:

(a) Francescatti (given with the musical example)

(b) Zimbalist

(c) Menuhin

(d) Auer

(e) Joachim

(f) Busch

(g) Klingler

(h) Flesch

Ex. 1, mm. 90 - 94 (Fold out: p. 99)

At measure 90, (c) starts with the fourth position, then moves to the third on G#, which is unnecessary since you can start in the third position and eliminate the shift. The shift itself could be done with the extension but that could negatively affect the intonation. At measure 93, (c) begins F with the fourth finger then shifts down to D with same finger. This is not an ideal shift since the fourth finger is weaker than the other three fingers and it could have an impact on producing the sound. Although the first six notes on the G string would have a powerful found.

The fingering of (g) at measure 93 would not be very even. The first and second triplets are played on the G and D strings. The Fs that are played on the D string would be much weaker than the notes on the G string and cause the passage to be uneven in the sound and the color.

The fingering in (h) is good except the skip of the D string in the second triplet to the third triplet could pose a problem for the comfort of the right hand.

The fingering of (f) is even throughout the strings but it is less powerful than the fingerings which start the triplets on the G string.

Ex. 2, mm. 95 - 98 (Fold out: p. 99)

At measure 97, the fingering of (f) has a shift to a first finger on the third beat. The stretch from the F to G# and G# to A is not natural for the fingers and could not be done technically well.

The fingering of (g) combines the extension and contraction of the fingers within the first two beats. The C# with the third finger gives the feeling of extension after having played the Bb with the second finger. The G# is contracted to avoid the possible stretch from the F, however this combination of extension in the first beat and contraction in the second beat causes the fingers and the mind to work harder.

The fingering of (c) has the good intention of starting measure 97 on the G string, but the portamento on the first two notes could be audible since it is under the slur. The contracted hand position within the first two beats is much easier to execute than the fingering of (g).

Ex. 3, mm. 98 - 102 (Fold out: p. 100)

The fingering of (a) at measure 100 is not a simple solution. Since it involves an extension and a shift consecutively to reach the fourth position, it is risking the intonation. Also, the downbeat of measure 101 has a fingered octave which again adds to the problem of the intonation. In measure 101, (a) uses two shifts in a row to reach the third position, which is unnecessary and precarious. The elimination in one of the shifts makes the whole passage easier and brings stability of position to the hands.

In the fingering of (b) at measure 98, D# is moved to E by the third finger, ending the passage at measure 99 with the fourth finger. The half-step shift on D# is ideal since it reduces the distance the finger has to move. However if you have a weak fourth finger, it would be much easier to end the passage with the third and second finger on the sixths.

As in the fingering of (a), the fingering of (c) uses two shifts in a row at measure 98 and 101. As before it is much better to use fewer shifts and specially not in a row for the hand to feel the security of the positions and to

reduce the risks of bad intonation involved in consecutive shifts.

The fingering of (h) at measure 101 uses the shift from A# to B, then an extension to D. The risk of getting the D out of tune after the shift is very high and is even higher when reaching the F# octave with the fingered-octave.

Ex. 4, mm. 102 - 111 (Fold out: p. 101)

The fingering of (a) at measure 110 uses a shift from Bb to G with the same finger. The portamento could be heard from the shift and this could be avoided by using the fingering of (e).

The fingering of (e) uses an extension from the Bb to G and thus avoids any portamentos. Also the shift at measure 107 could be avoided if you follow the fingering of (h).

The fingering of (h) uses the break of the two slurs and the bow change to shift. This avoids any possible portamentos.

The fingering of (b) at measure 110 uses a shift between the C# and Bb with the fourth finger. This fingering has a personal touch of the editor and the style of the time when it was used frequently, however this fingering would not fit the modern-day violin technique which requires fewer portamentos.

At measure 110, the fingering of (d) presents a solution to the problem of portamento. It uses the extension between

C# and Bb. Unlike the fingering of (e), its use of the stretch between the fourth and third finger could replace the stretch between the first and second finger.

The fingering of (c) at measure 107 uses the first finger to shift to D. This portamento could be heard since it's under the slur. However, a bigger problem arises after the shift when you use the third finger for F and the fourth finger for G#. It is awkward for the hand to stretch a minor third from the third finger to the fourth. Thus, shifting at the last two notes is a better solution. Shifting between the slurs as in the (h) would be an even a better solution.

The fingering of (g) at measure 107 shifts to the third position quite early and stays in the third position for the next two measures. The early shift to the third position causes the hand to combine the extension and the contraction for measure 107. This combination and mixture of extension and contraction of the hand is wasted energy for both the hand and the mind. Also, it could cause an intonation problem by mixing the extension and the contraction. At measure 109, the last note C is shifted up to C# in the next measure by a half-step. Although the shift is not under a slur, it could disrupt the momentum of the finger action. The previous two measures do not have any shifts and the fingers act as hammers. However, if a shift occurs after those measures, it could disrupt the movement of the fingers. Also, the sound would be less clear than when the other finger is used to

avoid the shift. In measure 111, the fourth note C# with third finger and the fifth note E with the fourth finger cause a problem. It is an awkward stretch of a minor third. This could also cause an intonation problem. Also returning to the first position at G with the third finger is difficult for the hand after playing prior passages in the half position. The half position, which is a contracted hand position, is less strong and articulate than when the passage is played in the first position, which is more open for the fingers.

Ex. 5, mm. 112 - 120 (Fold out: p. 101)

The fingering of (a) at measure 117 shifts from third finger to third finger in the last beat. This shift with the same finger could bring out an unwanted glissando. Also, the pattern of the strings that are played by the right hand is disrupted. For instance, from the last beat of measure 116 to second beat of measure 117, we have had the string pattern of E-E-A-D and D-A-E-E. Shifting to F on the A string causes a break in the pattern and this could also affect the right hand. Thus, keeping the string pattern and shifting to the last note of the measure 117, as in the fingering of (d), is a much better solution.

The fingering of (c) at measure 115 is an inventive one to avoid the shift to the last note. It uses a stretch between the G and Bb, last note instead of a usual shift.

However if this passage is played spiccato, the portamento will not be heard as much as when it is played détaché. At measure 117, the fingering of (c) once again uses stretches to avoid shifts. The avoidance of shifts could eliminate unwanted glissandos and portamentos. However, this fingering is very difficult and could jeopardize the whole passage. The stretch between the second and third finger is more uncomfortable than the stretch of first and second or third and fourth finger. When this stretch of second and third finger occurs within a fast and legato section, the passage could be inarticulate. Also, it could pose an intonation problem.

The fingering of (g) at measure 114 uses the contraction of the hand for the whole measure. Unlike the fingerings that use extension, it is less free and open, and very restricting for the hand. Also the passage played in the second position could bring the intonation problem. In measure 115, the shift from the third finger to the second is problematic. Unlike the shift from G to Bb, the shift from C# to E is a greater distance to travel. Since you are traveling from C, where the second finger is, to the E, you are actually traveling two whole steps as opposed to one and a half steps in the shift from G to Bb. The shift itself is uncomfortable due to the C# played by the third finger which is a contraction of the hand.

Ex. 6, mm. 121 - 135 (Fold out: p. 103)

The fingering of (a) at measure 130 uses the fourth finger for both G# and D#. The G# follows the G which is a half-step away and the D# follows the C# which is a whole-step away. The G# has to be played with the fourth finger in accordance with the chromatic fingering. However the D# is much better with the third finger. Since there is not the D between the C# and D#, using the third finger will open up the hand and will give a different feeling for each passage. At measure 131, the last beat is all in the third position, then shifts to the fifth position in the downbeat of the next measure. It is a long and therefore precarious shift. At measure 134, the shift between the G and E could cause an unwanted portamento.

The fingering of (d) at measure 132 moves up to the third position early enough, and avoids the big distance of the shift found in the fingering of (a). At measure 134, the first finger shift of E to B seems to bring more portamento than the fingering of (a). This is due to the greater distance the finger has to move.

The fingering of (f) at measure 121 brings an wanted portamento between D and B. This could be avoided by shifting on the beat to the D with the fourth finger. Shifting on the beat also corresponds to the natural pulse of the beat. At measure 132, the shifts from the first position to the fourth position and fourth position to seventh position are large

distances for the hand to cover. Even though the shifts do not occur consecutively, they are too frantic for the hand. At measure 134, the effect of the third finger portamento is quite nice, using the drop of the fourth finger at the end.

The fingering of (e) at measure 121 shifts in every beat. This measure is a precarious place for intonation and one of the shifts could have been avoided if the first finger had been shifted earlier in measure 120. From measure 130 to 133, (e) provides an another solution in last minute shifts to measure 133. This fingering moves up to the third position in measure 130 and to the fifth position in measure 131 and remains there until it gets to measure 133.

The fingering of (g) at measure 127 shifts to E with the first finger. This shift is unnecessary and it could have been avoided by staying in the fifth position and stretching for the G. At measure 130 and at 131, the fingering is 3-2-3-2 sequence for the ascending chromatics. The use of 3-2-3-2 slows down the passage and cause an intonation problem. The usual chromatics fingering of 1-2-1-2 sequence is much more articulate and fast. However the best solution for these measures is staying in the position and using the conventional chromatics fingering which is 0-1-1-2-2-3-3-4. This fingering would be more appropriate since the whole passage could be stayed in one position.

The fingering of (b) at measure 125 shifts up on the G string. This fingering allows the musical indication of

espressivo to come out by using the rich and sonorous sound of the G string. At measure 126, the F# on the D string suits the crescendo mark of editor's. Since the D string is softer than the G string, it is appropriate here to begin on the D string to build the crescendo. At measure 127, the distance of the shift to the C# is quite large and could pose an intonation problem. This could have been avoided by shifting earlier to the third position. The shift from D to E with the second finger is also unnecessary. The G could have been reached from the fifth position.

The fingering of (c) at measure 122 is precarious. The two extensions between the A and F# and F# and A are an excessive use of energy. Also, the two extensions in a row are a danger to the intonation. However, playing the first note A on the A string distinguishes the color of the passage from the previous measure which is on the E string. At measure 129, the shift of A# to B with the first finger is inarticulate. Unlike the next measure, where it can not be avoided between the D# and E, here, first to second finger followed by an open A string would bring a more cleaner passage. At measure 132 there are two consecutive shifts between the third note through the fifth note. This causes the passage to be inarticulate. The two shifts in a row in a fast passage do not permit the hand to be in position, thus the hand would feel insecure. Also the first finger shift from D# to E would be less articulate than when it is done by

different fingers without the shift. At measure 132, the shift is made to the last note of that measure and to the second note of the next measure. The shifts in both measures are made to the weak beats of the measure. When this occurs, the weak beats are accented by the movement of the hand. This could result in unwanted accent and musical problem.

The fingering of (h) at measure 128 reduces two shifts to one shift. Instead of a shift from D to B#, the first finger is used on the B#. The first finger on B# could be thought of as a C natural enharmonically or as a B# itself, whichever is comfortable for the performer. At measure 129, on the third beat, a contraction of the hand is used for the G, E# and F#. This contraction is good in that it keeps the hand in the half position, however it could be inarticulate. As usual the contraction makes the hand less free and, especially when the fingering involves the upper fingers in contraction, it is less likely to be strong in finger articulation.

Ex. 7, mm. 136 - 151 (Fold out: p. 104)

At measure 144, the fingering of (a) uses the second finger for F#. This fingering is useful when one would like to have a small break between the previous note D and F# itself. Otherwise it is difficult to play a legato between these notes, especially when you are crossing to the lower string with the same finger. The way to play the two notes in

legato is to put the finger very flat which can, then, grab the lower string as it shifts downwards. At measure 146, the fingering of (a) goes up to the G string on the D#. This utilizes the rich and powerful tone of the G string. As the intensity of the phrase builds, this use of the G string aids the musical intensity. This fingering comes down to the first position on B# in the next measure, measure 147, to get a stronger sound in the phrase and to avoid the weakness of staying in the A string.

At measure 141 the fingering of (g) uses two shifts in a row, moving from D to A and A to F#. This could result in unwanted portamentos twice in a row unless the first shift is stretched. The first finger could start stretching early so that the glissando is avoided. At measure 144, the fingering of (g) stays in the second position. This enables the player to connect the phrases more easily and comfortably. At measure 150, (g) uses second finger on the first note. The second finger is proceeded by the fourth finger which causes the hand to contract and this may not be a very simple solution. Another possibility is to get E by shifting back up again to the sixth position after having played the F#. However, this would all be eliminated if F# was played with the third finger.

At measure 141, the fingering of (e) avoids two shifts in a row by shifting to the D with the fourth finger. Unlike the fingering of (g), (e) also avoids possible portamento in

measure 140 by shifting on the beat where the stress is. This shifting into measure 141 could also use the bow change to hide any unwanted glissandos. Finally, shifting and staying in one string keeps the color of this phrase unified. At measure 150, (e) is left with the third finger on the downbeat for the trill. The trill with the fourth finger is much weaker and takes much more effort than the trill with third finger. Obviously, a violinist should not avoid the fourth finger trill so that he or she is unable to trill when there is no other possible finger to trill with. However, when third finger is giving much more power and strength than the fourth finger, the substitution of the fourth to third finger for the trill is advantageous.

At measure 144, the fingering of (f) slides up from C# to D with the second finger. This sliding up a half-step gives a more romantic effect than the fingering of (b) which uses different fingers for the grace note and the note with the trill.

At measure 141, the fingering of (c) uses a harmonic for A. The harmonic could give a nice effect as the phrase dies away. However, it could also stick out since the harmonic is the only note that can not be vibrated. The only way to incorporate the harmonic in this phrase would be to vibrate other notes without much speed and intensity. In measure 147, (c) stays on the A string in the last triplet and changes to the E string on the last note of this triplet. In this case,

D in the E string could stick out. a better solution would be to play all the notes in the last triplet on the E string. In measure 148, (c) shifts down to the first finger on F#. This is riskier than going into the first position with the second finger. However, there is a correlation with what happened in measure 144, which also starts the phrase in the second position.

Ex. 8, mm. 152 - 163 (Fold out: p. 105)

In the fingering of (a) at measure 156 and 158, the shifts are not in the same places even though the notes are exactly the same. In measure 156, the shift is to the F# and in measure 158, the shift is to the E. The reason behind having the shifts in different places in identical phrases is to have them sound different from each other. Even in measure 160 and 161, (a) doesn't shift down in the same places which is third triplet note of the first beat. In this case, measure 160 could sound stronger than the phrase which has shifts in the same places due to the fact that the shift is being made on the beat and there are more notes on E string. However, when the shifts are at the same places, the movement of the right hand becomes identical. The phrases would have four notes in the E string followed by two notes on the A string. Thus, it is easier for the right hand. Also at measure 160, shifting at the same place as in measure 161 in the third triplet note to the fourth finger would give less

distance to shift for the hand. The fingering of (a) in measure 159 has a shift which causes an unwanted glissando. The shift from D on the second beat to the next note A# is played by the same finger. This shift with the same finger traveling a large distance is more likely to create a glissando than when the shift is done by two different fingers as in (g) or when the shift is stretched as in (e).

In the fingering of (g) at measure 160, the third finger is used for the F#. This extension of the hand prepares for the shift towards the D and shortens the distance of the shift between F# and D.

In the fingering of (e) at measure 159, the extension of the hand before the shift from D to A# reduces the risk of having the unwanted glissando. Particularly, being able to use the stretch of the first and second finger, which is one of the widest, is helpful in this shift.

In the fingering of (d) at measure 155, B on the second beat is played by second finger. This creates a second and fourth finger octave on the next measure. All this is in preparation for the slide from B to A in measure 156. The slide has a very personal quality and is different from the identical phrase two bars later. However, the second and fourth finger octave is precarious. It could go out of tune easily and is technically more difficult than the regular one - four octave. In measure 159, (d) stays in the fifth position and shifts up to the B on the second note of third

triplet figure. This makes it easier to find the A in measure 160, but by staying in position, half of measure 159 is played on the A string. This in turn is too weak for the phrase that is going towards the A in measure 160. In measure 161, (d) uses the extension between F# and D using fourth and third finger. This extension poses an intonation problem since the extension itself is two whole steps and is done by fingers which have a narrower stretch than the first and second finger. When this stretch is compared to a stretch between first two notes played by the fourth and third finger in the previous measure, this extension is much more difficult to accomplish. The only way to play this passage would be by reaching for the F# with the hand in extended form and shifting down with hand, still in the stretched position.

The fingering of (b) at measure 161 uses shifts with same fingers to come down the passage. This is a very personal way of fingering a passage. The editor of this fingering wanted those glissandos to be produced while shifting down. It is also interesting that these shifts occur twice in first and second beat using different fingering.

Ex. 9, mm. 164 -169 (Fold out: p. 105)

At measure 165, the fingering of (c) shifts down to the second position. This avoids the large extension required by playing the thirds with second and fourth finger in the first

position. However, playing A, C, and E chord in second position brings up an intonation problem. Since the second position is less secure than the first position, it could be a problem for the violinist. Also in this measure, if A, C and E chord is played in the first position, it avoids one extra shift to come down to F#, A and E chord. In measure 166, (c) uses contraction of the hand to play the G#, B and E chord. The fourth finger on the B# and first finger on the B allows the hand to be in a comfortable position. For the next chord , the fourth finger on the G# could slide up to the A, thus avoiding the stretched 1-3 to 2-4 fingered thirds. On the other hand, using 1-3 and 2-4 fingered thirds would eliminate the shift done by the fourth finger and be less problematic in intonation.

In the fingering of (d) at measure 169, (d) plays the last chord of that measure with second, third and fourth finger. This fingering transfers the first, second and third fingers used by the previous D#, C and A chord to different strings, which is quite unnecessary. This transference of the fingers to the different strings doesn't let the fingers remain on the same strings as they are shifting. This action causes an avoidable technical problem involved with chord playing. Also playing the last notes of the chord, F# and D#, with the third and fourth finger would sound much weaker than when they are played with the second and third finger.

In the fingering of (e) at measure 165, (e) stays in the position and plays A and E with open strings. This use of open strings would give a bigger sound with resonance from the open strings than when it is closed with fingers. Also in technical point of view, the use of open strings makes chord playing much simpler. However if the strings are out of tune by any chance, this combination of open and closed strings might not work. In point of voice-leading, the middle voice starts out from the D string, then moves on to A and comes back to the D string. The bottom voice starts from the G string and goes to D and again comes back to the G string. However when open strings are substituted for fingered thirds at measure 165, this continuation of the voice-leading is disrupted since the middle and bottom voices interchange.

Ex. 10, mm. 170 - 178 (Fold out: p. 106)

In the fingering of (a) at measure 174, the arpeggio on the second half of second beat uses open E string to climb up to the high A in measure 175. The utilization of the open E string gives time for the hand to move up to the next position. The hand could be free while playing the open string so that the hand could easily shift to any place on the fingerboard and be ready for the next note. However in measure 174, (a) has to shift up again to E. In this case, since the arpeggio was not played using the regular arpeggio scale fingering, the shift to the E has to be done

more carefully. In measure 175, (a) shifts down by using sequential fingering. He uses 4-3-0 fingering three times, except the last time when he uses 3-1(2)-0. The sequential fingering pattern makes it easier to memorize the passage. The pattern in this measure is that each interval of a sixth is followed by an open string. This fingering has to shift one more time than when it is kept in the seventh position for the first and half of the second beat. Also there is a danger of bad intonation while shifting down to the fifth and third position. This is partly due to the difficulty of playing a sixth with the fourth and third finger, which has more disadvantages than a sixth with the second and first fingers and third and second fingers.

In the fingering of (b) at measure 171, (b) uses a harmonic for the E. The harmonic occurs in the top of the line and this will hinder the projection and power that is needed. The harmonic would have a resonance, however this would not be enough to project over the entire orchestra. The fingered E would be most appropriate for this measure.

In the fingering of (c) at measure 170, (c) uses open E string for the first beat instead of the fourth finger. This will give a brilliance and projection over the blocked fingering. Also, the editor creates the pattern of first and third notes closed and second and fourth notes of the sixteenth note groups open over four measures. On the other hand, the use of the open E strings at the first beat of

measure 170, the third beat of measure 171, and the first beat of measure 172 requires extra string crossings that could be avoided. There are string crossings over one string and two strings. The two-string crossing, such as from D to E string, is uncomfortable and awkward for the right arm due to the large distance the arm has to move. Apart from its awkwardness, the middle string of the three strings could be touched and could give an extraneous noise while the two-string crossing is played. At measure 173, (c) also uses a harmonic for the high E. Although, at measure 171, no fingering is given. Thus, by the assumption that this E is played with the fourth finger, the harmonic E gives variety and the high A in the measure 175 could sound powerful after the harmonic E. At measure 175, (c) stays in the seventh position for half of the measure, then comes down to the third position using the harmonic A and open A string. The harmonic A is quite unnecessary in this passage. Since there is an open A string which could give plenty of time for the hand to shift down, the passage could be done without the harmonic. The harmonic could also disrupt the color of the passage with its particular sound and be weaker than the fingered notes. At measure 178, (c) uses the fourth finger for the E on the second half of the third beat. This is quite appropriate for the passage which prepares for the piano and dolce in the next measure.

In the fingering of (d) at measure 172, (d) uses open E for the fourth note of the first beat. The open E string gives the power over the fourth finger and keeps the pattern of the string crossings for the right hand. If the fourth finger is used instead of an open string, as in example (a), the left hand pattern would also be disrupted by an extra motion of putting the fourth finger down. At measure 170, fourth finger is used at the same place of the beat. However this fourth finger is held down from the previous E and not lifted when G# is played, thus this finger is not required to be put down. At measure 172, (d) uses the second finger instead of open string from the third beat to the first beat in the next measure. This usage of the second finger would produce a much weaker sound than when the open string is used. Also, by using the second finger, the right arm motion would be disrupted. The right arm motion starts out with the clockwise motion. However when the second finger is played, it reverses the arm motion to the counter-clockwise motion. Then again, it returns to the clockwise motion. This disruption of the right arm pattern is not beneficial to the comfort of the right arm. Also the counter-clockwise motion is not a very comfortable movement in string crossings for the right arm. In most cases, when possible, it should be avoided.

In the fingering of (f) at measure 170, (f) starts in the third position. The third position makes a two string

crossing for the right arm which can be uncomfortable and can have the open D string sound. The fingering of (f) then shifts to B in the first position. The shift will cause an unwanted glissando. After the first position, (f) shifts back up to E in the third position. The two shifts involving E, B and E are not in a row since there is an open E string between B and E. However, the shifts are clustered together so tightly that they give the feeling of consecutive shifts. Thus, it would seem that one of the shifts could be eliminated.

In the fingering of (g) at measure 174, (g) changes the string for E in the second beat. This change of the string is unnecessary since the note after the change occurs in A string instead of E string. The change of the string would only disrupt the movement of right arm. At measure 175, (g) uses a second finger on the third beat. The second finger keeps the hand in an open position compared to the third on C and first on D#. It is also convenient for finding the C since it is a half-step away from the F#. Even though second finger on C is in fourth position, the center of the hand should be in the third position.

Ex. 11, mm. 179 - 197 (Fold out: p. 108)

In the fingering of (a) at measure 185, (a) uses the third finger for E. The use of the third finger is appropriate in order to achieve piano and dolce sound in this

measure. The open E string would sound too bright and overpowering. However when the third finger is substituted for the open E, the pattern of the right arm is disrupted and the line of the middle voice would be disrupted. From measure 182, the middle voice has been on the E string, and this line of E string timbre would be broken if E is played with the third finger on the A string. In measure 189, (a) shifts down to G# with the second finger on the down beat. The glissando would not be so obvious since the shift is done on the beat and at the bow change. The shift to F# with the first finger on the third beat would have an obvious glissando. The obvious glissando to F# would be partially due to the distance the finger has to travel. The distance from the first position to the fifth position would be too far to avoid any glissando. After the shift to F#, (a) uses an extension with the second finger for A. Then in measure 190, the fourth finger is also stretched for the A for the octave. Two extensions in a row would be harmful for the hand and precarious for the intonation. Also the 2-4 octave is much riskier than the 1-4 octave to achieve good intonation. In measure 197, (a) shifts to C# with first finger on the second beat. The C# is proceeded by C# and G# with the first finger. Since the shift occurs from the double-stopped fifth, it is uncomfortable for the finger to go from the double-stop to the single note. Also, when the first finger leaves the double-stop, it could pluck the A string and make an

extraneous sound. When the first finger arrives on the C# at the second beat, it is followed by a G# which is a fourth from the C#. The fourth is also problematic for intonation.

In the fingering of (b) at measure 183, the last note of the measure, G#, is played with the fourth finger. It is then shifted to the C# with the same fourth finger crossing the string. This shift with the same finger to a different string should be avoided. It could pluck the string while shifting and make an extraneous noise. In measure 193, (b) shifts down to the first position on the last note of the measure with the third finger. Although there is an open string as a break before the shift, the shift of seventh position to first position is a large distance to cover within a short period of time. It would be much more comfortable to shift down to the third position, then to the first position using the open strings as a time for shifts. In measure 194, (b) shifts on the third beat to the third position without playing the D with the third finger in the first position. In this case, due to the short distance of the shift, it eliminates an extra position to stay. In measure 197, (b) shifts to the third beat with fourth finger. This shift to the G# is very precarious. Since G# is in such a high position, it is difficult to shift into an accurate pitch. Also, due to its high pitch, it is very transparent as to its sound and pitch which makes it more obvious when the pitch is out. After the shift to G#, it is also difficult to find C#. Since C# has to

be reached from G# following the big shift to the G#, it becomes more problematic. If the shift occurred on the third triplet note of the second beat with the first finger, the distance of the shift is shorter and the familiarity of the fifth position would ease the problem of intonation. The next note, G#, has to be stretched up from the C# but this extension of reaching up is better for the intonation than reaching back. Also, it happens twice so it is more secure and practical.

In the fingering of (c) at measure 179, (c) uses an extension with the second finger on the last triplet note of the measure. It happens again at measure 185. Thus the editor tries to create a correlation between the similar passages. The extension brings the hand to the third position both times so there is no need to shift. In measure 185, two previous E are played with open E strings. This could result in a timbre change. In measure 188, (c) shifts down to the third beat with third finger using the half-step. The use of the half-step shift is convenient and eliminates the necessity of big shifts. In the downbeat of the next measure, the G# is reached back. Here also, the necessity to shift is eliminated. After the G#, D and B are also stretched. However, when so many extensions are close together, the hand could lose the center of the position. The hand has to feel which position it is in to be secure and in tune. The extensions are a vital part of violin technique and limited

and careful usage are helpful. In measure 190, (c) shifts to the fourth position with the fourth finger in the third triplet note of second beat. This fingering keeps the same timbre throughout the second beat by staying on the A string. In the third beat of the same measure, (c) shifts to A with the second finger. In this case, the glissando could be heard while shifting. It would be more ideal to climb up to the high position by shifting at the open strings. In the same passage at measure 192, (c) uses a different fingering to come down to the first position. Instead of using an open A string, (c) stretches to the second beat with the second finger. This extension involves an octave with the second and fourth finger which could pose an intonation problem. Also it is followed by a shift down to the A on the G string. This makes two shifts in a row, which could be a technical problem.

In the fingering of (d) at measure 189, (d) shifts to the A with the first finger on the last note of that measure. This fingering would be ideal since it brings the hand to the seventh position and prepares the hand so that A in the next measure could be played using the 1-4 octave.

In the fingering of (f) at measure 188, (f) shifts to the fifth position with the third finger on the down beat. This makes the distance of the shift longer than when it shifts up to the fourth position with the fourth finger. Also, when this passage is played in the fifth position, the

half-step shift on the third beat would be done with different fingers. This is also more of a distance than when the half-step shift is done using the same finger.

In the fingering of (g) at measure 187, (g) shifts up to A with the first finger on the second triplet note of second beat. The shift could have a glissando. Since it's under a slur however when the shift is done on the D string, it avoids the bright color of the E string. The D and A strings produce a dark and mysterious sound which is appropriate for the beginning of the crescendo. Also the E in the following measure is prepared due to an early shift to the fourth position. In measure 188, (g) uses a contraction for the first and second beat. In order to find the D with second finger on the second beat, the G# has to be held down in the preceding beat. This way of keeping the G# allows the second finger to feel the half-step to find the D. However, this leads to having too many fingers down in the form of contraction and affects the ability to vibrate freely. The contraction brings the hand to the fifth position and enlarges the distance to the following third position at the third beat. In the measure 189, (g) stretches down to the second position on the first beat from the preceding bar. Instead of the G# on the A string, the G# on the E string is more powerful. It would sustain the crescendo that has been building over two bars.

In the fingering of (h) at measure 189, (h) shifts down to the first position on the second triplet note of the first beat. This makes an unnecessary glissando. After the initial shift from the third position, the whole bar is played in the first position, and then shifts up in the next measure. The shift that goes into the downbeat of the next measure, measure 190, is precarious. Since the passage in the previous measure didn't prepare the hand to be in the high position by shifting early enough, the distance of the shift is large. Also, after the shift, the first finger has to be placed. Thus there are two notes which have to be played with risk and difficulty. If the whole passage was brought to the seventh position with the first finger on the last note of measure 189, for example, as in (b), there wouldn't be any notes which require risk taking. The only advantage to playing this passage in the first position is that it would sustain the crescendo until the end of the measure. The bright and strong sound of the E string on the last two notes of the measure 189 helps to follow dynamics.

In the measure 190, (h) shifts down to the third position in the second beat. The shift would produce a glissando which could be avoided by shifting at the open A string.

Ex. 12, mm. 204 - 244 (Fold out: p. 110)

In the fingering of (a) at measure 205, (a) shifts to F# on the upbeat with the first finger. The shift has a natural accent, so the shift on the weak beat must be done carefully. It also elongates the line of a phrase until it arrives at the final point. In measure 209, (a) shifts up to the E on the upbeat of second beat to bring the hand to the third position. This prepares for the harmonic A which could be reached by stretching of the hand. However, this preparation of the hand for the harmonic eliminates any kind of glissandos which could be useful in this passage. The passage is very expressive and the proper use of glissando would help to attain the expressiveness. Also, the harmonic A that comes after the E would sound too light. Thus, this fingering would not be appropriate for an expressive passage like this. It would sound just too light and clean. This idea also applies in a similar passage in measure 215. In measure 218, (a) brings the hand to the third position on the downbeat. This prepares the hand to be able to stretch both upwards and downwards for the coming tenth. When the hand is placed in the middle of the tenth, it is less of an extension both ways. Also when the tenth is played on the second beat, the preceding F# with the first finger does not have to be moved as much as when the stretch is done only with the fourth finger. When the first finger movement is very small, it would help to keep a good intonation. In measure 233, (a) changes string on the D natural from A to D string. However,

the change of the string between a half-step causes an awareness of the color change in the line. The color change between the strings could be less obvious when the strings are changed between a whole-tone or bigger intervals. In both measures, measure 232 and 233, (a) avoids shifting on the strong beat. Thus, the shifts must be done so that the weak beats are not accented.

In the fingering of (b) at measure 205, (b) shifts up to B with fourth finger on the third beat. The portamento which is produced here while shifting adds the voice quality to this passage. It also gives stress and importance to the B before going into the expressive melody. In measure 207, (b) shifts to the third beat with the same fourth finger. The shift emphasizes the third beat as in measure 209, which also shifts with same fourth finger. This repetition of the same fingering might be too redundant and less spontaneous sounding. In measure 213, the shift to the first beat is done using the closest finger from the previous note rather than extending the hand. This allows the second finger to slide up and produce a glissando effect. The same glissando effect occurs in measure 216. The shift to the first beat is made with same fourth finger, thus creating a slight glissando into the downbeat. All these glissando effects convey expressiveness. In measure 217, (b) uses the second position. In the next measure, low F# is in position, thus only the top A has to be added in the second beat. Although it seems

simple, an extension which is done only in an upward direction is more difficult than an extension in both upward and downward directions. The reason is that the thumb has to be in the middle of the tenth so that the extensions in both directions could be maximized. However when the top note is extended from the bottom note, the thumb has to be where the bottom note is and this allows only the upward extension to be done. This could damage and stiffen the hand. Also, when only the upward stretch is done, the rotation of the first finger to help the stretch has to be greater than when the extensions are done in both directions. Thus the intonation could be affected by the rotation of the first finger. In measure 220, the tenth is also an upward stretch. However, since the first beat is in the third position later than the first position, this allows the thumb to be ready for the tenth and first finger to be in the rotated position when the shift is made to the B on the upbeat of the first beat. In measure 230, (b) uses the second finger for the last note of the measure. Instead of the normal 1-4 fingering for the octaves, the first finger is replaced with the second finger. This fingering would be an ideal solution for violinists with big hands. The notes being on the top of the fingerboard makes it difficult to put down all the fingers or even lifting the second and third finger in 1-4 octaves for violinists with big hands. Thus, in order to avoid crowding of the fingers, 2-4 octave is used. Despite its convenience,

2-4 octave is riskier than 1-4 octave since 2-4 octaves are seldom used. In measure 232, (b) uses a series of half-step shifts to come down from this passage. Usually, the half-step shifts cover the unwanted glissandos and reduce the number of big shifts needed. In this passage, however, too many half-step shifts are applied. The half-step shifts could be found in both the first and second beat of measures 232 and 233. Such usage of the half-step shifts could sound repetitive and static. In measure 236, the double-stops are played on the D and A string which could sound light and bright. Also in measure 241, the tenth has to be played in the first position which might be difficult for violinists with small hands. It would be much easier when the tenth is done in the upper positions so that the hand is not forced to stretch. Also, it would be more comfortable to vibrate when the hand is in a relaxed position.

In the fingering of (c) at measure 207, (c) reaches back for the C# on the second beat. This allows the hand to remain in the third position. Thus the shift to the B on the third beat is closer. Also the shift to the B with the third finger could produce stronger sound than the fourth finger. In measure 209, (c) climbs up to the fourth position using the open A string. Here also, the third finger replaces the fourth finger for the A on the third beat by using the extension. The third finger could obviously sing more than the fourth finger because it is stronger and has a wider

finger pad. The fingering of (c) avoids wide shifts. Instead it shifts by using half-step shifts as in measure 207, 208 and 209. This could result in the passage sounding inarticulate. The passage would sound more articulated when the fingers are lifted up and put down rather than staying on the fingerboard. In the matter of shifts that go into the third beat in (c) at both measures 207 and 209, the beginning finger portamento is used. In the beginning finger portamento, the shift is led by the beginning finger and the last or arriving finger is dropped at the last moment. This could sound as an overslide.

Comparing that to the fingering of (b) at the same places, (b) uses a same finger shift which could sound as an underslide. In the underslide, the last or arriving finger is put down before its destined place and makes to its place. In both instances, all the shifts are expressive, however the editors taste determines the character of the shifts. In measure 212, there is a discrepancy between several editions regards the note on the third beat as to whether it is A or F#.

In measure 212, (c) uses A on the A string with the fourth finger on the third beat. By moving up to the A string, the necessity to skip a string while playing the next note is eliminated, as in example (b). This allows a smooth connection of those notes and less movement for the right arm. However in (c), the left hand shifts down to the first

position on the upbeat of third beat. The shift could make a glissando due to the distance it has to travel. In measure 213, (c) shifts to the second position on the upbeat of first beat. This is risky and unnecessary since the G# could be reached by stretching the first finger backwards. Obviously the editor of (c) would like to stay in the second position and end the phrase with the first finger, which might be comfortable for the editor. In measure 227, (c) uses the first finger for the last note, D. This is a result of the shift to the third beat. The shift to the third beat is made to avoid the awkwardness of the extension in lower positioned tenth. This avoidance of the tenth is a convenient way of playing, however it breaks the left hand pattern that starts from measure 223 and finishes at measure 230. Also it would sound different from the extended tenths. The glissando would sound while shifting up to the third beat of measure 227. In measure 230, (c) plays the high C with the third finger and the first finger is used for the last note of the measure. This 1-3 octave would be more convenient for violinists with big hands than the conventional 1-4 octave. In measure 231, the last note C, played with the first finger, is followed by A with the third finger. This would be too crowded and put the hand in a closed position since the distance between these notes is a whole-step. The reason behind the using third finger would be to reduce the distance of the shift to the next note, or possibly the editor felt more comfortable

singing with the third finger. In measure 232, (c) uses two shifts in a row with the fourth finger at the beginning of the measure. Between the F and E, the shift is done at the time of bow change so that the glissando is less obvious. However, between the E and D#, the shift is under the slur. Thus the glissando is more obvious and the notes would be less articulate. In measure 234, the F is reached with the second finger on the G string from the first finger in preceding note, G#. This eliminates the extra shift that is needed at the following measure, as in (a). If there was a shift at measure 235 to the E, the shift itself and the grace note would be too close and would jeopardize each other. In measure 236, (c) uses 1-3 octave and in the following measure, 2-3 is used for F and D# respectively. This would result in an uncomfortable position for the left hand. The second and third finger have to cover the distance of one whole-step and a half-step. Also, the stretch of second and third finger being small compared to the stretches of first and second finger or third and fourth finger, it doesn't ease the technical side of this passage. It would also restrict the movement for vibrato due to its awkward position.

In the fingering of (d) at measure 209, (d) uses two open strings on the second beat. The open E string would present more problems than the open A string. The open E string would sound too strong and bright. Also it could possibly cause a squeak in sound. The open E string is

followed by A, G# and F# on the E string. These four notes on the E string are too bright for the character of this whole phrase. The phrase that is taken over by the violin from the orchestra at measure 204 is lyrical, warm, and expressive. It is appropriate to continue the same character at measure 209 by playing the notes of the E string on the A string. The A string would sound dark but would still project enough. In measure 210, due to the difficulty of tenth, it should be played on the A and E string. Despite the E string, this passage would sound expressive because of the A string base in the double-stops. In measure 222, (d) uses the third finger for the last eighth note, G. Also in the following bar, G is played with the third finger. By using the third finger, it breaks the left hand pattern. Also the double-stops that follow, G and E, have to be played with the third and fourth finger. This would be a little bit weaker than when the second and third fingers are placed. Lastly, when the sequences of tenth and sixth are exchanged, a problem arises in the left hand. After the tenth, the third finger has to be retracted every time. This would be an unnecessary and wasteful motion for the left hand. The distance that has to be covered by the retracting third finger is large due to the stretched position the left hand has to be in while playing the tenth. Also this would cause an extraneous sound while retracting the third finger. After the sixth, the fourth finger has to be stretched to reach the tenth from the

fourth position. More than the retraction, the extension to the G is more risky due to the high register the note is in. These sequences of tenth and sixth cause the violinist to exert energy which is wasteful. All the sequences of retraction and extension could be avoided by using the second finger for the G. When the second finger is applied, the hand doesn't need to retract nor extend as much. Therefore, the left hand could remain in a stretched position. Also, it keeps the same pattern in the left hand throughout the whole phrase. Obviously, there are problems that rise from this fingering, such as finding the G with the second finger and the E with the first finger in the tenth. However, these problems are less problematic compared to when the G is played with third finger. In measure 242, (d) replaces first finger with the second finger on the D#. The replacement of fingers on the same note would give a different color to the note. As every finger has a different width and power, it would provide many varieties of vibrato, tone and character affecting the color.

In the fingering of (e) at measure 237, (e) uses fourth finger for the D# on the first beat. This would be less restricting for the left hand if the phrase is played on D and A string in first position. The first position would give more spaces between the fingers which would allow some independence for each finger. However, if the whole phrase is played on the G and D string in fifth position, it would put

the hand in a closed position. Especially, violinists with big hands would feel the contraction that restricts their hand. The closed position could affect the vibrato as well. The tightness and closeness would restrict the movement needed to vibrate. The other factor that would affect the vibrato would be the fourth finger in the double-stops. The violinist with an underdeveloped or weak fourth finger would find difficulty in vibrating the double-stops with fourth finger.

In the fingering of (f) at measure 212, (f) uses a harmonic A instead of the stopped note at the second beat. Also, in the downbeat of measure 213 is a harmonic D. In this passage, one harmonic is sufficient. Even the use of two harmonics would subdue the expressiveness in the music that is needed here. The use of a stopped note in place of harmonic in measure 212 would provide expressiveness and vibrato which would enhance the musical quality. Also it would help in leading the voice that has been carried in the top voice notes, C# and A. Keeping the A on the second beat in measure 212 on the E string would continue the same timbre as changing to the A string. The harmonics used in the phrase from measure 204 to 214 are all brought in with a glissando. This occurs in measure 209, 212 and 213. Too many repetitions would be dull and less interesting. Thus the harmonics should be used sparingly so that the effect can be maximized. In measure 212, the last note F# is shifted from the third

position to first position in order to prepare the following glissando to the harmonic on the first beat of measure 213. In the process, an unwanted glissando could be heard at the shift of two last notes in measure 212. In measure 221, (f) shifts up to D on the fourth position at the third beat. This allows the E on the first beat of next measure to be played as a stopped note. This reduces the risk of missing the note when it is played as a harmonic. Although the E could be securely played, the following tenth of E and G has to be stretched upwards only for G. This could present a technical problem. If the E was played with third finger as a harmonic, as in example (a), it would bring the hand to the middle of the tenth. This would prepare the left hand for the tenth and simplify the matter of playing the tenth. In measure 240, (f) uses the same fingering as in example (c) for D# and F and octave E, however all the preceding octave Es are played with the first and fourth finger. The last octave E uses a different fingering from the previous octave E because the last octave is followed by a tenth. The 1-3 octave on the Es would eliminate the shift of the fourth finger from E to F# due to an earlier shift of D# to E with the third finger in the top voice. Thus, the whole tone shift from E to F# in the top voice is avoided. Also, the 1-3 octave avoids the necessity of shifting in both top and bottom voices in the following measure. The 1-3 octave would simplify the connection between the octave itself and the tenth by

allowing only one half-step shift and eliminating the whole-tone shift and the shift in both voices. In measure 242, (f) shifts up to the last note, E, with the same finger. This would create a glissando which gives an expressive quality and also correlates with the previous glissando of D# to E in measure 240.

In the fingering of (g) at measure 204, (g) shifts up to the D string and stays there for two and a half beats. The eighth note passage on the D string would be much more intimate, dark, and softer than on the A string. However, it would be less strong and projecting than on the A string. The quality produced by the D string is expressive in color however it might not project over the orchestral accompaniment as the A string could. In the same measure, apart from the choice of string, the choice of fingering by the editor expresses the warm and intimate quality. The portamento going up to B from G# and a half-step shift down from D to C# with the same finger adds the expressive quality to the phrase. If it had been on the A string as with all the other editions, it would be stronger and project more but it would be less intimate and warm. In measure 206, (g) shifts to the second position on the third beat. This fingering reduces two shifts in the next measure from D to C# and C# to E. Thus it would be very clean and articulate, however the shift from A to D in measure 206 would have a glissando. Since the shift involves adjacent fingers of third and

second, the ability to stretch is less than when the shift is done with third and first finger. Therefore, unless the shift is done carefully with a half-shift and half-stretch and bow change, the unwanted glissando would present a problem. In measure 209, (g) uses the third finger on the last note, G#, after the harmonic. This would again sound very clean due to the elimination of the half-step shift from harmonic A to G# with the same finger. Also, this would suit the violinist with narrow fingers, since the placement of adjacent fingers in the tighter upper positions is more difficult for violinists with large fingers. In measure 218, (g) adds the harmonic as the top note of the tenth. The addition of the harmonic would make the left hand technique much more difficult. In order to have the harmonic sound, the A string must not be touched at all. However, when first finger is playing the F# and the hand has to be in a stretched position, it is hard not to touch the A string with the first finger. It would be much easier to block the A. With the fourth finger blocking the A, the tenth could be vibrated, which would help the small crescendo and decrescendo. Also, the vibrato on the tenth would be more expressive compared to the harmonic. The tenth with the harmonic would sound cold and inexpressive. In measure 240, (g) shifts to an octave E on the last beat with the third and first finger. Unlike the preceding measures where the octave E is played with first and fourth finger, the 1-3 octave in this measure prepares

the following tenth. The tenth is approached with only a half-step shift on the bottom voice when 1-3 octave is applied. This would avoid the shifts in both top and bottom voices as when the 1-4 octave is used. Thus, it would reduce the technical difficulty. However, the problem lies with the second and third beat in this measure. The second beat with F and D# is in a contracted hand position and when this interval is shifted to the third beat with an octave E in an extended hand position, the shift becomes much larger on the top voice. When the third finger is on the D# , the shift is only a half-step, however when the D# is played with fourth finger, the shift to the third finger is actually a whole-step since the third finger is lying on D. Therefore, the shift of fourth to third finger increases the possibility of bad intonation.

In the fingering of (h) at measure 235, (h) shifts down to E with the second finger. The second finger on the E is convenient for reaching the following octave E on the G and D strings since the shift involves no string crossing with the fingers. Despite its convenience, the shift to the half-position increases the distance that must be traveled to reach the fifth position. Also, it adds the difficulty of vibrating in the half-position. Lastly, the shift of the E in the same range from the D to G string causes a color change. It would suddenly sound much thicker and stronger and this would interrupt the serene mood.

Ex. 13, mm. 246 - 272 (Fold out: p. 112)

In the fingering of (a) at measure 249, (a) shifts up to fourth position with second finger on the last note of the measure. Then the hand is stretched for the next note, F, and returns once again to fourth position on E by a half-step shift. The purpose of this fingering is to keep the hand in one position and to stretch for one note that is in another position, thus minimizing the use of the shifts. Despite its advantages, the ability to vibrate the high F in a stretched position would be affected. The vibrato might start late and without much intensity as required in this phrase. In measure 250, (a) shifts a whole-step from the last note of the measure, E, to the first note of next measure, D. In this fast détaché passage, the whole-step shift would slow down and cause a glissando. On the other hand, the half-step shifts would reduce the number of big shifts and facilitate the movement of the hand. If the passage was under a slur, the half-step shift would be slower and more inarticulate than when each note is fingered. In the edition (a), the editor has set a pattern of fingering which alternates every first note in groups of four notes with the fourth finger and first finger. This might make it simpler to remember the passage but the pattern of fingering breaks the pattern of interval relationships in the two measure sequences from measure 250 to 253. For example, in measure 250, the first note to the second note is a half-step. By comparison, in

measure 252, the first note to the second note is a whole-step. The finger pattern helps memorization, however the violinist should be cautious about the interval changes in the passage. Apart from the memorization help, the finger pattern in measures 250-251 keeps the passage on the E string. This would produce a stronger and more projecting sound than when the passage is played on the A and E string combination. In measure 259, (a) shifts down to the third position at the third beat. The shift on the down beat helps keep the accent from shifting to coincide with the natural accent of the beat. However, in this passionate passage, two preceding notes C and A would sound soft and weak on the top of the A string. In measure 267, (a) changes strings between C and B of the second beat. The notes C and B are a half-step away from each other and the string change between them causes a very noticeable color change. A whole-step string change would not affect the color change as much. In measure 268, (a) shifts from first to fourth finger two times. This occurs between G#/F and C/B. The first to fourth finger shift is a wide shift that jumps four positions. Therefore, it reduces the number of shifts that must be done to complete the run. Despite its advantages, the 1-4 shift is wide, so it takes time to reach the other note and it is precarious due to the distance it has to travel. The first shift of G# to F is more precarious than the latter one because it has to

shift from the farthest fingers and the shift of an augmented second.

In the fingering of (b) at measure 250, (b) stays in the fourth position throughout two measures. This allows the notes to be on both A and E string which causes it to sound weaker than when the whole passage is on the E string. In measure 253, (b) shifts to C in the first beat with different fingers. Since the notes are a whole-step away and the shift is from the first to second finger, it would take time to reach the next note. The shift of adjacent fingers would increase the distance to be traveled compared to the same finger shift. In measure 267, (b) shifts down to the second note using a half-step. This would be an ideal fingering since it avoids the half-step string crossing, as in edition (a). In measure 268, (b) shifts to the second note with fourth finger. This would be a precarious shift since the notes are very exposed. In the second beat, a half-step shift with same finger is applied. This fingering would not sound as articulated as when it is fingered. However, due to its high position, it would be helpful for violinists with thick fingers since the half-steps in that area are much narrower. After the half-step shift in the second beat, an extension is used to reach the F with second finger. Even though the extensions reduce the number of shifts required, in this case a stretch of an augmented second with third and second finger is not beneficial. The third and second finger could be

stretched less compared to other fingers and this would cause the hand to feel awkward. In the third beat, there are two shifts. The first one is to the downbeat, D, and second is to the G#. The first shift involves the farthest fingers, first and fourth fingers. However, the bow change in this edition and the shift to the downbeat reduces the glissando and unwanted accent. The second shift between A and G# is only a half-step and the first and third fingers are not farthest apart. However it gives the feeling of discomfort. The reason for that is because the shift brings the hand into the half-position and it uses the non-adjacent finger for the half-step shift. Instead, if the second finger is substituted for the third finger on G# as in example (d), the adjacent finger would shorten the distance that the non-adjacent finger has to travel and the stretch of second and first finger would eliminate the half-position. In measure 271, the first note of (b) is shifted from the preceding note with the same finger. This causes a glissando between these notes. The glissando at this place would sound old fashioned and out of style.

In the fingering of (c) at measure 249, (c) uses a contraction for the first beat chord. This has the advantage of not having to move the third finger across the strings. When the progression of chords is played, it is important to move the fingers as soon as possible to the next chord and grip the chord. Removing the necessity of replacing the third

finger saves time and this would create steady and controlled rhythm. On the other hand, the contraction of the hand causes the fingers to be in the second position and the hand to be still in the first position. This difference of positions in hand and fingers results in mixed positions. Mixed positions cause the hand to lose the center and therefore it is precarious for intonation. Also when the contraction is used it brings the fingers to the second position on the first beat. However, since the second note is in the first position and the third note on the second beat is in the third position, it would feel as if there are two shifts in a row, even though there is a sixteenth rest between the first and second note. Thus, this would make wasted motion. In measures 250-253, (c) shifts down by using half-steps. This would be an ideal fingering since it keeps the sixteenth note passages in the strong E string and reduces the large shifts that slow down the passage and cause the glissando. The only shift that does not use the half-step shift with same finger occur in measure 251 at first beat. This shift uses the adjacent finger to come down from C to B. The third finger on the B eliminates one shift that would have been necessary if second finger was on the B. Although there is the advantage of one less shift, the second finger on the B would also work since it does not make two shifts in a row. The second finger on the B would keep the pattern of shifts with same finger as well. In measures 254-258, a vigorous four note sequence

begins in détaché stroke. The editor has kept the half-step shifts with same finger in this passage. However, the four-note sequence would be better with the 4-3-2-1 finger pattern sequence. The sequential fingering would be easy to remember. It could also be played as a four note descending scale. Lastly, the accent from the shift would reinforce the downbeat accent. The sequential fingering has only one fingering of 4-3-2-1, so it would be an easy solution to memorize. Since the printed fingering doesn't have the pattern, it would be more difficult to remember. Secondly, the printed fingering has a disorganized placement of half-step shifts which could be precarious if the shifts are done at a different half-steps. On the other hand, the sequential fingering would have no shifts within one beat so the four notes could be played always as 4-3-2-1 and this would prohibit the mistaken half-step shifts. Lastly, the sequential fingering would avoid any kind of accents from shifts at the weak part of the beat. Instead, it would coincide with the downbeat pulse. In measure 257, (c) shifts twice in a row in the second beat. The first shift is from F to E and the second shift is from E to D. This would cause the hand to be not centered and lose control over the positions. In measure 259, (c) uses a harmonic to shift up to A on the second beat. The harmonic would sound too weak for this intense phrase. The harmonic would also create a problem of shifting. Since the harmonic has to be played with the

fourth finger in the printed fingering, the shift would have to be done with same fourth finger to A on the second beat. The fourth finger has to cross the string and this would be inconvenient. Also, the mixture of the harmonic and stopped notes would also feel awkward. In measure 266 and 267, (c) shifts down to the second beat with fourth finger. Each time, the shift originates from the second finger. The second to fourth finger shift has more distance than the second to third finger shift. The longer the distance of the shift, the more difficult it is to search for the note. Especially in measure 267, the shift to the second position would be precarious for intonation. However, this fingering keeps all the notes on the E string and that could be an advantage in projecting over the orchestra. When the F is brought down to the first position at the end of measure 267, it increases the distance to the highest note of the phrase, D in measure 268. The larger distance creates more danger of missing the top note than when the distance is shorter. In measure 268, (c) shifts down to the G# with the second finger in the second beat. As in example (b), the same finger shift would be less articulated and clean. Also, it would not suit the violinists with thin fingers. When the fingering of (c) is compared with (b), (c) would have less trouble stretching for the F with the first finger, because the first and second finger could be stretched more than the second and third finger. When (c) is left with first finger on F, E is then

played with an open E string. The substitution of an open E string for the octave higher E would be a quick solution for a tough passage. The open E string would free the hand to shift, and ease the technique involved in shifting. However, it would not be a true approach to interpreting this master work. In measure 270, (c) shifts up on the second note in the first beat with second finger. It is a short shift from first to third position but with a string crossing , and so it becomes a problematic shift. The string crossing of four strings would be more problematic than the shifting here. Not only would the right hand be affected, but also the left hand has to cross the string while shifting. Thus, it would affect both the right and the left hand. One thing that could benefit from this string crossing is D and F which are on the G string. The G string would provide a richer, more sonorous and stronger sound than the D string. The D could also be vibrated, which would make it more expressive than an open D string. In measure 270, the last note, G#, is shifted from F with the same second finger. The shift is made in order to use the third finger on the climax. The third finger would be much stronger than the fourth finger and it would have a thicker sound. However, the preparatory shift of F to G# to the climax is very precarious. First, an augmented second in the high position is very difficult to find, and since it is exposed, it is impossible to hide any bad intonation. Secondly, the F to G# shift is preceded by a stretch of D to

F. Even though a stretch is not a shift, when the movements of stretching and shifting occur consecutively, affecting the place in position, it has the effect of two shifts in a row. When this occurs, the hand could lose the center of which position it is in and therefore lose control.

In the fingering of (d) at measure 268, (d) shifts from G# to F in the second beat and E to D on the third beat. Even though, the two shifts are not in a row, they occur very close to each other and give the feeling of constant shifting. Especially the small shift from the first to second finger followed by a large shift from the first to fourth finger causes the feeling of acceleration in shifting because of the large distance of the second shift.

In the fingering of (e) at measure 267, (e) shifts to the second beat. The shift is on the beat, thus accents from the shift and natural downbeat coincide. Also, the shift to C with the third finger in third position puts the third triplet note of second beat and first triplet of third beat onto two different strings. This creates a correlation with the preceding measure where the first and second notes of the second beat change strings from E to A. This kind of correlation of two similar measures occur in the example (c) where the notes are kept on the E string for both measures. In measure 268, (e) shifts from second note with first finger to the third note with third finger in the second beat. The next shift occurs in the third beat, from the first note with

first finger to the second note with the third finger. Unlike (d), (e) doesn't feel as if the shifts are too close together. In the example (e), there is one more note than the (d) in between the shifts, and the effect on the smoothness of the passage is tremendous. The use of the third finger in the first and second shifts reduces the distance of shifts which enhance the effect of smoothness. As in example (d) where the fourth finger is used, the shift from the first to fourth finger is so wide that it is uncomfortable and it could take a little longer to shift. The fingering of (e) would be the best for this passage. If there is a doubt, it would be regarding the shift on the third beat. Since the shift is not on the beat but is to the second sextuplet note, the accent of the shift could occur. However, this would be a minor problem. The passage is quite fast and this would cover any accent that could occur in shifting. Secondly, the notes that come after the shift in the third beat would be more of a problem. The second half of the sextuplet involves a lot of stretching which could delay the action of the fingers and affect the articulation. For example, the passage from A to G# requires the hand to stretch three full whole steps followed by a stretch of an augmented second from G# to F. The first stretch is awkward in a fast moving tempo but the second stretch is even more uncomfortable. The hand has to move from an extended position to a contracted position which would slow down the finger movement and might even cause a

glissando in reaching the F. Instead, if the passage had gone down to the first position on E string as in example (c) and (d), it would solve the problem that is caused by staying in the third position. In measure 271, the top note B is played as a harmonic. This would be a very outdated way of performing the climactic note. The harmonic would be too weak compared to the fingered note and it would not be strong enough to project over the massive orchestral accompaniment. Also, being able to vibrate would be a big factor in expressiveness of the note. The harmonic would sound cold and not affectionate. On the other hand, the fingered note would add the expressiveness that is necessary for a climactic note.

In the fingering of (f) in measure 266 and 267, (f) makes a correlation between these measures with the fingering. Both measures start with fourth finger and shift down to the second beat with third finger. Then, it stays in position till the end of the measure. Despite the ease of remembering correlated fingering, it is not most the comfortable and secure fingering. In measure 266, the shift to the second position could worsen the intonation due to wide spaces between the fingers. If it had stayed in the fourth position, the spaces between the fingers would be much narrower than in the second position. The narrower spaces would provide convenience and comfort which would help the dexterity of the fingers. For example, from last note of the

second beat, G, to the first note of the third beat, F, in measure 266 clearly shows the wide distance that could have been avoided by staying in the fourth position. Another fingering which uses the correlation between these two measures is example (c). The fingering of (c) keeps all the notes on the E string. In the example (f), the notes of the first and second beats are kept on the E string and the notes of the third beat are moved to the A string. The consequence of this would be a weak sounding third beat both times which might sound too thought out and calculated. In measure 270, at the third beat, (f) uses the first finger on the D and thereafter each note would be played with consecutive fingers. This would be the best fingering for this passage. This fingering avoids any slides, precarious shifts and harmonic. Here, the last note could be vibrated so that the phrase could end brilliantly.

In the fingering of (g) at measure 251, (g) shifts up to the third position in the second beat. This would be quite unnecessary since the whole passage from the previous measure is moving downward. When it moves to the higher position in the second beat, it only increases the distance to come down in the third beat. Also the overall feeling for the left hand in that measure is making downward, upward, and downward motion rather than just downward motion. In the third beat, the consequence of moving up in the previous beat makes the shift in the third beat a whole step. Unlike the half-step

shift, the whole-step shift makes it more difficult to hide slides. In the vigorous détaché stroke, the slide would not be appropriate. In the edition of (g), such uses of whole-step shifts occur in measures 255 and 257. In measures 266 and 267, (g) keeps the passages on the E string by shifting downwards. Thus, the fingering of (g) uses the E string to sustain a strong and projecting sound to equal the intensity of the music. The fingering used in (g) shifts in a safe and secure manner. For example, the shift to the second beat in measure 266 and the shift at the first beat in measure 267 use half-step shifts with the same finger. Compared to the fingering of (c) at measure 266, which uses second to fourth finger in the shift for the half-step, the shift with same finger in (g) conceals any glissandos. Also, the distance of the shift itself is reduced when the same finger is used in the shift instead of different and non-adjacent fingers. Obviously the large distance shift of (c) eliminates the need for an extra shift in order to arrive in the first position, as in the fingering of (g). However the shifts of (g) in measures 266 and 267, excluding the half-step shifts, are to the first position, which is very secure. Thus, when the fingering is safe and secure despite the number of shifts required, it is preferred over the precarious fingering. In measure 268, (g) shifts to E with third finger in the second beat. The shift is preceded by an augmented second which makes this passage quite precarious. The consecutive movement

of extension and shift puts the hand in a risky situation. Also the extension from G# to F leaves the hand in a stretched position and this increases the distance from the third to first finger. Thus, the shift is an even greater distance.

Ex. 14, mm. 304 - 311 (Fold out: p. 112)

In the fingering of (a) at measure 305, (a) has a series of first and third finger double-stops moving downwards from the third beat over to next measure. Despite the two consecutive shifts with the same fingers, the shifts are allowable in this example due to the longer rhythmic values. For each shift, the hand remains in one position long enough that the center of every position is felt. In measure 307, (a) shifts down with fourth and third fingers at the third beat. For some violinists with a weak fourth finger, this fingering would not be so ideal. It would be difficult to continue vibrating for two beats with the fourth finger in double-stops, and would sound much weaker than other fingers. However, the advantage of this fingering is that it would be simpler to shift down a half-step from Eb to D on the G string. Since they are located in upper positions of 8th and 9th where a half-step is very tight, it would be better to shift down with the same finger. In measure 308, (a) shifts back up to fifth position with second and first fingers. This would create a problem with the next note. The finger on the

D string moves to the G string and another finger moves from the G to D string. This switch of the fingers across two different strings causes an inconvenience, especially with the same finger moving from one string to the other. The other problem involved with this crossing of the fingers is that it could cause a break between these notes. When they are under a slur or in legato, it would be more noticeable. The only way to prevent this is to flatten the finger coming from the lower to higher string and press both strings with it so that there is no gap between the interval change. However this also is difficult in higher positions where the string level is higher above the fingerboard, requiring the finger to press harder to grasp two strings.

In the fingering of (b) at measure 305, (b) shifts down to the next note with the same second and fourth finger. It would be difficult to vibrate on both notes due to the second and fourth fingered third that puts the hand in a closed position. In addition, using the fourth finger rather than the third makes the vibrato more difficult. The last point would be that the (b) starts out from the second position and ends with the first position. Comparing that to the (a), (a) moves from third to second position. Thus (b) starts out of a wider distance than the (a). When (b) arrives in the first position, its wide distance between the second and fourth finger is more disadvantageous in vibrato than the distance of first and third finger in second position. In measure 308,

(b) switches fingers across the strings from first to second beat. As in example (a) at the same location, (b) would have a problem with the second finger moving from the lower to higher string. Also, no slurring between the first and second beat in this edition helps the fingering. The gap that could be created by the switching of fingers can be hidden between the bow change.

In the fingering of (c) at measure 304, (c) shifts down a half-step from the first to the second beat. The glissando like half-step shift would give an expressive and warm sound. It also prepares for the next shift in the following measure. When the C is played with the second finger in measure 305, it no longer has the gap between the C and the following third. Since there isn't switching of the fingers across the strings, it is possible to avoid a gap. However, this all might be unnecessary due to the phrase markings which separates C from the third. Thus, a small separation or a gap could exist there. In measure 308, (c) shifts up to fifth position in the downbeat. Then in the second beat, it moves back down to the fourth position. It seems as if all these shifts are well planned but over done. The shifts avoid the switching or crossing of the same fingers onto the other strings. From measure 307, most of the shifts are carried out by having at least one finger on the string that can slide up and down the fingerboard without leaving the fingerboard. This creates the feeling of legato in the left hand. However,

the upward and downward movements caused by the shifts are done so many times that it seems that they are over used. In measure 309, the second beat is played with the second and fourth finger. Here again, (c) puts the second finger down to slide up to the third beat. However, since the distance from the first to second interval is a half-step, it would be easier to attain the notes with the first and third finger. It would be also easier to vibrate with the first and second finger due to the open hand position. In measure 310, (c) uses the first and fourth fingers in the second beat for a third and in the next beat, the first and third finger are placed for the sixth. This unusual fingering creates a contraction of the hand and is an awkward fingering that could affect the intonation and the vibrato. The combination of both first and second position could easily disturb the pitch and the contraction of the hand would make the hand cramped in for violinists with large hands. Also, the contraction of the hand puts the hand in an inconvenient position that would affect the vibrato.

In the fingering of (h) at measure 307, (h) moves to the D and A strings. This fingering would be a technically simple and secure solution. Despite the simplicity and security, this fingering lacks the color and timbre that is needed. This fingering on the A and D strings would be bright and thin compared to what has been going on and what comes after these two measures. It would also disrupt the line by

substitution of the A and D strings in a phrase that could be played entirely on the G and D strings. The whole phrase on the G and D strings would be earthy, warm, and rich sounding. Keeping measures 307 and 308 on the G and D strings would continue the line in the same color and, even though it is risky, it would be musically more appropriate. In measure 309 and 310, (h) uses 1-3 and 2-4 for the rising thirds. By doing this, (h) is making a correlation between these two measures. Both times, the second finger is kept on the string, which sustains the melody. It also avoids any crossing of the finger. However, it is more difficult to vibrate with the second and fourth finger than with the first and third finger, especially, when the third is a minor third which adds a distance of a half-step more than the major third. In measure 311, (h) breaks the correlation from the previous measures and applies first and fourth finger for the third. The first and fourth fingered third would be easier to vibrate than the second and fourth fingered third due to the smaller distance between the fingers. However, it would be precarious getting this third with the first and fourth finger. This fingering combines both first and second position and this would add to the difficulty in getting the acceptable intonation for this third.

Ex. 15, mm. 312 - 331 (Fold out: p. 113)

In the fingering of (a) at measures 315 and 316, (a) crosses to A string for second and third beats. This would be a secure way of playing. Staying in position makes it easier to find notes and eliminates the need of shifting long distances. However, when the notes are in such high positions on the A string, they tend to crack more often. Also, when the same finger crosses from a lower to higher string in high positions as in the last note of measure 315 to the downbeat of measure 316, it could cause a plucking noise while moving to the E string. The same kind of problem occurs while going into the downbeat of measure 323 - the last note of the second beat skips a string to arrive on the third beat. This skipping of the string is uncomfortable for the right hand and it could touch the A string while moving to the D string.

In the fingering of (b) at measure 314, (b) shifts to the G with third finger. This would only increase the distance that has to be traveled from note C. However, it would be easier to reach the C in the downbeat of measure 315 since a large shift has been made earlier. In measures 315 and 316, (b) shifts a whole-step from the last note of the second beat to down beat of the third beat. This whole-step shift is precarious due to its location in the high position. In measures 317 and 318, (b) makes a series of half-step shifts to come down the passage. It stays in position while it crosses the string, which makes the whole passage very secure. However, there might be too many shifts involved for

this passage when it can be done in two shifts as in (a). Since it is slow in coming down these measures, it spends more time in the upper positions which require more turn of the left arm inward. In measures 322 and 323, (b) shifts up to the downbeat of these measures with same finger. The difference from other editions is that the editor of (b) has added slurs leading to the downbeats. These slurs create a glissando which add more emphasis on those downbeat notes. In turn, they help the stresses or long diminuendos with color generated by the left hand. In measure 325, (b) changes to the A string on the downbeat of this measure. Meanwhile, there is a crescendo that is going to the same place. Thus the G in the downbeat of measure 325 has to be a part of the preceding two sixteenth notes and must be the loudest. However, the G on the A string would sound suddenly soft, which is not appropriate here. In measure 326, (b) shifts to the third beat with second finger. This would make a whole-step shift. When the shift could be done by a half-step, it is more desirable. The half-step shift would hide the glissando effect caused by the shifts. Also, it is more convenient since the distance of the shift is smaller. In measure 329, (b) moves to the E string and combines the E and A string in the next measure. However, this would sound bright and strong. Since there is a long diminuendo from measure 326 to end of measure 331, it would be better to keep this passage on the A string. This would make a dark and

tender sound which is suitable and helpful for making the diminuendo. In measure 331, (b) stays in the fourth position after the initial note. This is a very exposed passage and the slightest mishap could be noticeable. The diminished seventh chord in the fourth position requires only one stretch of an augmented second in the third beat. However, the F in the second beat and B in the third beat have to be differentiated very carefully to keep the correct intonation.

In the fingering of (c) at measure 315, (c) shifts down to the Eb in the second beat. This would be a precarious shift or stretch. Especially when the shift is to the first finger, it has no other finger to feel the position. Thus it makes the shift more difficult and dangerous. The shift to the downbeat and second beat of measure 316 is less precarious than the shift in the previous measure. The shift to the downbeat, Ab is less difficult since it is an upward motion and to the fourth finger, which has other fingers to feel the position. The shift to the second beat, C, is also less difficult due to the familiarity of the lower position. In measure 322, (c) stretches for the third beat. This extension avoids any glissando that could occur. Again, (c) pull the hand back even further from the stretched position to reach the sixteenth note. This might be uncomfortable and not practical for some violinists but at least, theoretically, it eliminates large shifts. Many instances of such double stretches occur in measures 326 and 328. In

measure 326, (c) shifts up a half-step with the same finger in second and third beat. Since these sixteenth notes are under a slur, the same fingered shifts would be less articulate. This occurs again in measure 328, causing inarticulateness. In measure 330, (c) shifts back to the last note of the measure, B. This shift is followed by a big shift to F in the next measure. This fingering makes many movements up and down the fingerboard. When the extensions from G to C and C to G which proceed the shifts are included, there is constant motion on the fingerboard. This would cause unwanted glissandos and unnecessary movements in the left hand. When the last note of measure 330 is kept in the third position as in the example (a), it would break the sequence of constant movement. However, when it is played in the third position, the B on D string. This would disrupt the color of A string. In the measure 331, (c) stretches back for the last note, F. This allows same color of the D string to continue until the end of phrase and the new phrase to begin on the G string.

In the fingering of (e) at measure 314, (e) shifts down to the first position. The first position would provide security, but since a shift has to be made again to G, it is better to shift to C in second position. The second position would reduce the distance of both shifts. In measure 325, (e) shifts down to the first position using the same finger. Then, it shifts up to the third position on the second beat. This allows the first beat to remain loud and make the

decrescendo gradually. However, the shift to the second beat has to be made quickly. In measure 326 at the third beat and measure 327 at the second beat, (e) shifts to the first finger on an upbeat. The shift is made during the break between the notes created by staccato. This allows the two sixteenth notes to be clean and articulate. Also the shift does not have to be done as rapidly as when the shift is made following the two sixteenth notes. In measure 330, (e) shifts to the first position on the third beat. This makes G to be the only note on the E string when the phrase ascends and descends on the A string. The downbeat note, F, in measure 33 has to be on the E string but when the G is played on the E string, it would stick out and disrupt the mood of the phrase. It would also reduce the effect of the final rise to the F and descend as phrase finishes.

In the fingering of (f) at measure 317 to 319, (f) alternates from the A to E string on the lower voice. The alternation would prevent the lines from being separated by lower and higher voices. When all the lower voices are on the A string, one can follow the both lines better.

In the fingering of (g) at measure 315, (g) shifts on the upbeat of third beat. This shift would be much more secure than the whole-step shift to the third beat. This occurs again in measure 316 at the upbeat of third beat. In measure 325, (g) shifts to the A string on the second half of the second beat to E with the third finger. This enables the

phrase to make a gradual decrescendo, which is appropriate here. Secondly, it keeps the same color of the E string for the sixteenth notes followed by an eighth note. Lastly, it shifts on the bigger break between the eighth note and sixteenth notes, which eliminates any glissandos. In measures 326 to 327, (g) shifts at every upbeat, which adds up to five shifts. This would be wasteful motion of the left hand. Also it would make the intonation problematic since the hand is constantly shifting. When (g) is compared to (e), (e) only shifts twice within same two measures. This allows the hand to remain in one position long enough to be secure and not be wasteful of energy and motion. In measures 328 to 329, (g) again shifts three times where (e) shifts only once in the same place. This example of (g) has a precarious shift as well. The shift to the C# in the second beat is subtly difficult and precarious.

Ex. 16, mm. 332 - 340 (Fold out: p. 114)

In the fingering of (a) at measure 332, (a) shifts to the D string on the second beat. The D string would sound weak and not well projected for a section in forte with accents. However, it can help build the crescendo that starts on the third beat with the weaker sound of the D string. In measure 338, (a) shifts to second note of the sextuplet, B, with the fourth finger. The fourth finger shift would produce a glissando due to the sluggish movement of the fourth

finger. Also the glissando would be heard more clearly when it is on the E string than the A string since the register of the notes are higher. When it gets down to the first position on B, the wider width of the first position makes the left hand work harder than when it is played on the third position.

In the fingering of (b) at measure 336, (b) shifts to the second beat with the second finger. This helps the next shift to the third beat. Since the first finger is free in the second beat, it would be easier to reach the Eb on the third beat. When the example of (b) is compared to (a), (a) has to travel more distance to get to the third beat and the first beat in the next measure. Also, unlike (a), (b) doesn't cross strings with same finger. In measure 339, (b) shifts at the last note of the measure to the next chord. The combination of shifting and the necessity of gripping all the notes of the chord presents a problem. Thus it would be less difficult to isolate the problems by shifting early after the open D string to G in third position. Thus, only the grabbing of the chord is left to solve.

In the fingering of (c) at measure 332, (c) shifts up on the G string for four notes. It would be risky, however this would express the intensity through the powerful and rich sound of the G string. In measure 336, (c) shifts to the third beat with the first finger. This makes the first finger cross the string which can be uncomfortable and can have more

of a break between those notes. In measure 338, (c) remains in the third position until the third beat in next measure. In this fingering, there would be no glissando to think about, however the problems involved might be greater. First, it is precarious to have both the F and B played with same third finger. Since they are a half-step apart, the F could be played sharper and B played a little lower. Secondly, the half-step between the B with the third finger and F with the fourth finger could be too tight for violinist with thick fingers. Also this fingering put the hand in a closed position which would have an effect on the articulation. In measure 339, (c) plays the passage on the second position. The unfamiliarity of the second position for many violinists could deter from them. Also, the wider spaces between the fingers would be inconvenient. Lastly, the formation of the interval of a fourth by D and G with the third and the second finger and second and first finger would be precarious for intonation. In measure 340, (c) ends in the second position for the chord. It would leave the third and fourth finger for the chord and this would produce a weaker sound than the second and third finger. Since the third finger can give more pressure, it would help the right hand to give more weight to produce a stronger sound.

In the fingering of (d) at measure 337, (d) uses a fourth finger trill. One should not avoid the fourth finger trill, however when the music requires stronger sound and

articulation, the other fingers should be substituted. The advantageous point about this fingering is that there is no shift involved in reaching the fourth finger trill from the preceding note.

Ex. 17, mm. 348 361 (Fold out: p. 115)

In the fingering of (a) at measure 355, (a) shifts to the B# with second finger on the third beat. This is done to express the legato between the large intervals through the portamento and glissando in the left hand. This fingering prepares for the next shift which goes to the downbeat of the next measure.

In the fingering of (b) at measure 349, (b) arrives at the first position in the downbeat. When the shift is made to the first position, it elongates the distance of the shift and, in this case, the next shift as well. On the other hand, (a) shortens the distance of the first shift from A to G# and eliminates next shift to the A by stretching to the harmonic A. In measure 354, (b) shifts up on the G string for the harmonic D. The harmonic would sound very gutsy and brilliant. Although the line would be less sustained than that of (a) due to the large shift in the left hand and the skipping of the D string in the right hand.

In the fingering of (c) at measures 350, 352 and 358, (c) shifts to the top notes with the third finger. The third finger would produce a stronger sound than the fourth finger

or a harmonic. However, the distance of the shift gets larger, and the left arm has to rotate inward which might be uncomfortable for violinists with small hands and short arms. In measure 352, (c) shifts on the last note of the measure to the downbeat in next measure with same finger. This shift moves from ninth to first position. Due to its large span of positions, the glissando would be unavoidable. This shift actually eliminates the possibility of the next shift between B and A#. By alternating them, the editor of (c) tries to maintain a balance between measures of large leaps with portamentos and glissandos and measures with only clean shifts. After the large leaps in measures 352 and 354, (c) eliminates any chance of glissandos or portamentos in measures 353 and 355. In measure 353, (c) shifts to the first position on the downbeat instead of third position. Also, the shift from upbeat of second beat to the second beat is from first to second position. This shift eliminates the next possible shift from B to A#. Because it has been moved to the second position on the upbeat of the second beat, it can stretch for the A# on third beat. In measure 355, the preparation, by shifting to the second position in the downbeat, eliminates the need for a shift between the next two notes.

In the fingering of (e) at measure 357, (e) shifts up to the fifth position on the third beat. This is done to create the portamento from the next shift down to third position.

The next shift to first position is also done to create the portamento effect. Unlike the examples of (c) which alternates between the measures with portamentos and glissandos and measures without them, the editor of (e) tries to maintain the effect of the portamentos throughout measures 352 to 355.

Ex. 18, mm. 361 - 380 (Fold out: p. 116)

In the fingering of (a) at measure 365, (a) moves to the A string on the third beat. The transference to the A string would produce a weaker sound and a glissando would be produced in the shift from F to D.

In the fingering of (b) at measure 360, (b) shifts to the harmonic B on the downbeat. The harmonic would be too weak as a top note for this very intense phrase. However, the shift to the first position in the third beat eliminates the glissando from F to D as in example (a). The shift is made between the change of bow which can hide the glissando. In addition the E string would provide a strong and projecting sound. In measure 371, (b) begins on the A string for the sixteenth note. This would prepare the following octave by having the first finger down, although, the E on the A string would not be sufficient when a larger sound is required. In measure 372, (b) shifts to the fifth position and stretches for the top note. It would be easier to find the two bottom notes of the chord since they are closer to the octave E and

are on an odd numbered position. This is more familiar than the even numbered position for many violinists. However, the one and a half step formed by the middle and top notes of the chord, A and G, would pose problems in vibrato and intonation. It would be difficult to vibrate due to the wide distance between the A and G, and it would be easier to have poor intonation due to the mixed positions. In the same measure, (b) has to cross the string to get to the second and third beats. This would be an inconvenient fingering when compared to the example of (a). In case of (a), the fourth and third fingers are brought down to the fourth position which avoids string crossing by fingers. In the third beat, because the hand is in the fourth position, there is no need to cross strings.

In the fingering of (c) at measure 364 to 365, (c) uses first and third finger octaves. This would work well for violinists with large hands. The 1-3 octave would allow the hand to be in an open position which has more room and space between the fingers than the 1-4 octave. In measure 372, (c) uses first, second and third fingers for the first chord. As in example (b), the mixed positions would pose problems. In the second and third beats, the mixed position continues in the example of (c). Although both of them avoid any string crossings, it would be very difficult to find both double-stops in the second and third beats. Apart from the intonation problem, it puts the hand in a closed position

which hinders the vibrato and would be very uncomfortable for larger hands. In measure 376 at the first beat, (c) comes down to the fifth position by extensions. This eliminates any need for shifts, but in this fingering, the first and second beats would have different fingering thus increasing the intonation problem. When the example (c) is compared to (a), (a) brings the hand into position for G, E and C#. Thus when reaching the second beat, the hand is encouraged to play the correct notes. At second beat in the same measure, (c) uses a harmonic for A, this allows the finger to cross to the E string easily. In measure 377, (c) substitutes a harmonic E in the first beat. The harmonic would give a fraction of time for shifting because harmonics can ring after the finger is lifted from the string. However, the mixture of harmonics in the fingered passage would cause other problems. The harmonic occurs when the string is slightly touched with the finger. When that is mixed into a fingered passage, the fingers can not react quickly enough to the different pressures they need to apply. In measure 378, (c) uses an unconventional fingering to climb the passage. In the third beat, (c) shifts to the fifth position, then stretches for the E and finally shifts again for G. Although the E is played with second finger as in other examples, due to its stretched position from the first finger, the hand is actually farther back and in fifth position. This makes the distance of the shift from E to G longer. Also, because it is not following the regular

arpeggio fingering as in example (a), the shift from E to G is more precarious.

In the fingering of (d) at measure 365, (d) plays the top B as a harmonic. It would sound not only weak but also cold. After the harmonic, (d) shifts to the G# with the same finger. Then, the broken diminished chord is played with the fourth, third and second fingers. The distances between these notes is wider than in the example of (a) due to the initial shift from B to G#. Thus, the fingers have to be more extended and it would be less convenient. Secondly, the first shift from harmonic B to G# is precarious and unnecessary. The second shift from D to B is under the slur, thus the glissando would be heard. It would be better to shift at the change of bow to avoid the glissando.

In the fingering of (e) at measure 377, (e) shifts from E to C# with the second finger in the second beat. This would cause a noticeable glissando which should be avoided. The alternate fingering given by (e) suggests the first finger for C#. This would be a better choice because it eliminates the glissando.

In the fingering of (g) at measure 365, (g) avoids extensions by way of a closed hand position. It efficiently reduces the stretches that the fingers have to do. The hand however, works more in an angular motion. Because there is no gradual outward rotation of the left arm led by the stretching fingers, the left arm is more rigid when there are

shifts. In measure 370, (g) plays the second beat with the third and second fingers. This keeps the hand in the middle and eliminates the need for a shift. The third finger is also stronger in sound than the fourth finger.

In the fingering of (h) at measure 377, (h) uses the extension in the first beat. The extension eliminates the shift, but it can create uncomfortably wide distances between the fingers.

Ex. 19, mm. 389 - 410 (Fold out: p. 117)

In the fingering of (b) at measure 392, (b) shifts back to G# in the third beat. By doing this the glissando goes into the downbeat of the next measure. The glissando helps the transition between the previous and the new phrase by changing the color. Also it prepares for the new melodic phrase from a somewhat unsettled phrase. Lastly, it adds the romantic touch. Although the shift in measure 404 could have been made on the open D string to B, (b) shifts at the second triplet note of the first beat. This allows the hand to move up freely while the open string is played.

In the fingering of (c) at measures 393 to 394, (c) plays the G# to A twice with the second finger alone. This would sound monotonous due to the repeated usage of second finger. Because every finger is capable of producing different color, it would be better to change fingerings in the same sequence for variety of colors. In measure 396, (c)

shifts up to C with the second finger. This causes the D to be played with the third finger and makes it farther away from the next note, G. Finding the G would be precarious due to the large distance from D. When D was played with the fourth finger as in example (a), the distance can be measured as three and a half step. Each finger would be a whole step away from the adjacent finger with the exception of the last finger with an additional half step. This helps to gauge the distance in the beginning until the distance can be felt. With the third finger on the D, the gauging can not be worked on but straight to feeling the distance. Thus it would make the stretch more precarious. In measure 406, (c) shifts down to second position in the first beat. This allows the notes to be vibrated. The shift is not necessary, however, because the chord could be played in the third position with the open strings.

In the fingering of (d) at measure 395, (d) has used the fourth finger for the top note. The fourth finger on such a sustained note would not be appropriate. Since the third finger is superior than the fourth finger in singing the note, the third finger should be substituted.

In the fingering of (g) at measure 400, (g) stretches for the B in the first beat. The stretch is uncomfortable and unnecessary. In order to avoid shifting, the G# could be played with the first finger.

Ex. 20, mm. 411 - 436 (Fold out: p. 119)

In the fingering of (b) at measure 415, (b) substitutes a fingered E for the open E string in the second and third beats. This is done to bring out the downbeat E and to avoid having the open E string project more than the downbeat. However, this allows an uncomfortable stretch between the fourth and second fingers and string crossings for one note. The open E shouldn't be covered because it is a short note, over projection is not a significant problem. In measure 424, (b) shifts to the third position in the second beat. This avoids large stretches in the first position but causes a problem going into the downbeat of next measure. The fourth finger has to cross from the D to the A string and since the notes are not lying in a parallel manner, it risks causing plucked string noise. In measure 429, (b) shifts to the third position in the third beat. The F# on the A string would discontinue the line of top notes on the E string. Also, due to its weaker sound, the F# on the A string would be contrary to the crescendo that is building. In measure 436, (b) shifts to G in the first beat. Because the shift is to the third triplet note, it could be accented. As it has no other fingers to help find the note, it is precarious. Despite these problems, it avoids the crossing of strings with fourth finger. This would be beneficial for violinists with thin fourth finger.

In the fingering of (c) at measure 411, (c) maintains the open A for a stationary note. The open A string causes three string crossing. This would waste energy by making the right arm work harder. Also, in the three string crossing, the middle string could be heard. In measure 420, (c) stays in the third position. This keeps the sound quiet and dark, but it causes a big break between the last note of this measure and the next note. Because there are three string crossing in the right hand and the shift in the left hand, it is difficult to avoid a break in the sound. In measure 426, (c) uses the second finger for the last note in the measure. The second finger on the A connects this measure with the next measure. In addition, the portamento to the A from F# prepares for the G in the downbeat.

In the fingering of (g) at measure 435, (g) shifts to the second position in the second beat. This would avoid playing the fifth with the fourth finger in the next measure. However, this fingering causes other problems. It makes a fourth with G and D in the next measure that can be precarious. Also, the shift in the second beat of measure 436 becomes larger and requires more time.

Ex. 21, mm. 443 - 485 (Fold out: p. 120)

In the fingering of (a) at measure 444, (a) stretches back to the D# on the downbeat from the last note of previous measure. This would be uncomfortable, and it would affect the

vibrato on the B. In measure 452, (a) crosses from the A to D string with the same finger in the first beat making a break between these notes.

In the fingering of (b) at measure 443, (b) uses a stretch in the first three eighth notes and shifts down at the half-step. This eliminates the backward stretch as in the example of (a). In measures 444 and 446, (b) shift to the third beat with fourth finger. In both instances, the third beat is accented by the shift causing redundancy. When (b) is compared to (a), (a) is more interesting musically. In the example of (a) at measure 444, the shift is made earlier to the D which reduces the accent of the G#. Thus when the shift occurs to G# in measure 446, it is more intense and emphatic. In measure 447, (b) stretches back for the G# in the third beat. This eliminates the shift to the F# in the next measure. In measure 452, (b) makes series of shifts. First, it shifts to the B on the downbeat and then shifts to the E# on the third beat. This would keep the hand in the open position as oppose to the example of (a) which keeps the hand in a closed position. The example of (b) also keeps the same color in the two slurred eighth notes. In measure 465, (b) stays in the fourth position. This allows the A on the D string to be vibrated and be more expressive. Secondly, it gives contrast to the antecedent which was on A and E string by staying in the D and A string. Lastly, it would help the line to continue in the same color until measure 473 when the

E string appears again. In measure 470, (b) breaks the pattern of fingering for the sixth by using the first and second fingers. Not only does this break the pattern of fingering for the sixth, it also causes the fourth finger to stretch more for the tenth due to the absence of the backward stretch with first finger.

In the fingering of (c) at measure 444 and 446, (c) changes the reach for the G# on the third beat. In measure 444, (c) remains in the position and in measure 446, (c) shifts to the G#. In both instances, (c) uses the third finger for the G#. This enables the G# to be sung more than a G# made with the fourth finger due to the thicker pad of the third finger. In measure 452, (c) uses an open and portamento free fingering. In the first beat, (c) shifts up to E# with first finger. This would avoid the break between the B and E# as in example (a). The G# on the second beat is reached by a stretch which brings the hand into the second position. This eliminates the shift to the E# on third beat. The fingering of (c) with the shift to E# and a stretch to G# on the second beat keeps the hand in an open position. When example (a) is compared at the same point, (a) keeps the hand in a closed position in the second beat which doesn't free the hand. In measures 461 and 463, (c) keeps the same pattern of reaching the tenth. It shifts down to the first position and stretches upward. When the example (a) is compared with (c), (a) starts in the second position and reaches backward for the first

fingered note while maintaining the hand near the second position. In measure 465, (c) plays the tenth on A and E string, then it moves to A and D string in measure 467. This differentiates the third phrase at measure 465 and the extension that follows with the change of color. Also the fingering of (c) makes the difference of expressive section and lusingando section in piano. It is obvious that the D and A strings with the tender and soft sound, are well suited for the lusingando section. In measure 470, (c) shifts up to the third position in the third beat. This would break the pattern of the fingering and it requires an another shift to second position in the second beat of the next measure. In measures 475 to 476, (c) makes a series of same-finger shifts in the chromatics. This would not distinguish the notes clearly, and, also, a slide would occur. For maintaining the legato in the right hand and distinguishable notes in the left hand, this fingering would not be favorable. In measure 483, (c) shifts to the second position in the upper note. This would enable the hand to reach the tenth with only a backward stretch with the first finger and avoids both backward and upward stretches as in example (b).

In the fingering of (d) at measure 452, (d) crosses the string in the third beat. This would cause a break in the sound.

In the fingering of (e) at measures 443 to 444, (e) plays the D# on the downbeat of measure 444 on the A string.

This disrupts the color of the line since D# is in the middle of the D string passage. To keep the same color in the line, it would be better not to change the string for just one note. The alternate fingering which is given allows a smooth transition from the D to A string and it would be preferable.

In the fingering of (g) at measure 452, (g) uses a contraction in the first beat. It would be uncomfortable and affect the vibrato due to the cramped fingers in the lower position. The shift to the second beat would cause a glissando since it is under a slur. In measures 465 and 471, (g) remains in the odd numbered positions, which can be more secure. However, in measure 471 to 472, it would cause unnecessary stretching with the fourth finger. In measure 483, (g) moves to 1-3 octave on the third beat. This requires the third finger to slide up a whole step from G where it is located in the second beat. This would be a long stretch for only one finger and it would be precarious for intonation.

Ex. 22, mm. 487 - 513 (Fold out: p. 122)

In the fingering of (a) at measures 493 and 494, (a) shifts with the fourth finger. Both times, (a) shifts a whole-step. In the fast passage, it would take longer to shift than shifting a half-step. Also it would be more difficult to find a note that is a whole-step away than a half-step away. In measure 512, (a) has the downbeat as a harmonic. The harmonic would not be appropriate for the

climax. It would sound weak and since it can not be vibrated, it would lack the intensity.

In the fingering of (b) at measure 496, (b) shifts to the second position in the second beat. This would keep the notes that follow all in one string and allow the hand to be closer to the third position in the next measure. When (a) is compared to (b), the example of (a) shifts at every beat creating the sequence in the fingering. This would make a two measure pattern in measures 495 to 498, which would be more coherent. In measures 507 and 508, (b) changes a string under the slur. However, it would be more comfortable to keep the two notes under one slur in the same string. By doing so, it would bring out the rhythm of two against three more clearly. In measure 508, (b) shifts under the slur with the same finger in the second beat. This would hinder clear articulation in the left hand. It would sound more clean and articulated by shifting between the bow change. In measure 511, (b) shifts twice in a row at the second beat. This is precarious since the hand is constantly moving and has no time to feel the position.

In the fingering of (c) at measure 490, (c) substitutes the first and second finger in the downbeat in order to avoid the string crossing of the third finger. However, this fingering would be more precarious than the fingering in first position due to the contraction of the hand. The contraction would affect the intonation despite its benefits.

Since the chord has to be played from the lower strings due to the two note pick-up, there would be a slight time for the third finger to cross the strings. In measures 493 to 500, (c) keeps the pattern of shifting in half-steps. This would make a smooth line. However, it would be blurry in measures 496, 498 and 450. In contrast, (a) uses sequential fingering which distinguishes groups of four notes and emphasizes every first note of the four-note group by shifting on the beat. In measure 509, (c) shifts to the sixth position for the downbeat. This would be an unnecessary hand movement. In the second beat of same measure, (c) shifts to the downbeat of the second beat. This shift eliminates any glissando that could occur in the shift under the slur. In measure 510, (c) uses a mixture of half and first position. This would contract the hand and keep it in a closed position. The closed position offers less stretching, however it would be weak in finger articulation due to many uses of the third and fourth finger. In measure 511, (c) shifts twice at the end of the run to reach the top. This would be precarious due to frequent shifts at the last moment. The shifts add problems of intonation in what is already a difficult diminished chord passage. Despite its difficulty, it reaches the top note with third finger which would be stronger than the harmonic in sound.

In the fingering of (e) at measure 493, (e) stays in the third position up to the second beat of next measure. This

would sound weak due to the mixture of A string. As the music builds in intensity, these two measures should be stronger than the two previous measures. Thus, it would be more appropriate to keep the entire two measures on the E string.

In the fingering of (f) at measure 511, (f) uses 1-2-3-4 fingering for the last four notes of the passage, then it slides up to the top note with third finger. This would be the ideal fingering since it reduces the extra shift at the end and avoids using the fourth finger and harmonic for the top note.

In the fingering of (g) at measure 498, (g) shifts to the first position in the second beat. The shift, being a whole-step, requires a longer distance to move than the half-step shift. Also, due to the greater distance of the shift, the shifted note could be accented more. In measure 510, (g) crosses the string from D# to E in the second beat. It would be uncomfortable for the hand to move from the fourth to the first finger due to the wide distance. Also the change of strings in half-step would bring out the disparities of the string.

Ex. 23, mm. 526 - 571 (Fold out: p. 124)

In the fingering of (a) at measure 535, (a) moves up to the harmonic on the B. This would sound transcendental and would be appropriate here as the line tries to reach the top, and then finally arrives at the top. In measure 539 to 542,

(a) uses only the third finger to come down the line. The third finger has the quality of singing, however the use of only one finger here seems redundant. It would be more interesting to have different qualities from other fingers. In measure 555, (a) shifts to first position in the third beat. This shift to first position would increase the distance of shifting up to G# in measure 557. In measure 560, (a) shifts back and forth three times through second and first positions. Frequent shifts would cause an intonation problem and should be avoided. In measure 562, (a) shifts to the fourth position in the third beat. This requires an extra shift to the third position in the next measure. Thus, it would be better to shift to the third position the first time.

In the fingering of (b) at measure 553, (b) shifts up to a harmonic on the A string. This would give a darker sound than the harmonic on E string. Also, it would be interesting to have the difference of sound the second time. In measures 557 to 558, (b) comes down the passage using extensions. This reduces the number of shifts required to play the passage. Thus it would be more efficient. In measure 559, (b) starts from the third position with the stretched fourth finger. This would be difficult to grab since the fingers have to fall in a stretched position. Also, it happens twice in this measure. Thus, it would be very difficult. When the example of (a) is compared, (a) uses the security of first position

without special extensions which would simplify the passage. In measure 560, (b) starts the passage in the third position. This passage also has a major third with the third finger and stretched fourth finger on D and F#. However, unlike the previous measure, this third has the third finger on D and F#. However, unlike the previous measure, this third has the third finger already on the string and it is only adding the fourth finger. Thus, it would be easier than grabbing both notes. When (b) is compared to (a), (b) is preferable since it reduces many shifts.

In the fingering of (c) at measure 534, (c) shifts from the harmonic to F#. This shift would be precarious due to the distance of the shift and the harmonic before the shift. The latter creates more problems since the harmonic would require careful adjustment of the finger to produce the sound, and the shift, as well, has to be measured precisely. Thus, when many problems are occurring together, it would make the problems worse. In measure 554, (c) shifts to F# on the third beat. When this is compared to the example of (a), (a) shifts up to the third position using the open A string. This reduces the distance of the shift, which would be more efficient. In measure 555, (c) uses the extension to reach to the third beat and then, shifts to get to the third position. When this is compared to the example of (b), (b) eliminates the extension and shifts directly to the third position. The elimination of precarious the extension and the breaking up

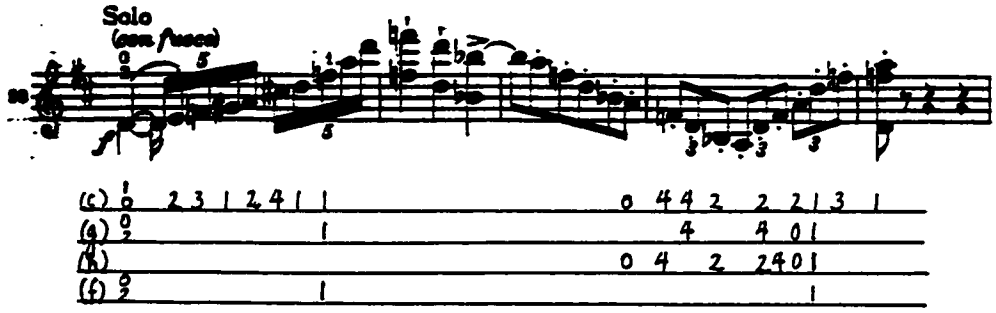
of the extension and shift occurring together would be preferable. In measure 557, (c) uses an extension to reach the harmonic E and shifts to the second position in the third beat. There are three problems which exist here. First, would be the extension to E. The second problem would be the harmonic that has to sound, and lastly the shift after the harmonic. It would be very precarious to have all these problems side by side. Especially, the extension to reach the harmonic could jeopardize the harmonic. In measure 558, (c) uses the second position and contraction from the second position or first position in first two beats. This causes a problem in the passage. The problem arises when the open strings are used between the notes. They cause the hand to lose the feeling of the position and to keep searching for the notes following the open string. In measure 559, (c) uses the mixed positions on the second and third beats. They prepare the hand to be in position for the notes following them. Thus, they use the extensions to eliminate all the shifts in the measure. However, this fingering is precarious due to the use of mixed positions. The mixed position requires wide stretches between the fingers which poses a problem of intonation.

In the fingering of (d) at measure 556, (d) moves up early on the D string at the second beat and shifts up again on the A string. The shift to the B on the A string in third beat eliminates the wide shift to the following note, G#.

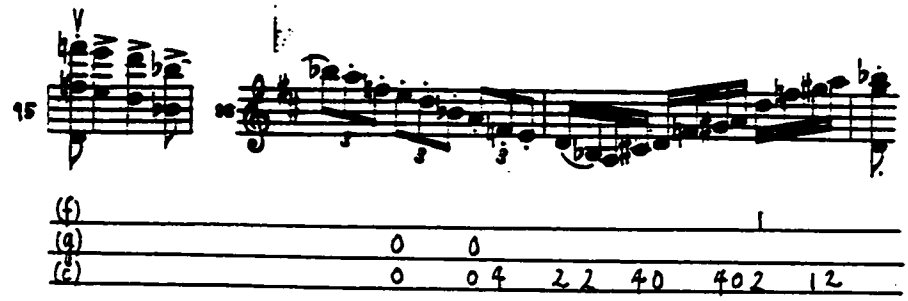
However, the shift to the B on the A string is precarious, since B lies in a high position on the A string. Also, the slide up to the G# would sound more free and expressive.

In the fingering of (g) at measure 550, (g) plays an open string in the first beat. The color of the D string would be disrupted by the use of the A string. Also, the open D string would provide time to shift. Thus, the open A string would not be necessary.

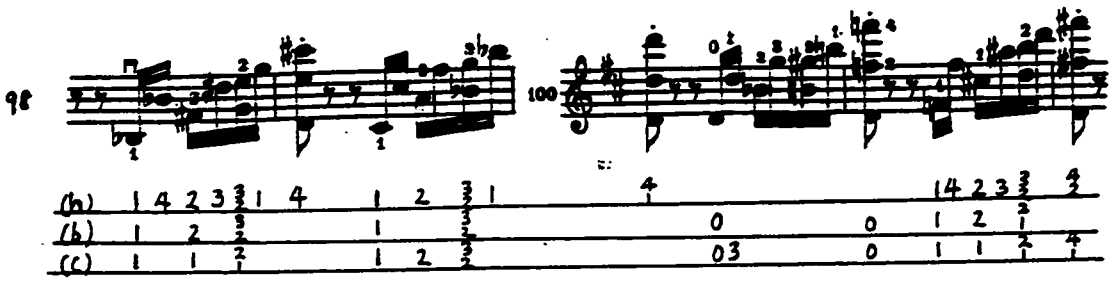
Examples



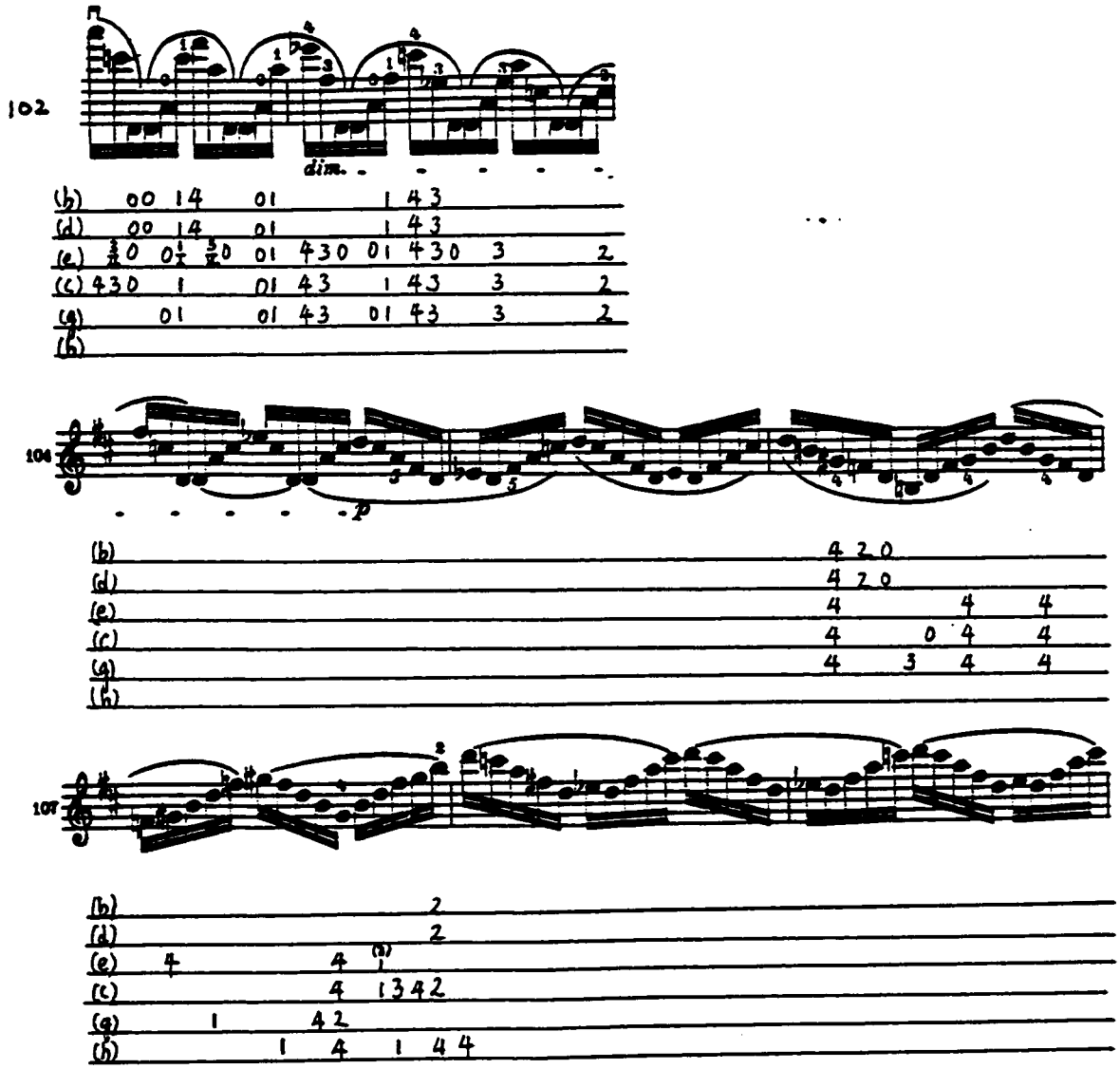
Ex. 1, mm. 90 - 94 (Text: p. 10)

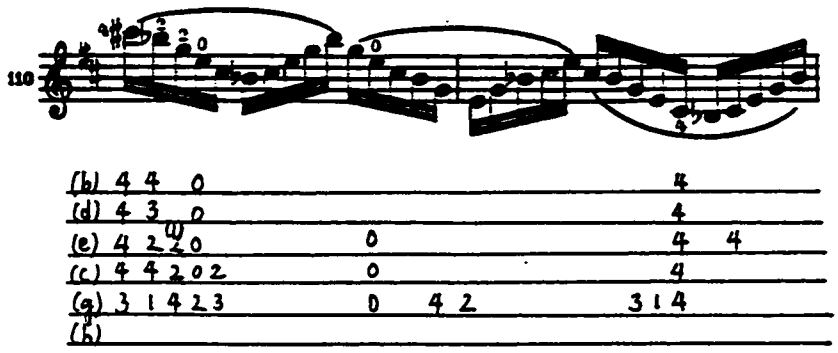


Ex. 2, mm. 95 - 98 (Text: p. 11)

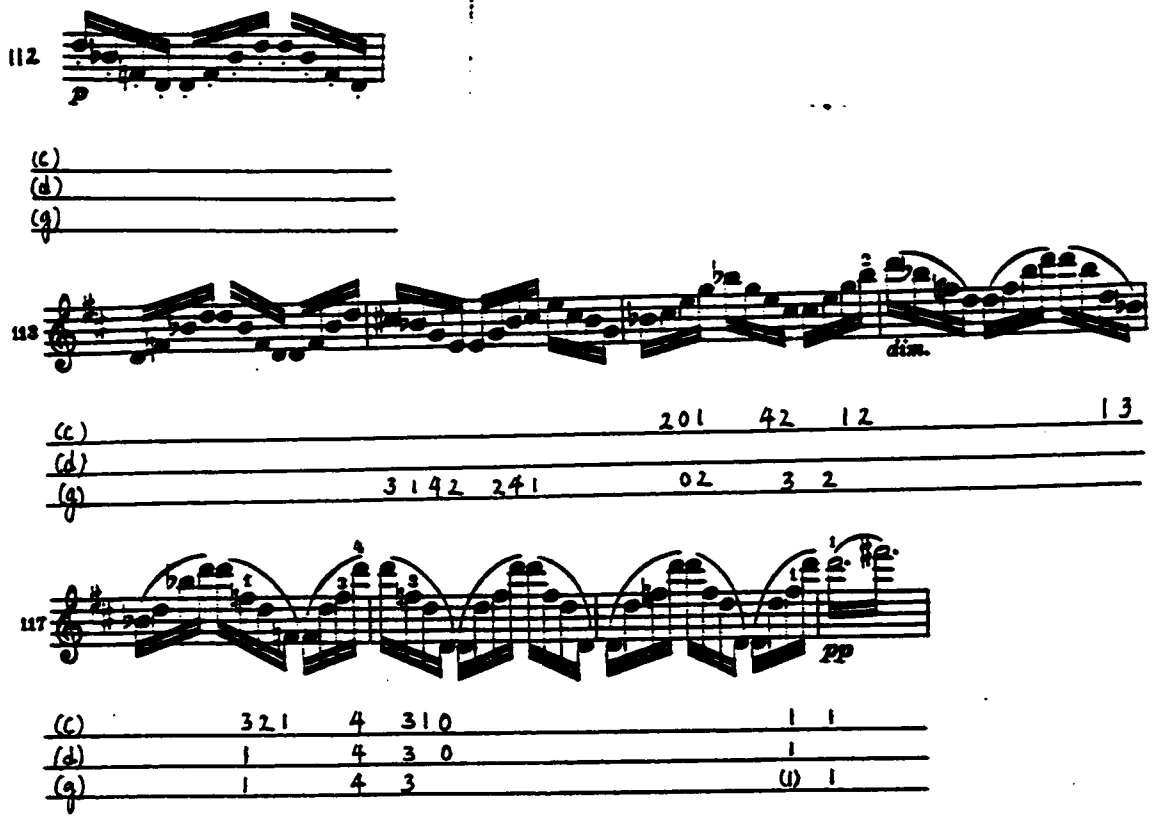


Ex. 3, mm. 98 - 102 (Text: p. 12)





Ex. 4, mm. 102 - 111 (Text: p. 13)



Ex. 5, mm. 112 - 120 (Text: p. 15)

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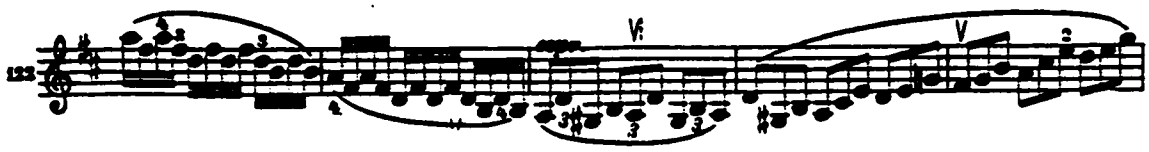
(f) 4 2
(e) 4 2 4
(b) 4 3 1 1 2
(c) 4 1 3 1
(h)



(d) 4 3 3 0 4 0 4 2
(f) 4 3 3 0 4 4 2
(e) 4 3 3 4 4 2
(b) 4 3 3 0 4 0 4 1 3 0
(c) 3 4 3 3 0 4 1 1 3 1
(h)

(d) 1 4 4 2 2
(f) 1 4 2 2 4 1
(e) 1 4 2 2 4 1
(b) 1 2 2 4 4 2 2
(c) 1 1 1 4 2 2 1 1 4 1 1 4 0
(h) 4 1 2

(d) 1 1 1 3 1 1
(f) (0) 1 1 1 1 4
(e) 1 1 4
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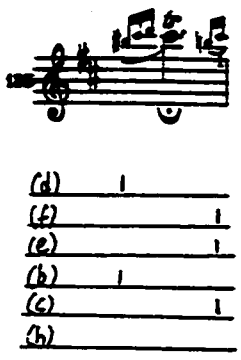
(c) 1 2 1 2 1 2 2 4 1 2 1 1 4 0 1 2 1 2 1 2 2 3 3
(h)



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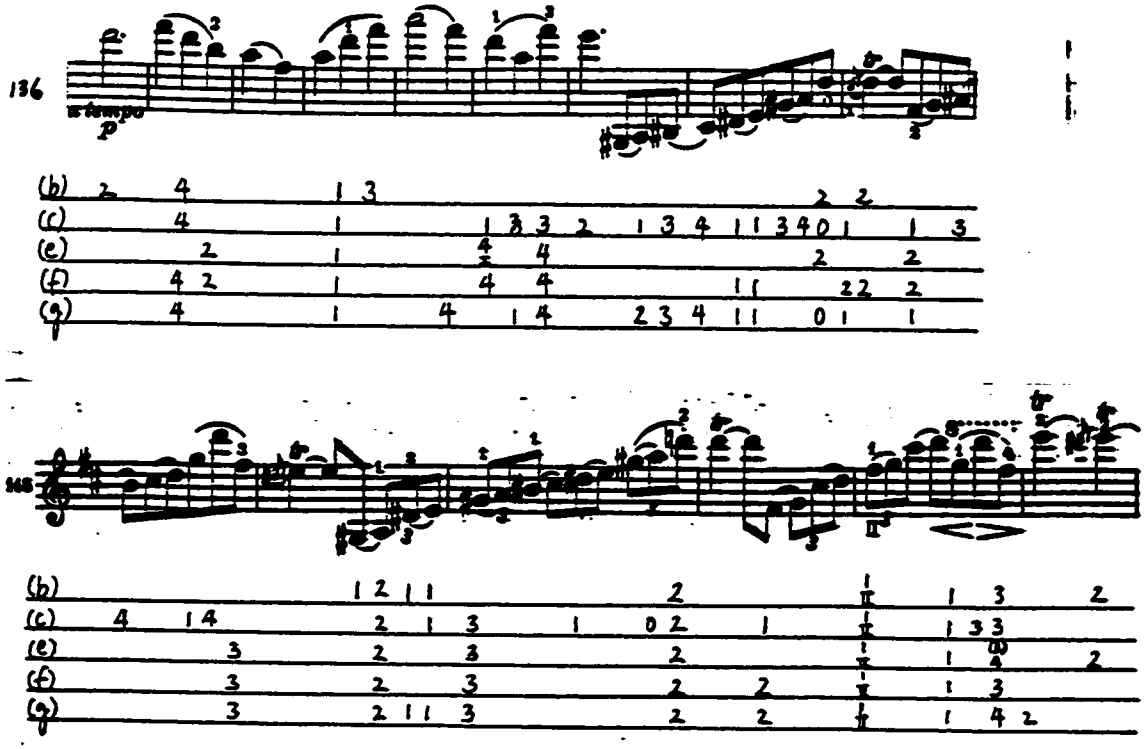

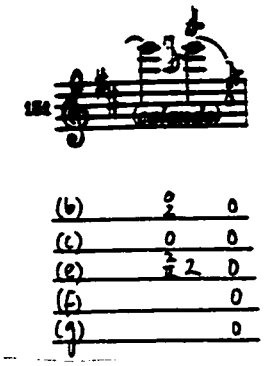

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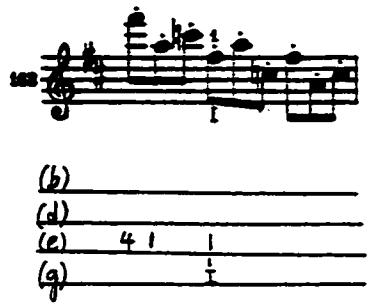

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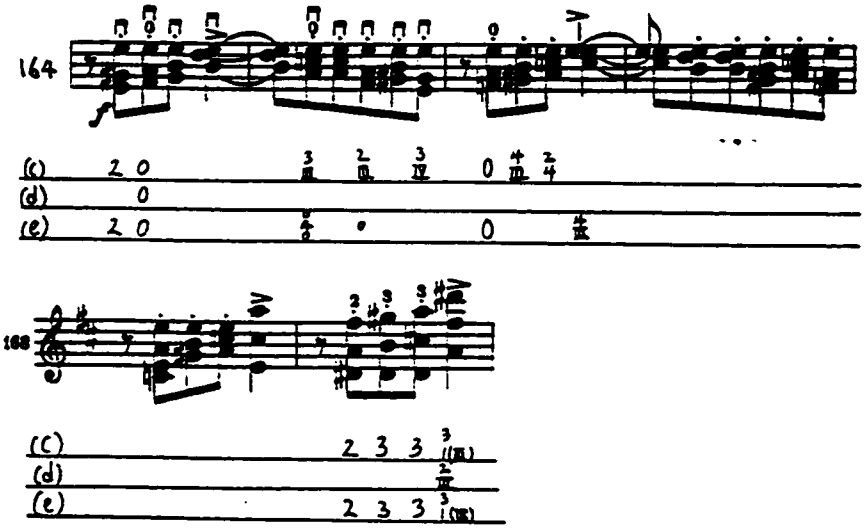

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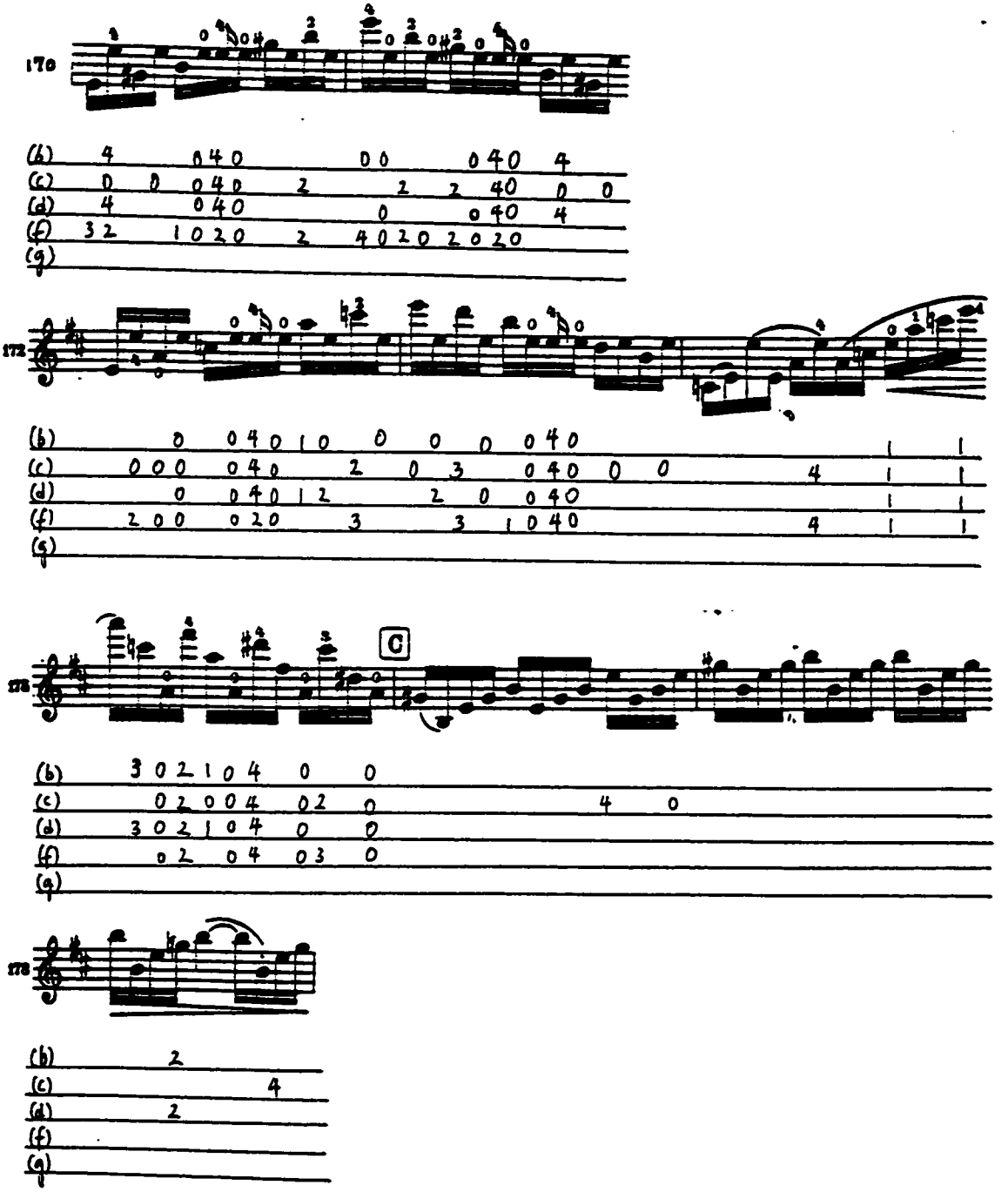

Ex. 10, mm. 170 - 178 (Text: p. 27)


179
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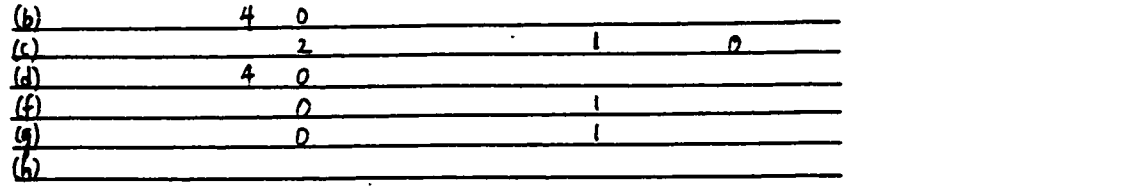
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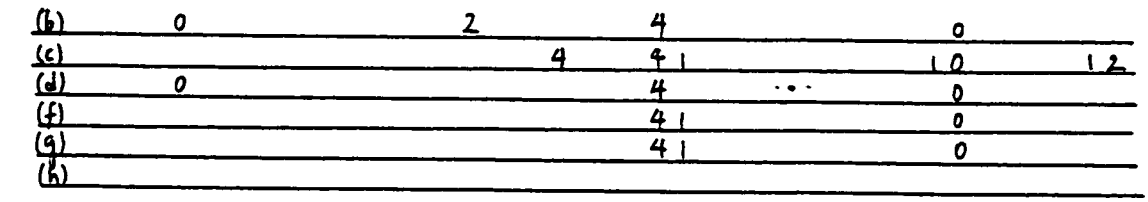
(c)
(d)
(f)
(g)
(h)


182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(f)
(g)
(h)


186
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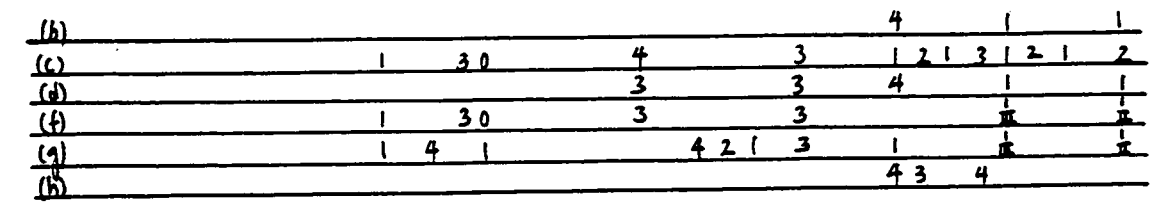
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(f)
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190
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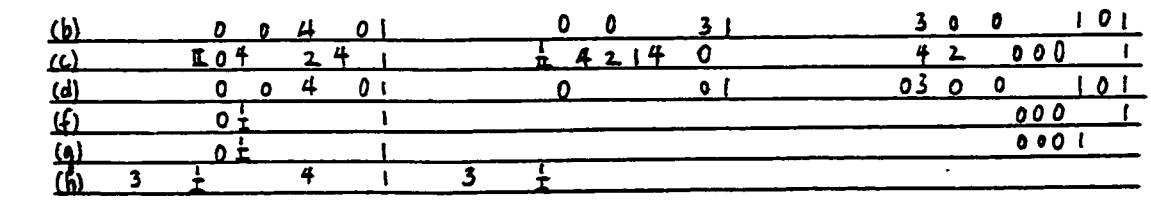
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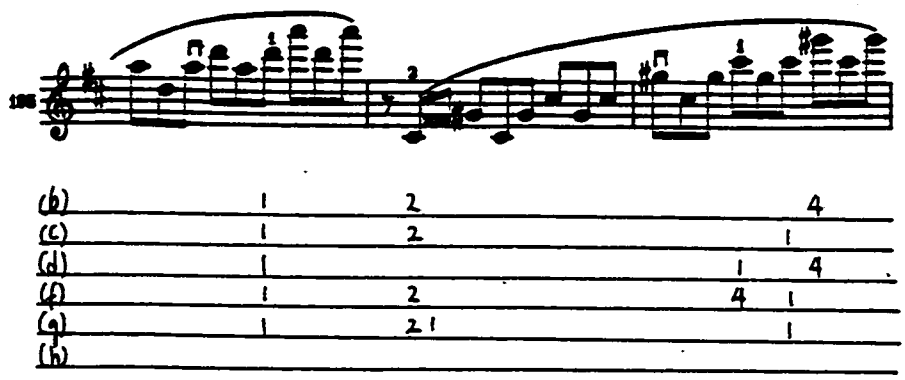

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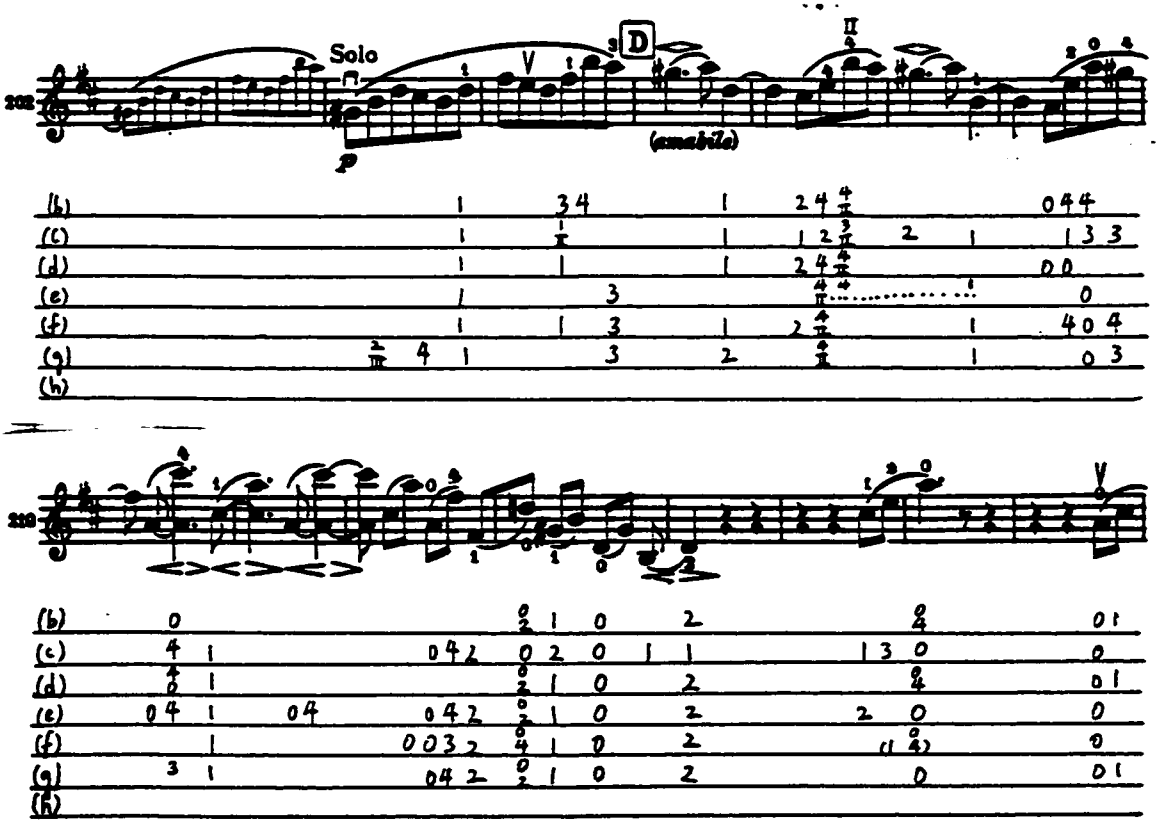

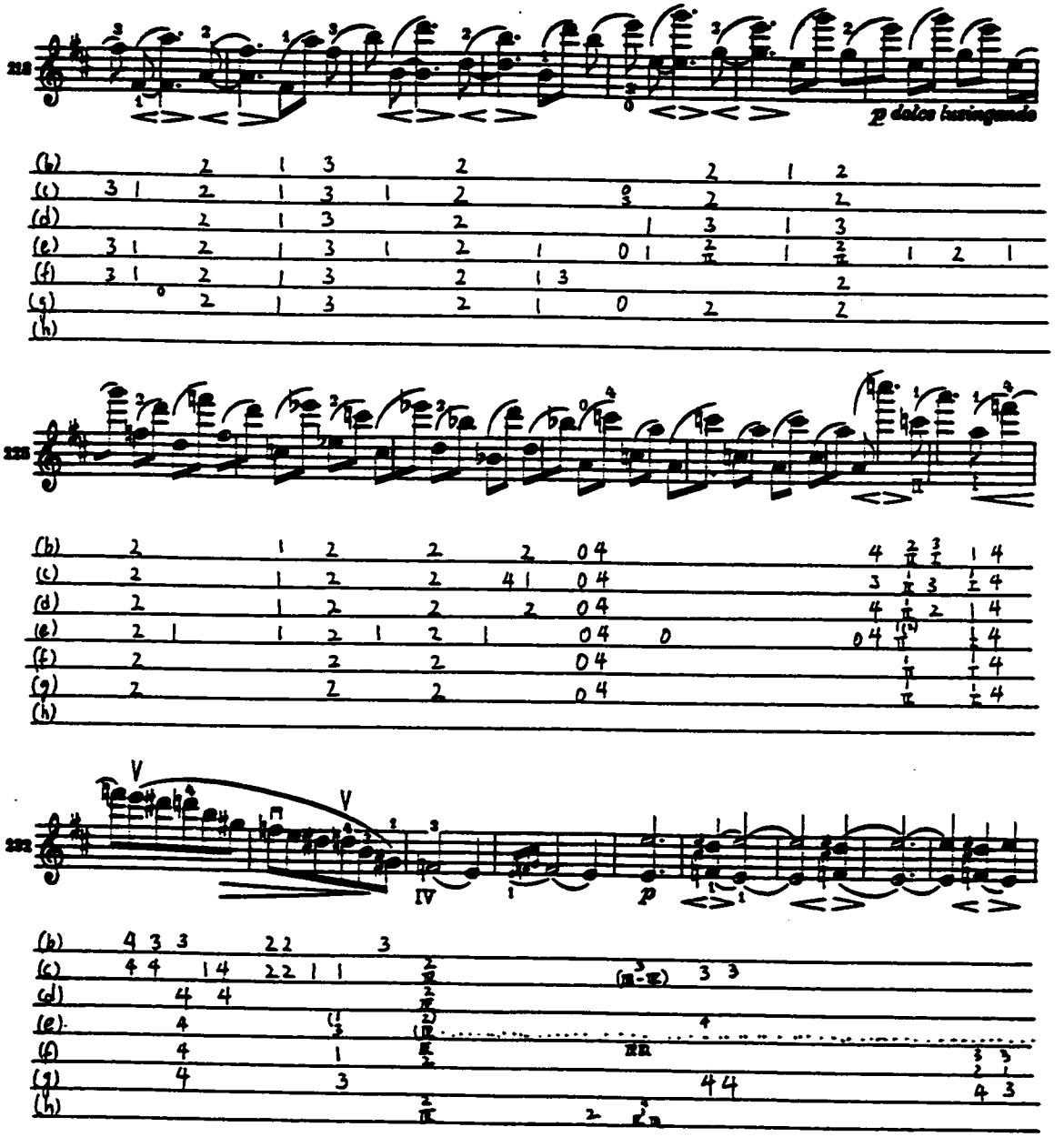
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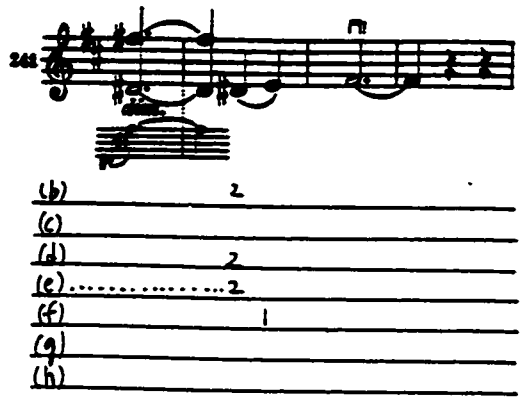

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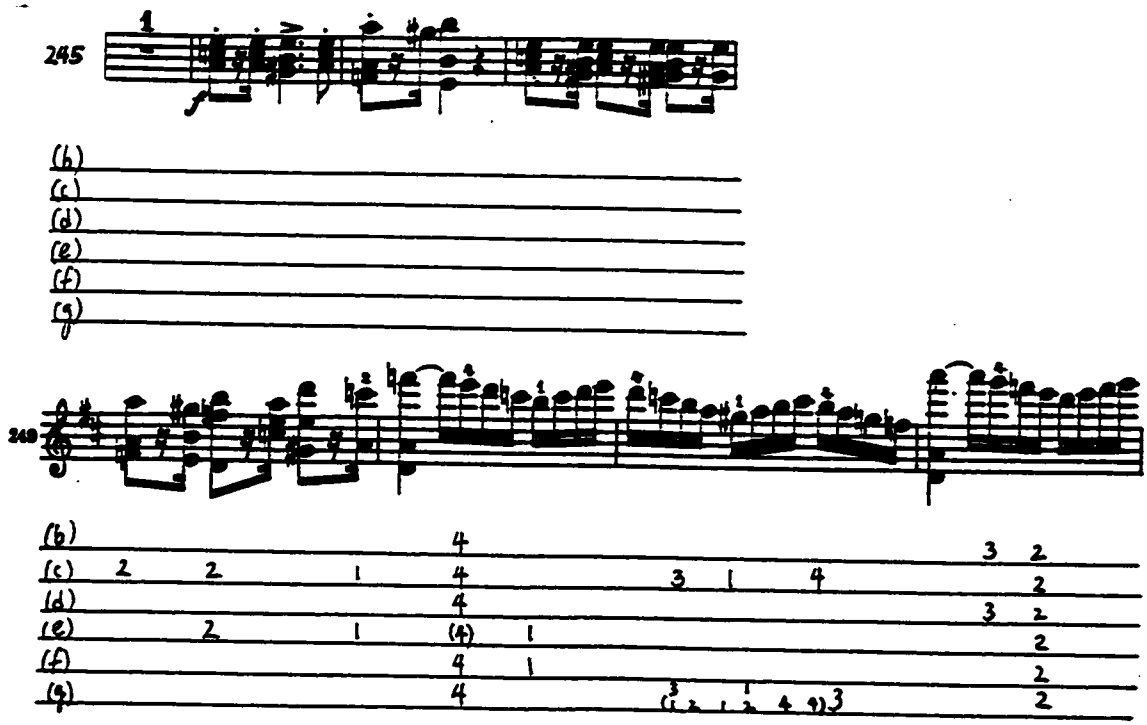

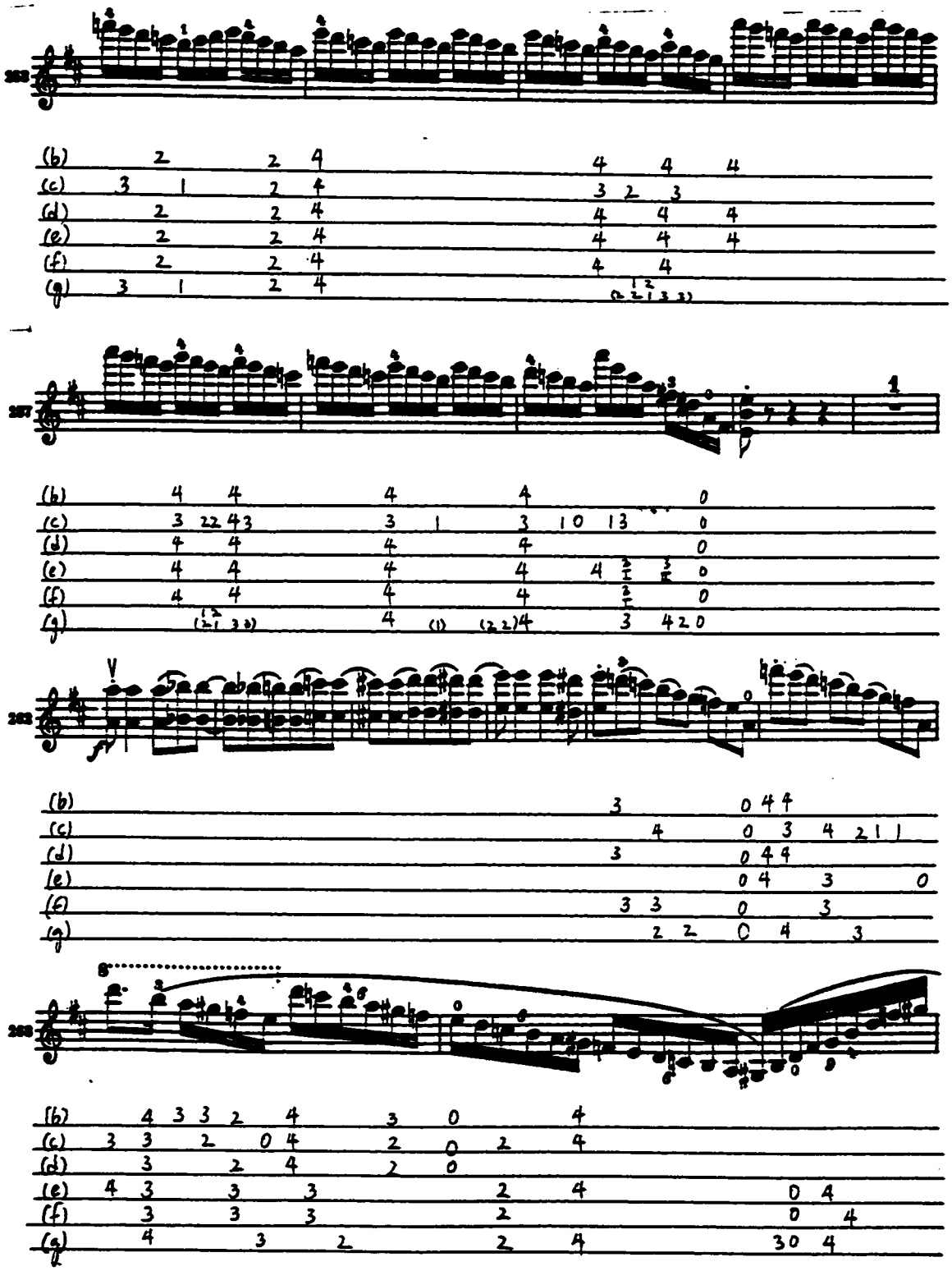

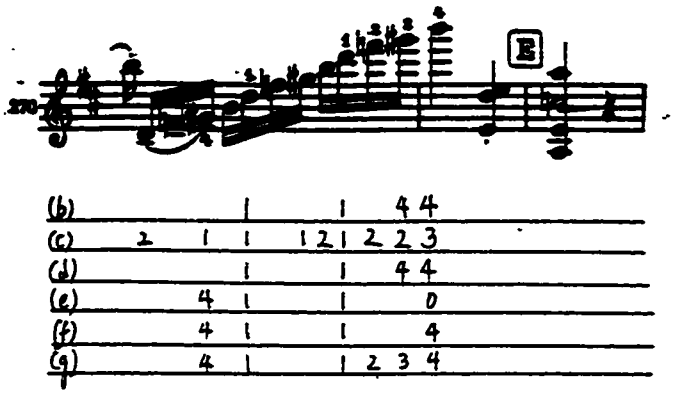

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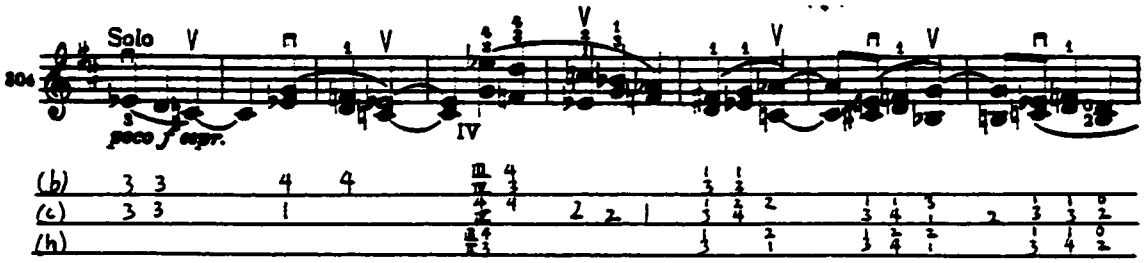

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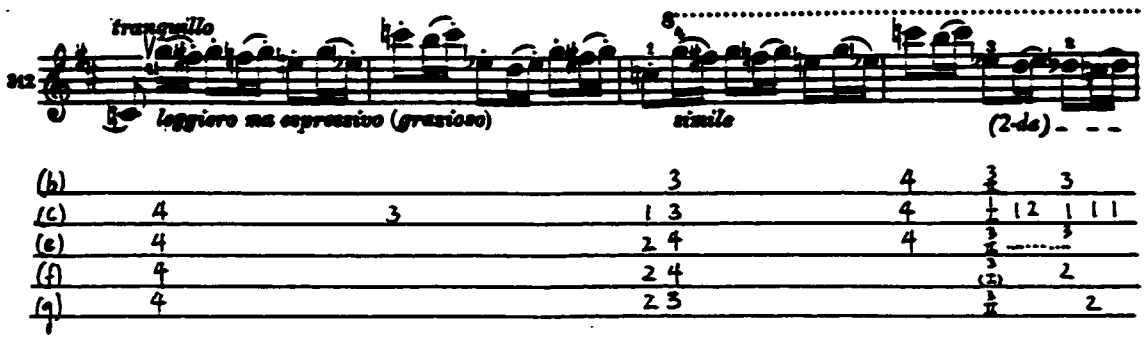

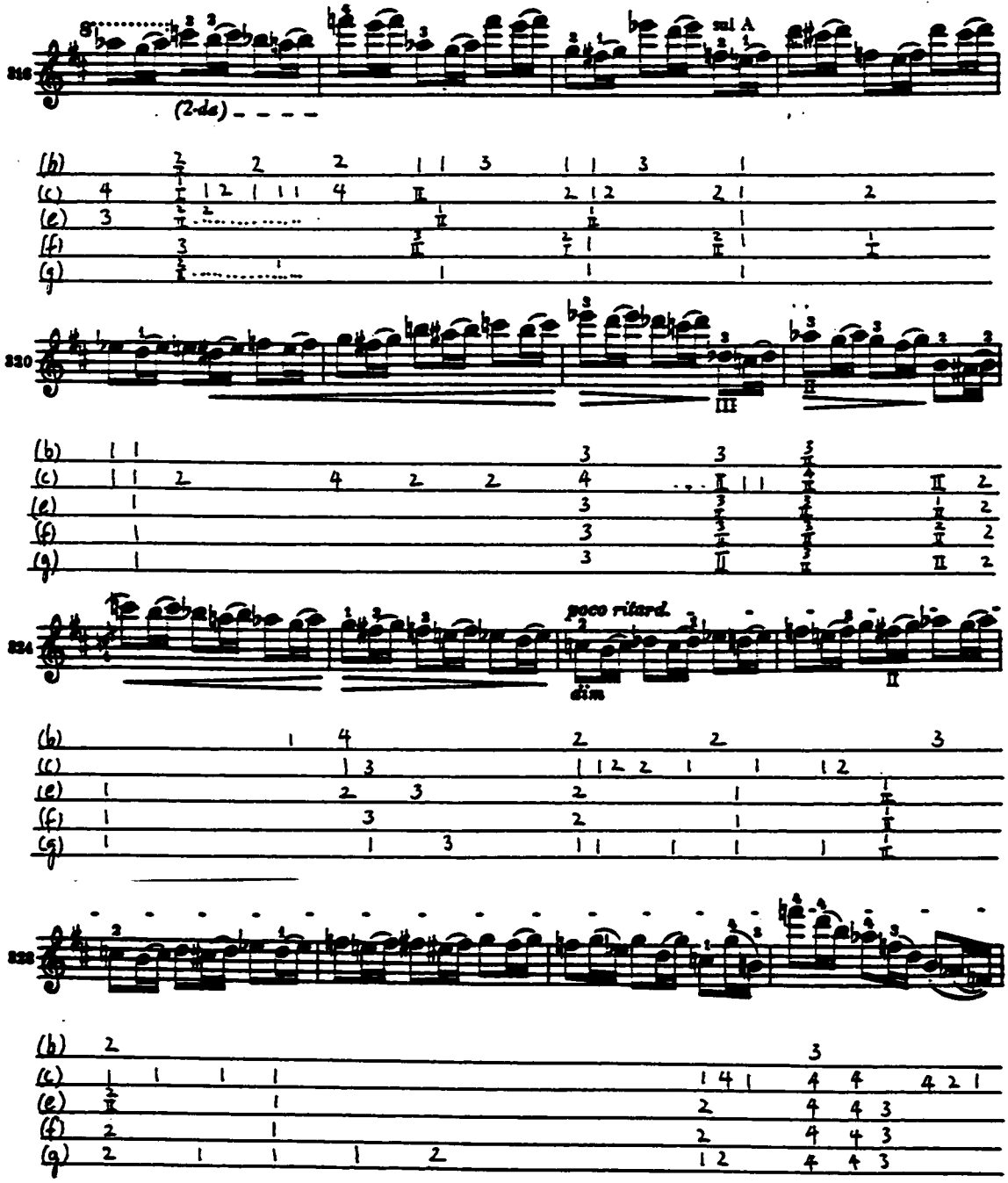

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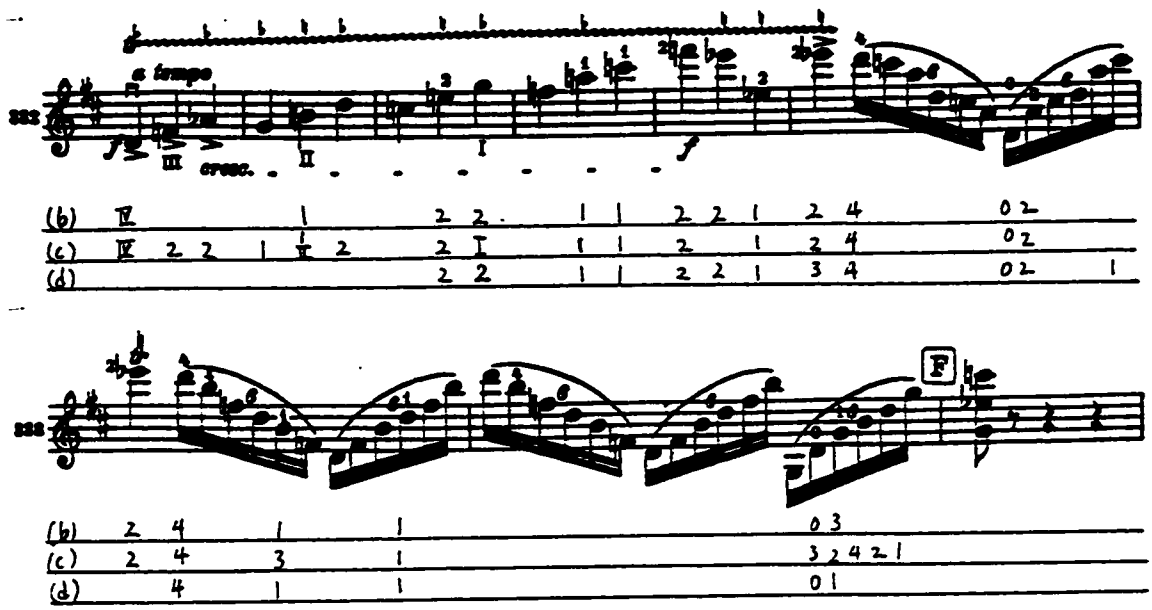

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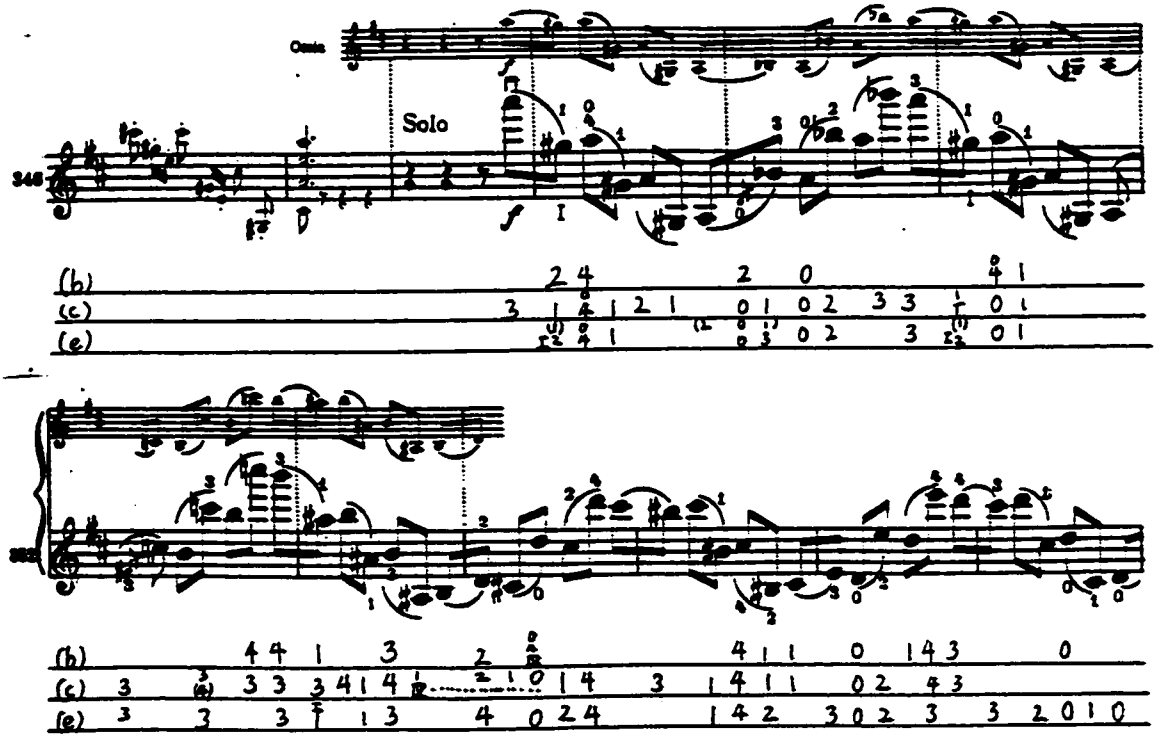

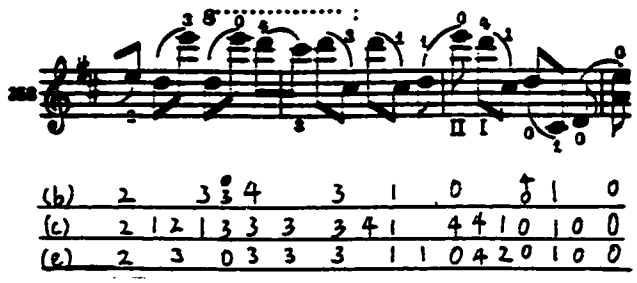

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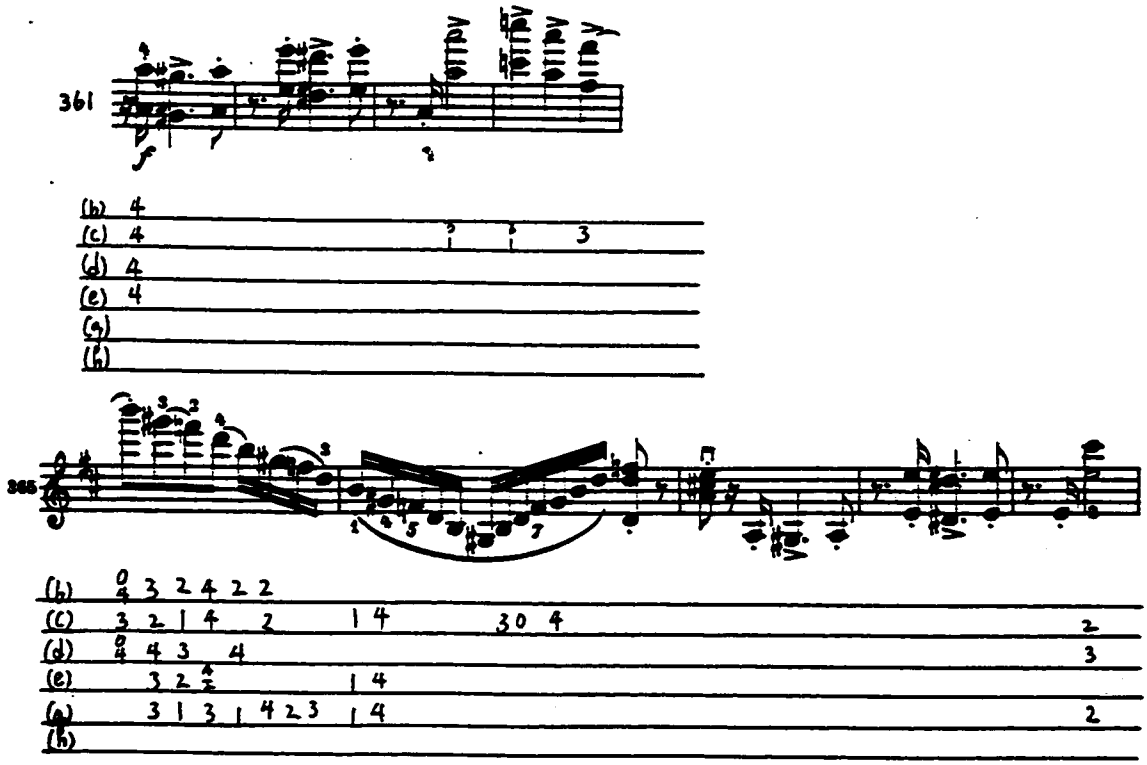

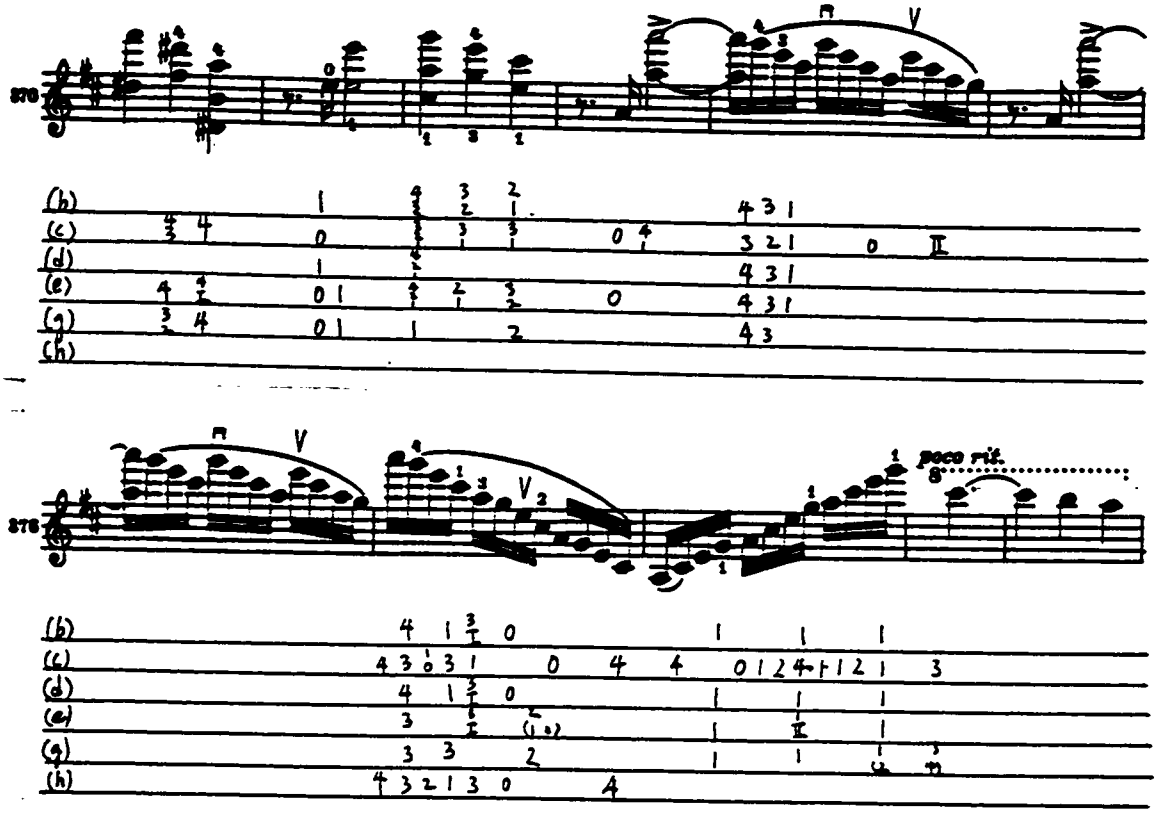

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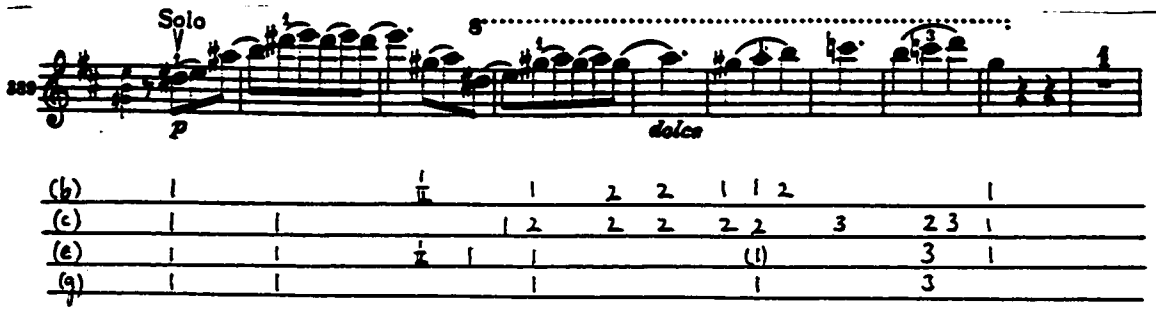

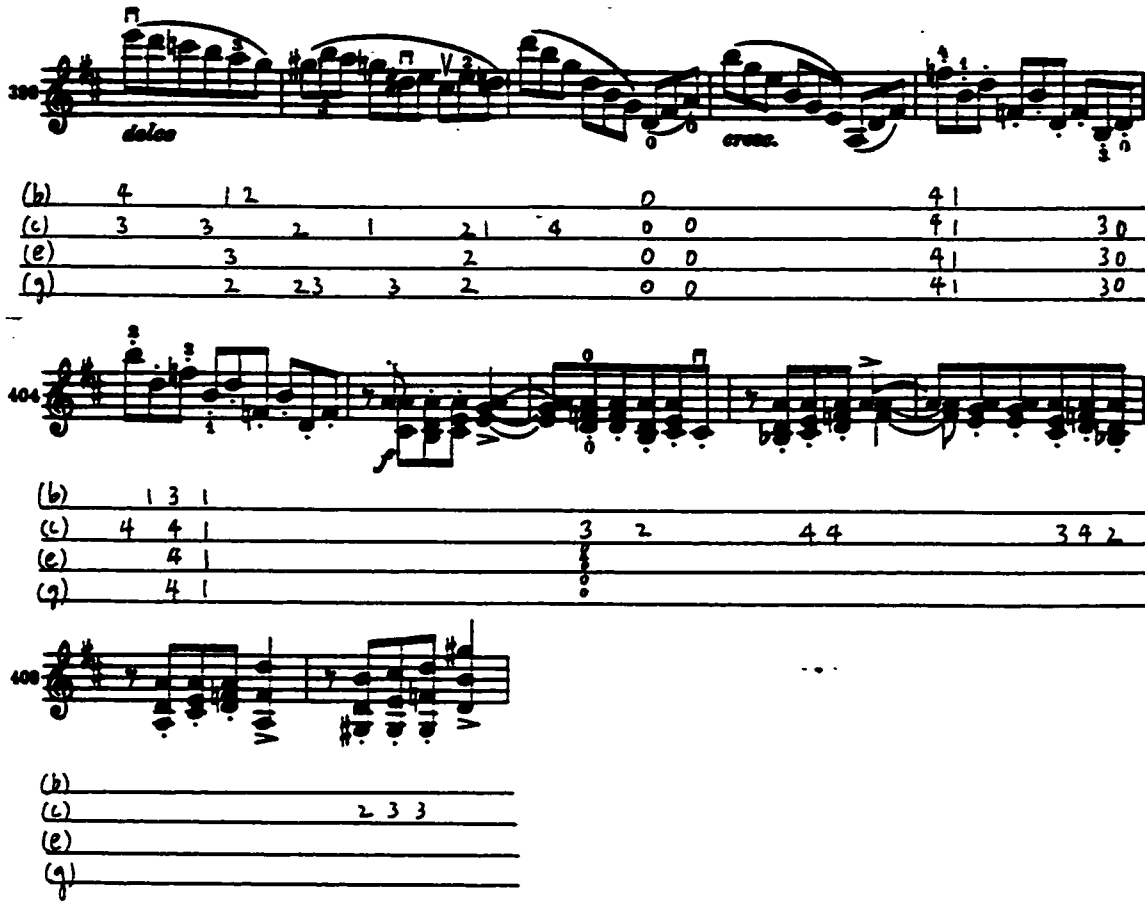

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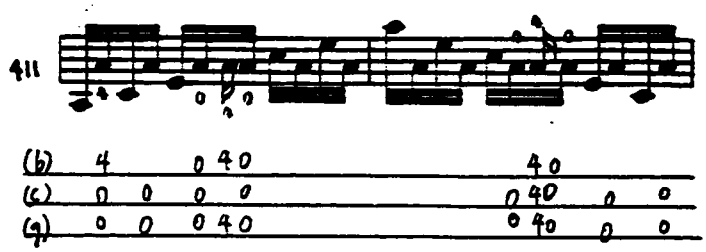

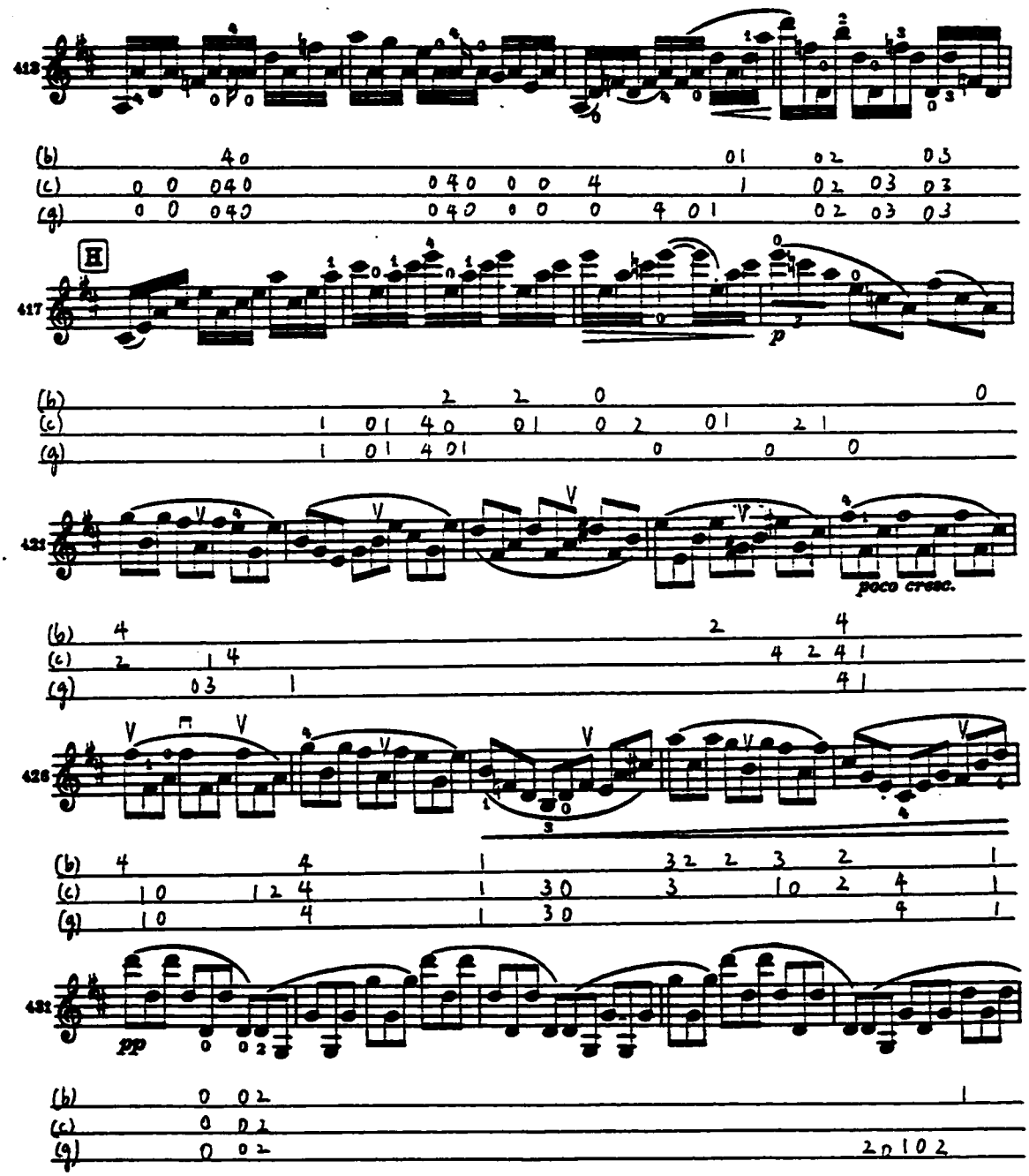
412
(b)
(c)
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426
431
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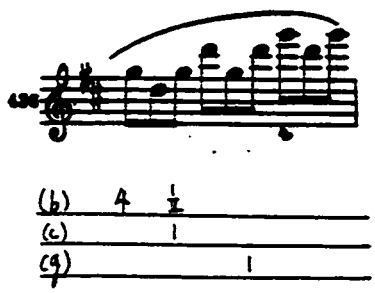

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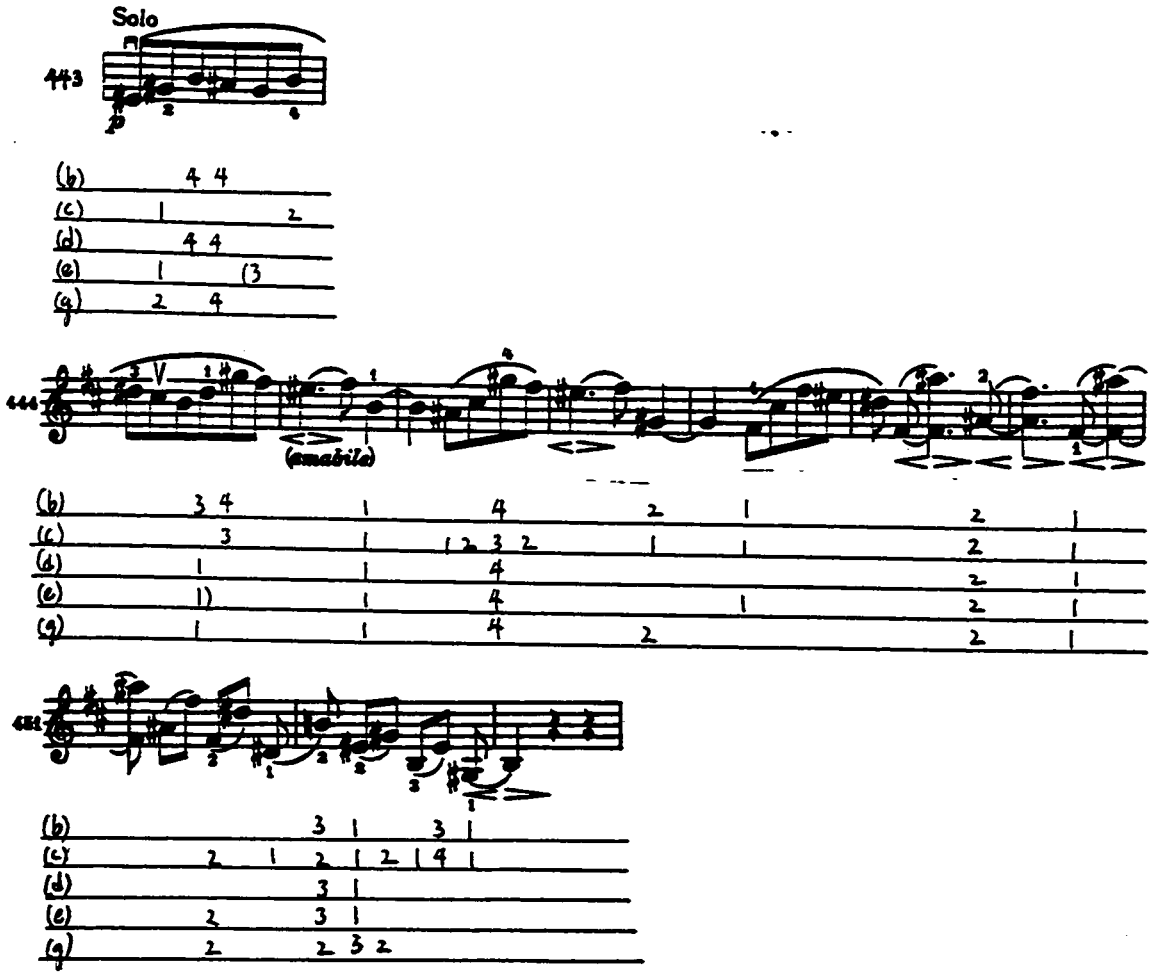

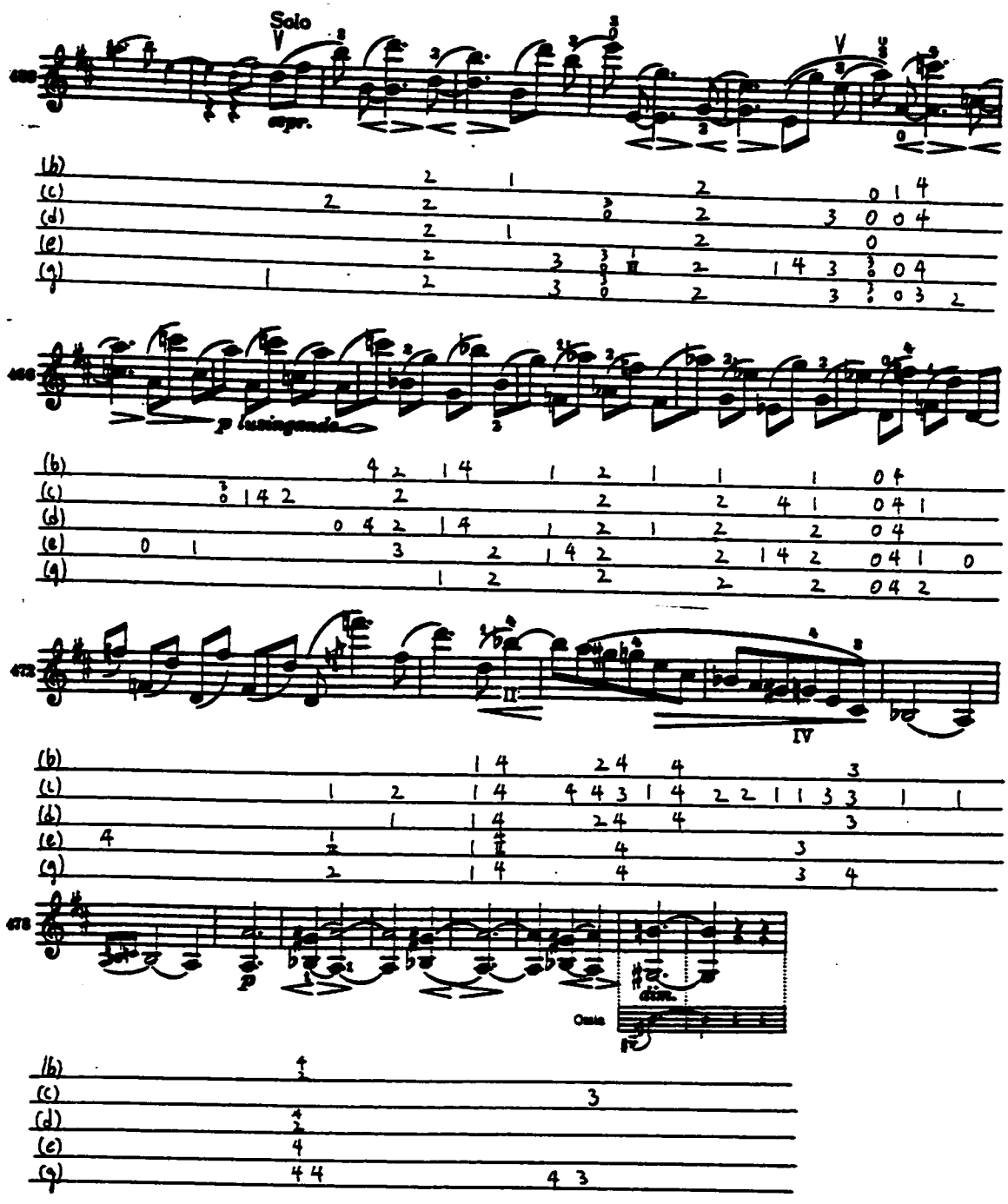

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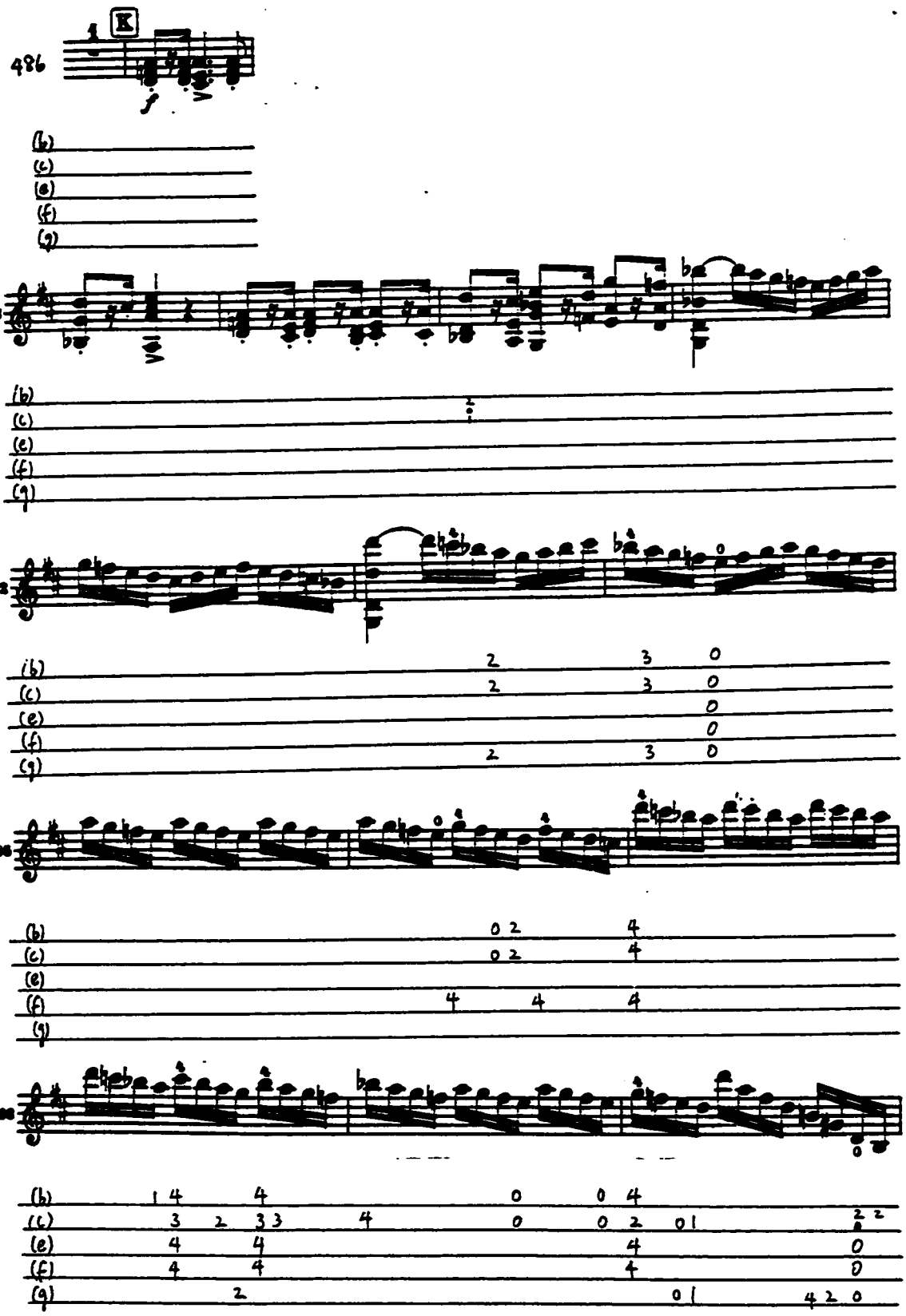
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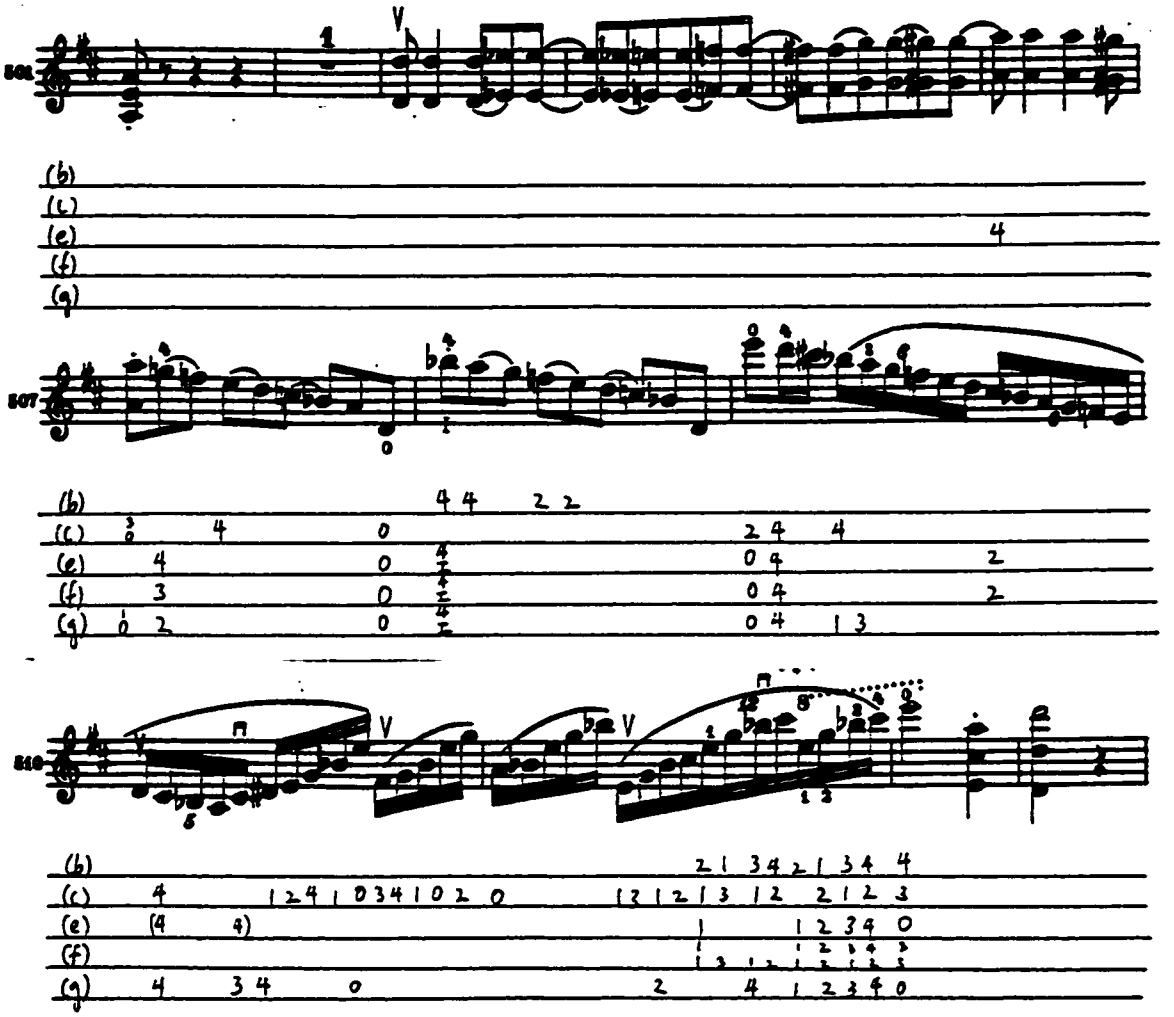
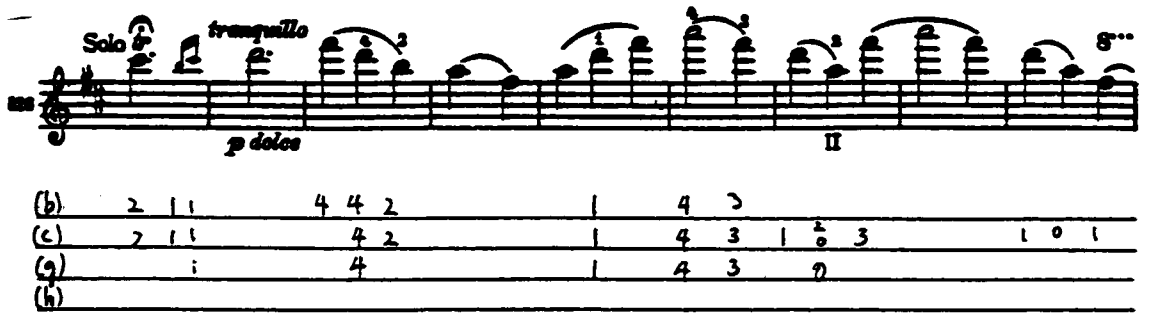
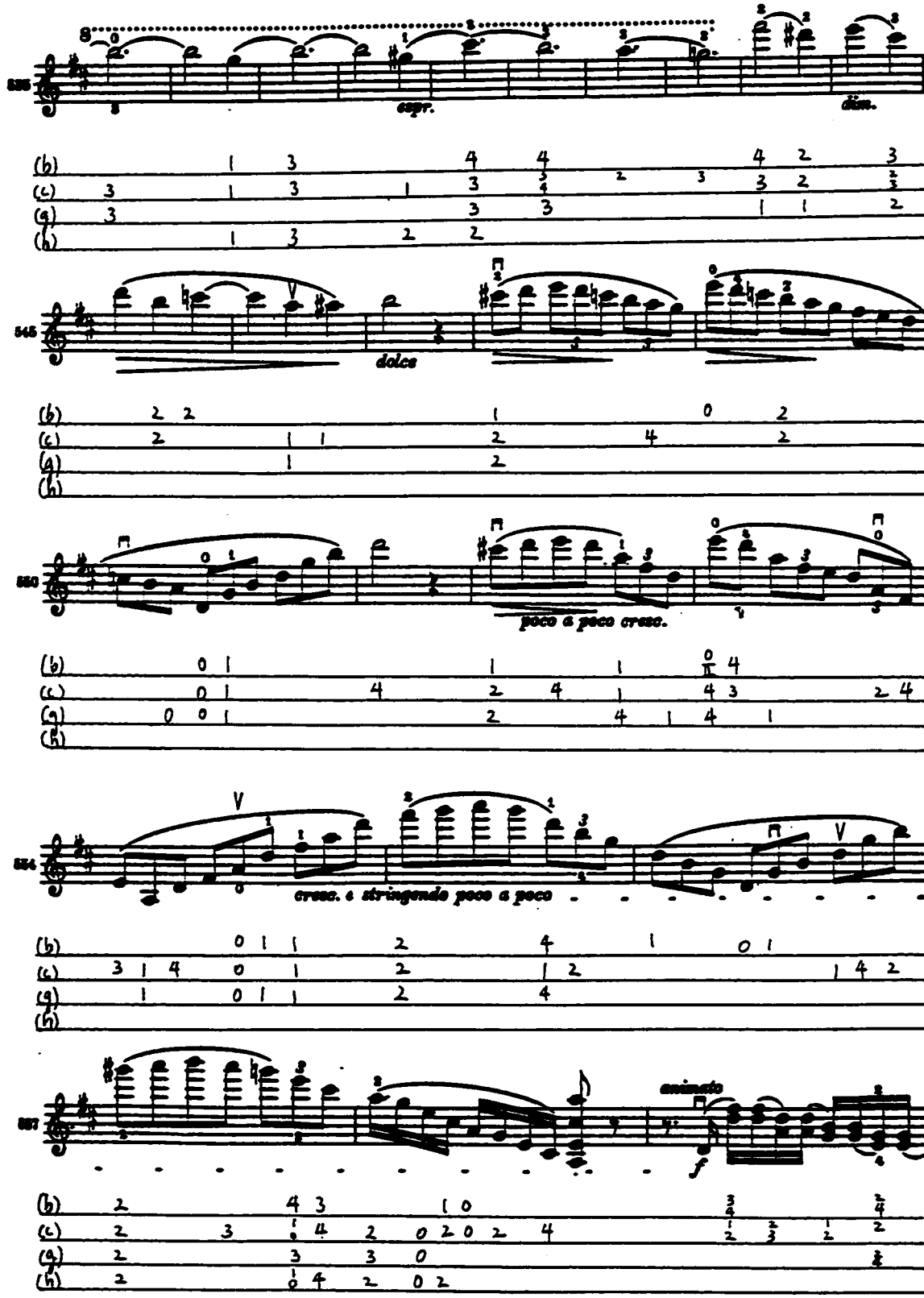
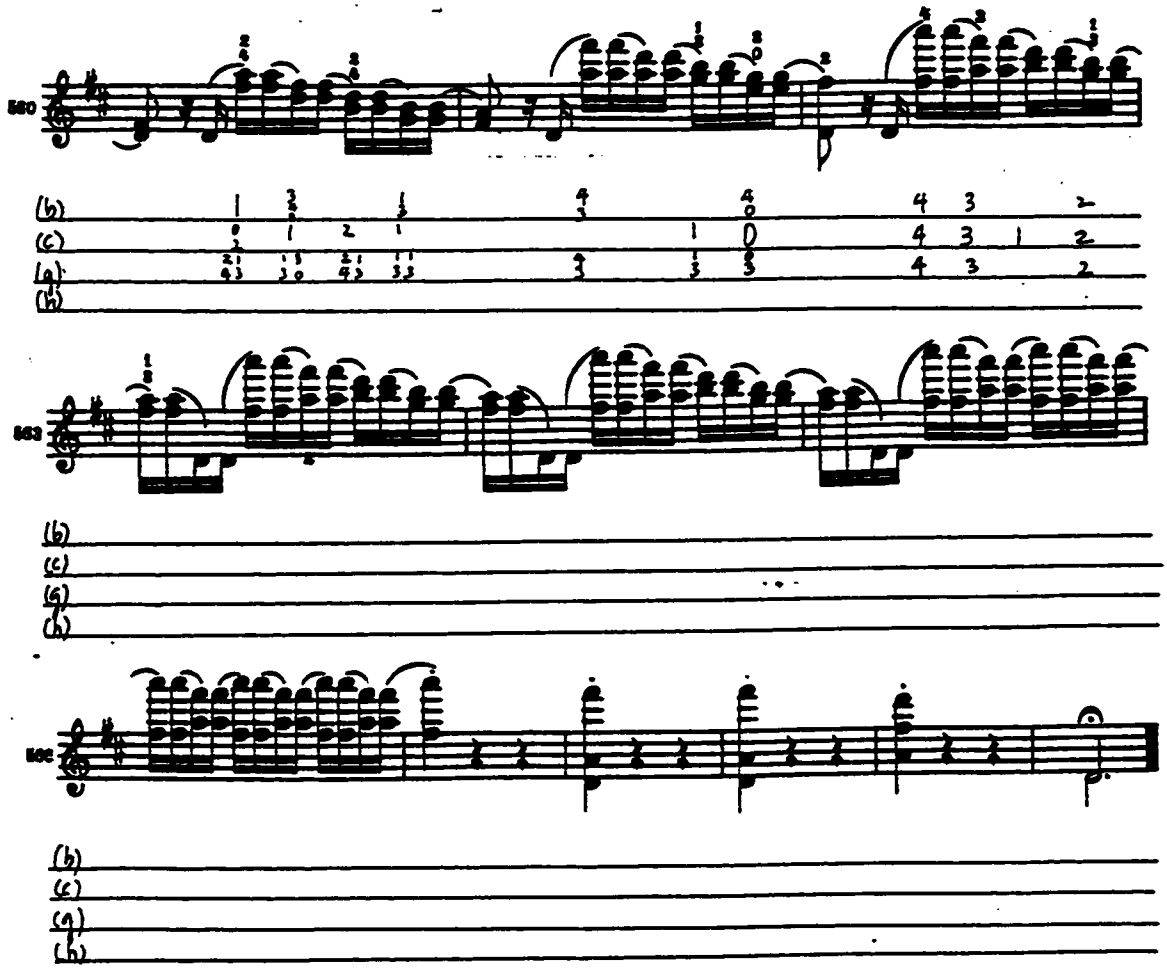


Ex. 22, mm 487 - 513 (Text: p. 91)




espr.
dim.
dolce
poco a poco cresc.
cresc. e stringendo poco a poco
animato



Ex. 23, mm. 526 - 571 (Text: p. 94)

Chapter IV

Conclusion

Violin fingering is a subjective matter. A fingering could be well-suited to one person while ineffective for others. Although the reasoning behind a fingering is complicated, the ideal fingering can vary greatly due to the one's physical shape, such as having large hands or short fingers. Furthermore, the strength of different fingers could affect the choice of fingering. Musically, violin fingering has to express good taste within a proper style. However, taste is very individual and the styles of performance change, all of which contributes to differences between the fingerings. Also, the traditions of schools pass on the choice of fingering, the examples of (b) and (d) share many similarities due to their Russian school of violin playing. The example of (d) uses more stretches to reduce the number of shifts than (b). The editor of (b), being a student of the editor of (d), makes the fingering very similar. However, the example of (b) is more position oriented in lyrical passages to avoid large shifts. The similarities are manifested in their counterpart, (e) and (f) of German school. The example of (e) consists of optional fingering and is precisely edited. The example of (f) is similar to the fingering of (e) but is variable in some places. The example of (g) is an

another example of the German school, however (g) is more personal. The example of (g) uses too many contractions and uncomfortable placements of fingers. The editor of (c) having been a student of editor of (f), the similarities might be expected. However, the example of (c) uses frequent shifts and complicated fingering for very personal interpretation of the work. The example of (a), representing the French school, tends to use 2-4 over 1-4 octave which requires extensions.

Many ideas and formulas aid in simplifying a difficult passage. The use of half-step shifts, creeping fingering, extensions and contractions, sequential fingering, shift on open strings, retention of fingers in double-stops, fingered chromatics, clockwise motion of the right arm are among many which help the progression of violin playing. Other facets of formulas in violin fingering aid in creating a musical sense: the avoidance of half-step string crossing, change of position on a weak beat, mixing of strings in a melody, undesirable glissandos, harmonics and fourth finger on a climax, and same fingers on repeated notes or same fingering on repeated passages.

The selection of one's violin fingering is a time-consuming effort. One can easily depend on the provided fingering of a particular edition or one's own teacher. However, the experience of trial and error and the knowledge gained from selecting one's own fingering can be beneficial in becoming independent minded. The violinist can improve on

his taste and stylistic approach by exploring the endless possibilities in choices of fingering.

End Notes

1. Carl Flesch, Violin Fingering Translated by Boris Schwarz (London: Barrie and Rockliff, 1966), 5.

2. Ivan Galamian, Principles of Violin Playing and Teaching (New Jersey: Prentice-Hall, Inc., 1985), 31.

3. Malcolm MacDonald, Brahms (London: J. M. Dent and Sons LTD, 1990), 269 - 270.

4. John Horton, Brahms Orchestral Music (Seattle: University of Washington Press, 1969), 39.

5. Michael Musgrave, The Music of Brahms (New York: Oxford University Press, 1994), 209.

6. Malcolm MacDonald, 268.

7. Malcolm MacDonald, 233.

8. Walter Niemann, Brahms Translated by Catherine Alison Phillips (New York: Tudor Publishing Company, 1945), 320.

9. Walter Niemann, 320.

10. Malcolm MacDonald, 268.

11. Malcolm MacDonald, 268.

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Vita

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