

Keyboard Fingering and Interpretation: a Comparison of Historical and Modern Approaches

Jeffrey Swinkin

Follow this and additional works at: <http://scholarship.claremont.edu/ppr>



Part of the [Music Practice Commons](#)

Swinkin, Jeffrey (2007) "Keyboard Fingering and Interpretation: a Comparison of Historical and Modern Approaches," *Performance Practice Review*: Vol. 12: No. 1, Article 1. DOI: 10.5642/perfpr.200712.01.01

Available at: <http://scholarship.claremont.edu/ppr/vol12/iss1/1>

This Article is brought to you for free and open access by the Journals at Claremont at Scholarship @ Claremont. It has been accepted for inclusion in Performance Practice Review by an authorized administrator of Scholarship @ Claremont. For more information, please contact scholarship@cuc.claremont.edu.

Keyboard Fingering and Interpretation: A Comparison of Historical and Modern Approaches^[1]

Jeffrey Swinkin

Copyright © 2007 Claremont Graduate University

Robert Donington provocatively suggests, “There is a very interesting general distinction between early systems of keyboard fingering and modern systems. The former exploit the natural differences of length and strength in the human digits, and their changes of position, as aids to good phrasing and articulation. The latter minimize these differences and changes, as an aid to facility and versatility.”^[2] That is, early fingerings virtually always imply for a passage a distinct phrasing, grouping, or articulation; they also often have ramifications for other aspects of interpretation, such as dynamics, voicing, and tempo variance (all of which, of course, may play a role in phrasing). Early fingerings substantiate the pedagogical maxim that, on some level, technique and interpretation are inextricable. Modern fingerings, by contrast, are devised more out of a concern with physical comfort, convenience, and brilliance than with delineating musical particularities.

While the above distinction between historical and modern fingerings may seem overgeneralized, I believe there is abundant historical evidence to support it. In this essay, I shall present numerous examples of historical keyboard fingerings, from C. P. E. Bach to Schenker, in each case discussing the implications the fingering has for aspects of interpretation. This historical survey is not intended to be comprehensive, but merely to demonstrate that, although there are aspects of fingering that definitely evolve over this considerable stretch of time, the fingerings within this category are all motivated by basically the same concern—to illuminate musical structure and detail. Then, I shall hypothesize as to at least one of the origins of modern fingering and directly compare the historical fingerings of certain passages to modern ones in order to amplify the differences between the two approaches. Finally, I shall place these differences within a broader philosophical context in an attempt to expose the aesthetic ideologies that inform and underlie them.

¹ I would like to thank Kumaran Arul, George Barth, and Alexandra Pierce for their extremely helpful suggestions on earlier drafts of this essay.

² *The Interpretation of Early Music*, new version (London: Faber and Faber, 1975), 580. I shall refer to the former as “historical fingerings,” the latter as “modern fingerings,” with one caveat: as I later discuss, the modern approach arose in the nineteenth century (with Czerny), and thus overlapped in time with the development of the historical approach, which continued well into the twentieth century (with Schenker). Hence, these terms refer less to discrete periods of time than to distinct methodological approaches.

I. Historical Fingerings

C. P. E. Bach

J. S. Bach significantly reformed fingering practices. Whereas the trend prior to Bach was to use primarily the middle three fingers,^[3] his intricate compositional content (and increased use of black-key tonalities) necessitated the use of all five fingers on a more or less equal basis. In the process, he centralized the thumb, which led to the new notion of what we now call “hand position”—in which all five fingers are placed close to the key—which, in turn, precipitated the increased use of *legato* and facilitated greater accuracy.^[4] C. P. E. Bach reinforced his father’s innovation of rendering the thumb the principle finger, providing “the key to all fingering,”^[5] insofar as it determines hand position and, in enabling cross-overs and -unders, allows the other fingers to be used to greater effect. Yet he went beyond his father in asserting that musicianship and fingering are intimately connected (“the correct employment of the fingers is inseparably related to the whole art of performance”^[6]), and that to perform a passage with the proper effect, one must uncover the fingering most appropriate for that passage.

Motivated by these concerns, C. P. E. attempted to develop a sound, systematic basis for fingering. This is most apparent in his fingering recommendations for scales, to which he devotes a large part of his chapter on fingering in his treatise. Here he advocates the now prevalent technique of using the thumb for crossing under. Indeed, he rejects the older device of crossing the right-hand second finger over the third; however, he still allows crossing the right-hand third finger over the fourth. Ex. 1 shows C. P. E.’s three right-hand fingerings for the C major scale, which include thumb cross-unders as well as crossings of 3 over 4. Note that the first fingering, which is today the standard fingering for C major, is shown by C. P. E. to be merely one of

³ This style of fingering favored the use of repetitive, paired finger groups, such as 2–3 2–3. Instances of this are found in: Elias Nicolaus Ammerbach, *Orgel oder Instrument Tabulatur* (Leipzig, 1571), an example from which is reproduced in Peter LeHuray, “Fingering,” *The New Grove Dictionary of Music and Musicians*, vol. 6, ed. Stanley Sadie (Washington D. C., 1980), 568.

⁴ “Bach performed [his keyboard pieces] with the greatest perfection...All his fingers were equally skillful; all were capable of the most perfect accuracy in performance. He had devised for himself so convenient a system of fingering that it was not hard for him to conquer the greatest difficulties with the most flowing facility. Before him, the most famous clavier players in Germany and other lands had used the thumb but little. All the better did he know how to use it.” C. P. E. Bach and Johann Friedrich Agricola, “Obituary of the World-Famous Organist, Mr. Johann Sebastian Bach...” reprinted in *The Bach Reader*, rev. ed., eds. Hans T. David and Arthur Mendel (New York: W. W. Norton, 1966), 223.

⁵ C. P. E. Bach, *Essay on the True Art of Playing Keyboard Instruments* [1753], trans. William J. Mitchell (New York: W. W. Norton, 1949), 43.

⁶ *Ibid.*, 41.

several possibilities. Interestingly, each fingering implies a different way to partition the scale into smaller groups (as shown by dotted slurs in the example). As for the other scales, C. P. E. contends that those with several black keys permit of fewer fingering possibilities than those with mainly white keys. Indeed, he allows only one fingering for the B major scale, as shown in Ex. 2.^[7]

Ex. 1: C. P. E. Bach, three right-hand fingerings for the C major scale^[8]



[Play music example 1](#)

Ex. 2: C. P. E. Bach, fingering for the B major scale^[9]



[Play music example 2](#)

In addition to providing fingerings for all major and minor scales, he discusses the fingering possibilities for multiple voices (intervals and chords). Furthermore, he advances several techniques that, while unorthodox by today's standards, were employed by subsequent innovators in keyboard fingering later on, particularly Chopin. These include placing the thumb on black keys, using the same finger on different consecutive tones (especially when moving from a black key to an adjacent white key), and omitting certain fingers from conjunct successions. In short, C. P. E. Bach continued the transition begun by his father from using primarily the middle fingers to using the entire hand, and situating individual fingers within a hand position as defined by the placement of the thumb. In addition, through his scale fingerings,

⁷ Indeed, Chopin, whom I shall later discuss, taught the B major scale before C major because the fingering of the former is more self-evident (and places the hand in a natural way on the keyboard, such that the long fingers are on the black keys). He said, "It is useless to start learning scales on the piano with C major, the easiest to read, and the most difficult for the hand, as it has no pivot. Begin with one that places the hand at ease, with the longer fingers on the black keys, like B major for instance." Jean-Jacques Eigeldinger, *Chopin: Pianist and Teacher As Seen by His Pupils*, trans. Naomi Shohet (Cambridge: Cambridge University Press, 1986), 34.

⁸ C. P. E. Bach, 46.

⁹ Ibid, 55.

he implicitly established the ideal of creative and flexible fingering, using different fingerings to create different groupings.

Beethoven

Beethoven was influenced by C. P. E. Bach's treatise and used it in his teaching (of Czerny, for example, whom I shall later discuss).^[10] Yet, in contrast to C. P. E.'s systematic approach, Beethoven's was more contextual: his fingerings were devised in response to the specific content and challenges of particular passages within his compositions. Beethoven obviously continued the tradition of utilizing all five fingers to the fullest extent, and did so partially in the service of transforming the predominant keyboard touch from a detached to a more connected, *legato* style. Like J. S. Bach, he emphasized the proximity of the hand to the keyboard in order to facilitate *legato*. According to his student Anton Schindler, Beethoven wanted "the hands [to] always lie on the keyboard in such a way that the fingers cannot be raised more than necessary...He detested the staccato style..."^[11] Yet, as George Barth points out, Schindler also attested to Beethoven's adherence to the speaking, rhetorical tradition of keyboard playing, in which priority is given to "the drama of individual gestures."^[12] Indeed, Beethoven's "cultivation of a *legato* common touch did not interfere with his sensitivity to articulation."^[13] What this implies for fingering is that within a five-finger orientation and pervasively *legato* style, Beethoven still found ample room for differentiation, and was able to devise distinctive fingerings to meet the interpretive demands of his music.

Although, as I mentioned, Beethoven's approach to fingering cannot be said to constitute a method and is highly contextual, the purposes it serves do fall into general categories, such as grouping and phrasing, articulation, and dynamics. Let us consider examples of each.

¹⁰ Jeanne Bamberger, "The Musical Significance of Beethoven's Fingerings in the Piano Sonatas," *Music Forum* 4 (1976): 240.

¹¹ Anton Schindler, *Biographie von Ludwig van Beethoven*, 228 (quoted in Sandra Rosenblum, *Performance Practices in Classic Piano Music* [Bloomington: Indiana University Press, 1988], 194). Also, Heinrich Schenker says, "The increasing use of *legato* simultaneously with increasing content can be appreciated most clearly in Beethoven, whose contemporaries admired his *legato* playing above all...The works of the masters who preceded Beethoven, particularly those of J. S. Bach, are more appropriately performed in *non legato* than in *legato*." *The Art of Performance*, trans. Irene Schreier Scott (Oxford: Oxford University Press, 2000), 20.

¹² George Barth, *The Pianist as Orator: Beethoven and the Transformation of Keyboard Style* (Ithaca: Cornell University Press, 1992), 78.

¹³ *Ibid.*, 114.

Grouping: Beethoven often uses fingering to clarify or create rhythmic groups,^[14] especially when they conflict with the meter. Consider Ex. 3, where a hemiola is created by the fingering Beethoven indicates, without which the pianist would probably play in conformity to the meter—i.e., with accents on the first and fourth eighth notes. The opposite situation applies in Ex. 4. Here, Beethoven wants to ensure that the rhythmic groups will be played in conformity with the meter; he thus indicates a repeated finger pattern, 1–2 2–4, beginning on the second beat of the first measure and recurring on all subsequent beats. Two aspects of this fingering help to produce emphasis on each beat. First, the thumb, as a comparatively weighty finger, tends to produce an accent where it falls. Second, just as the repetition (varied or exact) of a group of notes implies a new phrase (or subphrase, gesture, etc.), so does the repetition of a finger pattern; in this case, Beethoven’s repetition of 1–2 2–4 implies gestures beginning on, and reinforcing, each beat.

Ex. 3: Beethoven, Piano Sonata in C major, Op. 2/3 (iv), mm. 269–270 ^[15]

The image shows a musical score for two staves in 6/8 time. The top staff has a treble clef and the bottom staff has a bass clef. The music consists of two measures. The first measure contains six eighth notes, and the second measure contains six eighth notes. Above the first measure, the fingering for the top staff is indicated as 5 4 5 4 5 4 and for the bottom staff as 1 3 1 3 1 3. Above the second measure, the fingering for the top staff is indicated as 5 4 5 4 and for the bottom staff as 1 3 1 3. The word "(simile)" is written above the second measure. Accents are placed above the first and fourth eighth notes of each measure in both staves.

[Play music example 3](#)

Ex. 4: Beethoven, Piano Sonata in F-sharp major, Op. 78 (ii), mm. 116–117 ^[16]

¹⁴ Whether historical fingerings are responsible for gestural content or vice versa is a question that cannot be satisfactorily answered here, and is perhaps largely unanswerable. Of course, in cases where we know the music to have been generated largely through improvisation—as in the case of much of Chopin’s music—we can safely say that the localized gestures, where they exist, are more the byproduct of fingering and other technical proclivities rather than the reverse.

¹⁵ Ludwig van Beethoven, *Complete Piano Sonatas*, vol. 1, ed. Heinrich Schenker (New York: Dover, 1975). Both this and the following example are discussed in William S. Newman, “Beethoven’s Fingerings as Interpretive Clues,” *The Journal of Musicology* 1/2 (1982): 191.

¹⁶ Beethoven, *Complete Piano Sonatas*, vol. 2.

[Play music example 4](#)

Ex. 5a is taken from a piano trio that Beethoven composed for pedagogical purposes and is thus thoroughly fingered.^[17] Beethoven's right-hand rhythmic groups in m. 1, like those in Ex. 3, are in conflict with the notated meter, which is maintained in the left hand; the right hand temporarily realigns with the meter and left hand on the downbeat of m. 2. Beethoven's fingering helps to delineate the right-hand rhythmic groups in m. 1 simply by using the same finger, 4, to trigger the beginning of each group (except for the anacrusis). The fingering also facilitates the realignment, in the following way. The second right-hand group uses fingers 4–3–2, which we then expect to recur on the third right-hand group, since it begins with 4–3; yet, just when we expect 2, 3 is repeated instead (just as we expect B-flat to occur instead of the repeated C, due to the sequential repetition). This element of surprise, of deviation in pitch and fingering, no doubt compels the pianist to place an accent on the downbeat of m. 2, thus realigning the right- and left-hand groups. There is an element of physical necessity as well: repeating a finger (in this case, 3), in contrast to using adjacent fingers, requires a slight lift and is thus conducive to an increase in arm weight and consequently in dynamic. In short, Beethoven's fingering first enables the right hand to be misaligned, then realigned (albeit briefly) with the left hand and the meter.

Furthermore, the fingering is used to produce rhythmic delineation not merely between the right-hand and left-hand groups, but within the right-hand groups as well. Suppose for a moment that the bar line were shifted, as in Ex. 5b. Here, the right hand implies its own unique manifestation of 6/8 meter, with the second F occurring on the putative downbeat. The implied repetition of 4 on the second F forces an arm drop and hence accent on that note, appropriate for the downbeat within the displaced meter. By contrast, the beginning of the second beat is approached not by a repeated finger and thus considerable accent, but by merely a change of finger, which, as a more localized, tactile motion, produces a lesser accent appropriate for the second beat within the displaced meter. In short, Beethoven uses the repetition of a finger to elicit an accent on the first beat within both the notated meter (i.e., C, downbeat of m. 2) and

¹⁷ The following discussion extends that of Elfrieda F. Hiebert's in "Beethoven's Fingerings in the Piano Trio in B-flat major, WoO 39," *Early Keyboard Journal* (85–86): 15–17.

displaced meter (i.e., the second F in m. 1). Ingeniously, he uses the same device both to create the metric conflict between the hands and to resolve that very conflict.

Ex. 5a: Beethoven, Piano Trio in B-flat major, WoO 39, mm. 1–2

Allegretto

2 3 4 (4) 3 2 4 3 3 2

p misalignment realignment

dolce

1
3
5

[Play music example 5a](#)

Ex. 5b: Right hand metrically displaced

(repeated finger = arm drop) (finger change = less accent)

4 4 2 4

[Play music example 5b](#)

Articulation: In Ex. 6, the second E and second A appear to be tied over. However, notice that over those notes Beethoven supplies a change of finger. Is this not a contradiction? That is, if the notes are tied and not to be repeated, of what use is the finger change? (A composer might indicate a silent finger change to facilitate a *legato* connection into the next note; yet, in this case, each note in question is followed by a rest.) Two explanations have been advanced. One is that the notes are in fact meant to be tied, but that the change of finger over the tied note evokes the impression of a sustaining, even vibrating, effect, as can be produced by the clavichord (*Bebung*), or by wind and string players. This is the view held by Schenker, who discusses this issue with respect to the recitative-like passage in Beethoven's Op. 110 (iii), m. 5; here, Beethoven indicates a change of finger from 4 to 3 over a tied A. Schenker contends that the notes are to be tied, but that the change of finger “gives an impression similar to the sound transmitted by a singer or violinist. Just as the singer and the violinist continue, enlivening the sound with, respectively, a spunout breath or a bow stroke, the pianist gives an illusion of spinning the sound on by changing fingers on one note. The quick changing of fingers approximates a continuous presence; without finger change, played only once, the sound appears

fixed.”^[18] Clearly, Schenker has in mind an effect that is more psychological than actual. The other explanation is that the second note is to be repeated, although as a light release off the first note rather than as a fully independent note (this is the view held by Czerny). William S. Newman agrees with this view, on the basis that it is unlikely, as Schenker would have it, that Beethoven used fingering for such subliminal purposes as the intimation of *Bebung*, and that “there is a practical reason for the change of fingers on the same key in the repeated-note slur. It can come closer to that ideal single motion of initiation-release than a repetition by the same finger.”^[19] I concur with Newman: the note, I think, is meant to be played again, albeit lightly. In either case, however, the fingering, in conjunction with the tie, serves to produce a very subtle effect that standard articulation marks alone cannot.

Ex. 6: Beethoven, Sonata for Piano and Cello in A major, Op. 69 (ii), mm. 1–4

[Play music example 6](#)

Dynamics: Fingering may also imply a dynamic change. Consider Ex. 7. Beethoven’s repetition of 5/1 leading up to the climax on the downbeat of the third measure facilitates the crescendo to this climax for the physical reason already mentioned: the repetition of a finger or fingers necessitates dropping arm weight, thus producing emphasis. The fingering enhances the climax in two other ways as well. First, the repetition of 5 on the downbeat of the third measure causes a detachment, as also indicated by the phrase break, prior to the climax. Indeed, Beethoven often approached points of arrival in this way, rather than subsuming them by a

¹⁸ Schenker, *The Art of Performance*, 28–29. Elsewhere, Schenker alludes to this passage from Op. 110 within the context of a discussion specifically of *Bebung*, and suggests that the same effect can be produced on “our less sensitive pianoforte [i.e., relative to the clavichord], by depressing the pedal several times while holding a note.” He does not, however, attribute the *Bebung* effect to fingering. *A Contribution to the Study of Ornamentation*, trans. Hedi Siegel, *Music Forum* 4 (1976): 139.

¹⁹ William S. Newman, *Beethoven on Beethoven: Playing His Piano Music His Way* (New York: W. W. Norton, 1988), 296–297. Bamberger takes a curiously equivocal position: “Whether or not the tied note is actually struck again...is not the crucial point. The point of the fingering has been made when the pianist has a sense of surging but frustrated movement, of movement not quite realized.” “The Musical Significance,” 248.

slur.^[20] Second, the dropping of the arm invariably requires more time than the simple passing of consecutive fingers; hence, this fingering entails a slight *ritardando*, appropriate for a climax. In short, Beethoven's fingering produces effects of dynamics, articulation, and timing, all conducive to delineating the climax of this passage. Also note Beethoven's fingering after the climax, which produces small gestures within the larger slur.

Just as fingering can facilitate dynamic gradation among consecutive tones, so can it among simultaneous tones in different voices. For instance, in Ex. 8, Beethoven marks repeated 1's in the inner voice that cause it to be voiced, for the physical reason discussed above. Granted, due to the large intervals between the soprano and alto, 1 is the most—perhaps the only—feasible fingering. Yet, the fact that Beethoven composed the passage in this way—where the pianist would most likely need to employ repeated 1's and thus emphasize the inner voice—indicates that Beethoven's conception of fingering, of the way the pianist would have to use her hand, was integral to the genesis of the passage; in other words, the passage has as its *raison d'être* a distinctly physical impetus. Moreover, the fact that Beethoven notates this fingering, especially when it is practically self-evident, is an interpretive clue. That is, the mere act of supplying finger numbers calls the performer's attention to these otherwise concealed notes—even if on only a subliminal level—thus compelling her to emphasize them.^[21]

Ex. 7: Beethoven, Piano Sonata in F minor, Op. 2/1 (iii-Trio), mm. 59–62

The image shows a musical score for two staves in 3/4 time. The top staff has a treble clef and the bottom staff has a bass clef. The key signature is one flat (F minor). The score consists of four measures. Above the notes, fingerings are indicated: 3 4 5, 5 4 5 4 5 5, 5 5 4 5 4 3, 4 5 4 3 4 5. Below these, the corresponding finger numbers are listed: 1 1 2, 1 2 1 2 1 1, 2 1 2 1 2 1, 2 1 2 1 2 1. The first measure has a fermata over the final note. The second measure has a slur over the notes. The third measure has a *ff* dynamic marking. The fourth measure has a slur over the notes.

[Play music example 7](#)

Ex. 8: Beethoven, Piano Sonata in A-flat major, Op. 110 (iii), mm. 106–109

²⁰ Barth, *The Pianist as Orator*, 113.

²¹ Schenker affirms, as we have already seen in the case of *Bebung*, that fingering and other aspects of musical notation have the capacity to affect the performer in these subliminal or psychological ways.



[Play music example 8](#)

Beethoven, then, employed fingering to achieve special expressive effects, and rendered it an integral aspect of musical notation. Indeed, his fingerings, although sparse, reflect and in part constitute the distinctiveness of his compositional style.

Chopin

Chopin's fingerings, like Beethoven's, both respond to and comprise the unique attributes and challenges of his music. With Chopin, the fingers assumed paramount importance, in marked contrast to the more wrist- and arm-oriented technique of his contemporary Liszt. Echoing C. P. E. Bach, Chopin claimed, "Everything is a matter of knowing good fingering."^[22] He was explicitly concerned with finding the easiest fingering, but also implied that what is easiest is what best suits the content and character of the passage. For Chopin, "good fingering was a matter of finding the most comfortable succession of fingers, best suited both to the form of the hand and to conveying the musical discourse."^[23] Indeed, although Chopin was concerned with finger evenness,^[24] he was more concerned to exploit the inherent individuality of the fingers and the different sounds they can produce by virtue of their relative degrees of strength and weakness. "As many different sounds as there are fingers," he said.^[25] Chopin favored not only finger differentiation, but also frequent changes of position in order to facilitate proper phrasing; both principles were motivated by the same association of music and speech to which Beethoven subscribed. As one of his students stated, "all the theory of style which Chopin taught to his

²² Eigeldinger, *Chopin: Pianist and Teacher*, 18.

²³ *Ibid.*, 19.

²⁴ Mikuli recalls, "[Chopin] made his pupils practice scales...with metronomic evenness." *Ibid.*, 34.

²⁵ *Ibid.*, 33. As expressed by Alfred Cortot, "His interest in technique was governed by a basic principle. This involved the postulate that each finger was of a different strength..." Alfred Cortot, *In Search of Chopin*, trans. Cyril and Rena Clarke (New York: Peter Nevill, 1951), 22.

pupils rested on his analogy between music and language, on the necessity for separating the various phrases...»^[26]

Although Chopin's fingerings, like Beethoven's, were unsystematic and determined by context, we can point to techniques for which he showed a general preference; these are summarized in Fig. 1. Let us consider some examples of Chopin's strategic use of the pinkie, the first two of which demonstrate the sliding or repeated finger technique (listed as No. 4 in Fig. 1). In Ex. 9, the repetition of 5, as in Ex. 7, creates a slight lingering, or *tenuto*, on each note, which aids the indicated *poco rubato*.^[27] In other places, finger repetition is used not merely for emphasis, but for the delineation of very localized groups, as in Ex. 10, where the repetition of 5 forces the pianist to lift his hand between the slurs and thus reinforces the notated grouping. Finally, in Ex. 11, second measure, Chopin's use of 5 is both a technical expedient and an interpretive clue, creating a smaller gesture within a larger group.

Fig. 1: Some of Chopin's preferred fingering techniques^[28]

1. Using the thumb on a black key
2. Changing fingers silently on a single note
3. Crossing the thumb under the pinkie
4. Sliding or repeating one finger across multiple keys
5. Crossing 3, 4, and 5 over each other instead of crossing with the thumb
6. Repeating a finger on the same note

Ex. 9: Chopin, Nocturne in E-flat major, Op. 9/2, mm. 25–27^[29]

²⁶ Eigeldinger, *Chopin: Pianist and Teacher*, 42.

²⁷ Carl Schachter advocates using the sliding finger technique (2–2) on B-flat to A in Chopin's Prelude, Op 28, No. 5, in order to create a hesitation before and lingering on the B-flat, and in order to differentiate those notes from B–A, for which he recommends 3–2. "Chopin's Prelude in D major, Opus 28, No. 5: Analysis and Performance," *Journal of Music Theory Pedagogy* 8 (1994): 41.

²⁸ Eigeldinger, *Chopin: Pianist and Teacher*, 19–20. Notice, as indicated by No. 5, that Chopin retained an aspect of the older method of fingering, that is, crossing the middle fingers. Chopin's classic usage of this technique is found in the Etude in A minor, Op. 10, No. 2.

²⁹ *Ibid.*, 260.

[Play music example 9](#)

Ex. 10: Chopin, Nocturne in E-flat major, Op. 9/2, m.4^[30]

[Play music example 10](#)

Ex. 11: Chopin, Nocturne in C minor, Op. 48/1, mm. 20–22^[31]

³⁰ Ibid., 257. Chopin marked this fingering in several students' scores.

³¹ Ibid., 265. Chopin marked this fingering in the score of his student Ludwika Jedrzejewicz, *ibid.*, 245–266. Eigeldinger reproduces many more fingerings that Chopin notated in the scores of several pupils, *ibid.*, 245–266.

[Play music example 11](#)

Schenker

Perhaps the last significant contribution to historical keyboard fingering was made by Heinrich Schenker (who, incidentally, has a link to Chopin, having studied with his student, Carl Mikuli). Schenker, in addition to his well-known achievements as a music theorist and analyst, is one of the founders of modern editorial practice. He believed that much insight about musical structure could be gleaned from examining composers' original notation—not just notes, but also expressive indications, such as dynamics, slurs, and fingerings. Schenker was highly critical of the so-called performing editions of his time, since they did not always reproduce a composer's original markings and often supplanted original indications with editorial ones. With respect to original fingerings, Schenker stressed that the complexity and unity of the works of Bach and Beethoven, for example, gave rise to an appropriately complex and progressive fingering, and that therefore modern editors have a responsibility to reproduce these notations in their editions. Later fingerings, he claims, arose from a concern with technique and virtuosity in and for themselves, rather than a concern with illuminating significant aspects of a composition.

Consequently, Schenker, in this edition of Beethoven's piano sonatas, reproduced Beethoven's original fingerings, which, as we have seen, are significant but sparse; hence, alongside Beethoven's fingerings, Schenker supplied many of his own. Since Schenker no doubt recognized the interpretive significance of Beethoven's original fingerings, it is not surprising that his own fingerings often serve many of the same purposes as Beethoven's, such as grouping, articulation, dynamics, and voicing.^[32] Let us consider a couple of examples. In Ex. 12, Schenker places 5 at strategic places—the pickup to the first measure and the beginnings of the third and fifth measures—in order to clarify the subdivision of the eight bar phrase into 2+2+4 measures (a *Satz*). Such clarification is needed in this otherwise rhythmically unstable and ambiguous passage. In Ex. 13, Schenker places 4 on the last note of the second measure and 2 on the first note of the third measure in order to force a separation between the two measures (i.e., to prevent

³² Schachter outlines various purposes that Schenker's fingerings serve and offers examples of each in his "Introduction to the Dover Edition," of Beethoven, *Complete Piano Sonatas*, vol. 1, viii-ix.

the pianist from using 1 on A and thus having a means by which to connect A to F-sharp). He does this so as to preclude “an untruth”—that is, the impression of a relationship between last note of one motivic group (A) and the first note of the next (F-sharp).^[33]

Ex. 12: Beethoven, Piano Sonata in A-flat major, Op. 110 (ii), mm. 41–48^[34]

[Play music example 12](#)

Ex. 13: Beethoven, Piano Sonata in A major, Op. 101 (iv), mm. 59–62^[35]

³³ In a similar instance, Schenker recommends repeating a finger to force a separation between two notes since the second is the start of a motivic repetition. See Ex. 7.3 in *The Art of Performance*, 35. Charles Burkhart discusses a similar example of Schenker's in “Schenker's Theory of Levels and Musical Performance,” *Aspects of Schenkerian Theory*, ed. David Beach (New Haven: Yale University Press, 1983), 97–99.

³⁴ This example is discussed by Schachter in the “Introduction to the Dover Edition.”

³⁵ This example is discussed by William Rothstein in “Heinrich Schenker as an Interpreter of Beethoven's Piano Sonatas,” *19th-Century Music* 8/1 (1984): 21–22.



[Play music example 13](#)

Often his fingerings do not fall into the historical category per se (or modern, for that matter) but turn out, upon inspection, to have analytic import, thus forming an entirely separate category. Indeed, Schenker's fingerings as a whole express not only expressive insights, but structural ones as well.^[36] In short, because Schenker was an editorial purist and did not insert his own expressive markings, fingering is the main device by which he transmits his interpretation of these sonatas to the performer.

II. The Modern Approach

Thus far, we have seen that C. P. E. Bach emphasized the centrality of fingering to performance, and devised numerous fingerings for scales that are conducive to phrasing them in various and nuanced ways. Next, Beethoven and Chopin brought C. P. E.'s ideas to fruition, creating fingerings to suit the particular technical and expressive content of their music. Finally, Schenker devised fingerings for the music of Beethoven guided by many of the same ideals implicit in Beethoven's own fingerings. So, despite small differences in these masters' approaches to fingering, all served roughly the same purpose: to enhance the performer's ability to execute musical distinctions and subtleties with respect to phrasing, articulation, dynamics, and timing.

Yet alongside this conception of the purpose of piano technique arose an opposing one, in which technique was viewed in more abstract and autonomous terms—as an end in itself, as opposed to something that serves interpretation. Ironically, the seed for this conception was planted by, among others, Carl Czerny, a disciple of Beethoven, who, as we have seen, rendered fingering integral to the artistic process. The details of Czerny's deviation from the aesthetics of his teacher are well documented in Barth's book, and I shall not rehearse his argument here; however, I would like to reiterate one of his main points. As we have discussed, although Beethoven transformed the predominant keyboard touch from *non legato* to *legato*, he nonetheless composed within a declamatory and rhetorical style, in which gestures emulate patterns of human speech and movement. Yet, Czerny ultimately deemed this style outmoded—

³⁶ Schenker's fingering of the Beethoven sonatas warrants a separate study, one that examines both how the fingerings illuminate the content of the sonatas and the role they play within the larger context of Schenker's theory.

he claimed it went out with Mozart—and so came to associate Beethoven’s *legato* with singing as opposed to speaking, with purely musical lines as opposed to anthropomorphic gestures.^[37] Barth concludes, “With the claim that changing taste necessitates ‘other means’ for the realization of Beethoven’s ideas, Czerny opens the way for ‘modernization.’”^[38]

The two related facets of this modern approach are long, superimposed phrasing slurs and, relatedly, a more static approach to fingering. In this approach, fingerings were designed to keep the hand in position or to execute changes of position by crossing the fingers rather than lifting the hand—both conducive to rendering a long line. Ex. 14 epitomizes Czerny’s approach. Here, he edits the Beethoven passage seen in Ex. 7 by replacing Beethoven’s multiple slurs with one long phrasing slur and supplies a new fingering more conducive to this overarching *legato*. Note in particular how Czerny subsumes the point of arrival (beginning of the third measure) under a long slur, something Beethoven was careful not to do.^[39] The consequence of this for fingering is that Czerny omits Beethoven’s repetition of 5/1 leading up to the climax, which, as we discussed, would cause a detachment directly before—and hence an articulation of—the climax. The dynamic and temporal implications of Beethoven’s fingering are also lost in Czerny’s version. Czerny is clearly more concerned with creating a repetitive, easily memorized finger pattern (4/1–5/2) than with illuminating the unique contour of the phrase. Other nineteenth- and twentieth-century editors follow Czerny’s precedent in adhering to a long line and more homogenized fingering.

³⁷ Czerny’s stance is of course merely one instance of the paradigm shift taking place in music aesthetics in the first half of the nineteenth century, namely one from a mimetic mode to an absolute, autonomous one, as elaborated by Karol Berger in *A Theory of Art* (New York: Oxford University Press, 2000), 108–161. (Also see Mark Even Bonds, “Idealism and the Aesthetics of Instrumental Music at the Turn of the Nineteenth Century,” *Journal of the American Musicological Society*, 50/2–3 (1997): 387–420.) Indeed, the autonomy of technique is an obvious corollary to the autonomy of music in general, insofar as both foreground properties of the musical medium (in the former case, of musical performance specifically) to the exclusion of what music might express or signify. Jim Samson relates the “autonomy of technique” to the rise of performance-oriented music in the early Romantic period, music where “the listener would be encouraged to focus on the medium as much as the message: to appreciate a sensuous or brilliant surface...communicated by the performer rather than to search out a form of knowledge embedded...in sound structures by the composer.” “The Practice of Early-Nineteenth-Century Pianism,” *The Musical Work: Reality or Invention?* ed. Michael Talbot (Liverpool: Liverpool University, 2000), 112.

³⁸ Barth, *The Pianist as Orator*, 84.

³⁹ Barth refers to Czerny’s “subsuming of arrival notes that Beethoven had not subsumed, and the lengthening of slurs that Beethoven had not lengthened...” *Ibid.*, 94.

Ex. 14: Beethoven, Piano Sonata in F minor, Op. 2/1 (iii-Trio), mm. 59–62, edited by Czerny (Compare to Ex. 7) ^[40]

[Play music example 14](#)

The basic tenets of Czerny’s modern system of fingering, as codified in his *Complete Theoretical and Practical Pianoforte School*, Op. 500, are summarized in Fig. 2.

Fig. 2: Modern principles of fingering as codified by Czerny ^[41]

1. Neither the thumb nor the pinkie should be used on black keys.
2. Unnecessary changes of position are to be avoided.
3. The thumb is the pivot of the hand.
4. 3 in the right hand is no longer permitted to cross over 4.
5. One can silently change fingers on a single note in order to produce a *legato* transition into the next note.
6. One should avoid using the same finger on consecutive keys, unless one is moving from a black to a white key, or from the end of one phrase to the beginning of the next.
7. Use the same, or similar, fingering for analogous, or sequential passages.
8. For repeated notes, use different fingers.

These principles remain in fashion right up to the present. ^[42] How markedly his modern approach contrasts with the historical one, as epitomized by Chopin, can be sensed by comparing

⁴⁰ Bamberger, “The Musical Significance,” 253. Barth offers many more examples of incursions by Czerny against Beethoven’s original notation in *The Pianist as Orator*, 88–95, though he does not discuss the implications for fingering.

⁴¹ LeHuray, “Fingering,” 574.

⁴² As the *Urtext* ideal is currently more fashionable than performing editions, the appropriation of modern fingering principles is more evident in current pedagogical circles than in editorial ones (although modern editions of pedagogical repertoire are replete with modern fingerings).

Figs. 1 and 2. Indeed, the positions these composer-pedagogues held were for the most part diametrically opposed. Of particular note is Czerny's prohibition of using the same finger on two consecutive keys (with the exceptions noted in the figure), a device of which Chopin was particularly fond, as was evident in Exs. 9 and 10.^[43] While he does allow for this technique at the juncture between phrases, Chopin, as we have seen, allows for its use on a more local scale, in order to delineate minute gestures (see Ex. 10). Generally, Chopin was explicitly averse to so-called "pure" technique and the kind of abstract technical facility and evenness that Czerny and others were promoting in their method books. Chopin said in reference to these, "[They] do not teach us how to play the music itself—and the type of difficulty we are practicing is not the difficulty encountered in good music, the music of the great masters. It's an abstract difficulty, a new genre of acrobatics."^[44]

While on the topic of Chopin again, I would like to speculate that Mikuli's stance toward Chopin is analogous to Czerny's stance toward Beethoven, in that both Mikuli and Czerny departed from and modernized the aesthetics of their respective mentors—although, I should add, the case of Mikuli is somewhat less obvious and certainly less documented. Whereas Czerny departed from Beethoven's aesthetic because of changing tastes (at least in Czerny's perception), Mikuli departed from Chopin's because he considered fingering to be a component of the pianist's interpretation rather than of the musical work itself. Aleksander Michalowski, a student of Mikuli's, summarized the latter's position regarding Chopin's fingerings:

The question of fingering is inseparably tied up with the interpretative individuality of the pianist, the shape of his hand and the style of his technique. Nobody can impose a fingering and this aspect should not be given prime importance among all the problems relating to the interpretation of Chopin's music. This explains why some of the master's own indications have been overlooked in Mikuli's edition. The latter openly admitted that in this regard he did not always follow Chopin's indications.^[45]

Mikuli's dismissive attitude towards Chopin's fingerings is often evident in his editions of Chopin's works. Unfortunately, in these editions, Mikuli did not typographically distinguish between Chopin's fingerings and his own; however, I surmise the fingerings in Ex. 15 are Mikuli's because of the modernizing tendency they betray. Notice, for instance, that Mikuli indicates 1 for the right hand's first note in m. 9—a rather awkward fingering and inconsistent with the more comfortable 3 indicated in the analogous place in m. 5 (the first measure shown). One can justly infer that Mikuli recommends 1 because it provides a means of connecting the last C of m. 8 with the first D of m. 9—or at least of keeping the hand in basically the same place, contrary to the notated phrasing (whether or not it is Chopin's). By the same token, Mikuli

⁴³ Schenker also commends this technique in *The Art of Performance*, 36–37.

⁴⁴ Eigeldinger, *Chopin: Pianist and Teacher*, 23.

⁴⁵ *Ibid.*, 172–174.

indicates 2 on the third beat of m. 6, again implying either a single (extended) hand position that transcends gestural boundaries, or even a means of connecting the ending of one gesture with the beginning of the next. A 1 on the C (m. 6, third beat) would be more congruent with the phrasing, as the pianist would have to lift her hand between the gestures and start anew. Finally, Mikuli's indication of 1–2 from the end of m. 7 to the beginning of m. 8 implies a connection as well. Indeed, using Mikuli's fingering, one could easily play the entire passage without raising his hand a single time, and this, most likely, is precisely what Mikuli intended. At best, this fingering promotes an immobility of the hand that is simply not congruent with, or conducive to, the notated phrasing; at worst, it implies an overarching *legato*, a long line, that directly contradicts the notated phrasing and that would annihilate the gestural boundaries and attenuate the rhetorical character of this passage. By contrast, the fingering in Ex. 16—recommended by the great Chopin interpreter Ignacy J. Paderewski—is, I believe, more in keeping both with the phrasing and rhetoric of the passage and with the kind of fingering Chopin was likely to use. He uses 1 on the third beat of m. 6 and 3 on the downbeat m. 9, in each case compelling the pianist to lift his hand and change position as a way to execute the gestures naturally.

Ex. 15: Chopin, Mazurka in C major, Op. 7/5, mm. 5–9; Mikuli's fingering^[46]

[Play music example 15](#)

Ex. 16: Chopin, Mazurka in C major, Op. 7/5, mm. 5–9; Paderewski's fingering^[47]

⁴⁶ Frederic Chopin, *Mazurkas*, ed. Carl Mikuli (New York: Dover, 1987).

⁴⁷ Chopin, *Mazurki*, in *Fryderyk Chopin Complete Works*, ed. Ignacy J. Paderewski (Poland: Instytut Fryderyka Chopina, 1953).

[Play music example 16](#)

Two final modernizations: Exs. 17 and 18 show fingerings by the Liszt pupil Rafael Joseffy of the two excerpts from Chopin's E-flat Nocturne seen in Exs. 9 and 10. In Ex. 17, the use of 5–4–3 where Chopin had indicated 5–5–5 (last beat of m. 26) is motivated by a purely technical convenience—the maintenance of hand position; in Ex. 18, the same technical motivation applies, but in this case, a longer line is implied as well. In both cases, Joseffy, like Mikuli, fails to see the advantage of Chopin's repeated finger technique for the delineation of localized gestures and subtle details.

Ex. 17: Chopin, Nocturne in E-flat major, Op. 9/2, mm. 25–27; Joseffy's fingering

(Compare to Ex. 9) ^[48]

[Play music example 17](#)

Ex. 18: Chopin, Nocturne in E-flat major, Op. 9/2, m.4; Joseffy's fingering

(Compare to Ex. 10) ^[49]

⁴⁸ Chopin, *Album for the Piano*, vol. 39, ed. Rafael Joseffy (New York: G. Schirmer, 1915).

⁴⁹ Ibid.

[Play music example 18](#)

In sum, all of the modernized examples we have seen prioritize ease over expression, and a general technique over one specific to phrase and gesture. We are now in a position to draw some general and fundamental distinctions between historical and modern approaches to fingering, as outlined in Fig. 3. In the remainder of this article, I shall view these differences from a broader philosophical perspective in an attempt to capture something of their essence.

Fig. 3: General comparison of historical and modern fingerings

Historical fingerings	Modern fingerings
1. Disjunct (smaller finger groups, hand more mobile)	1. Position-oriented (hand more stable)
2. Phrase-specific (variable to accommodate content)	3. Abstract, standardized
4. Geared toward local detail	5. Geared toward long lines
6. Geared toward heterogeneity	7. Geared toward homogeneity

III. Historical Versus Modern Fingerings: Aesthetic Ideologies

We have seen that “historical” and “modern” approaches, as I have termed them, are intertwined historically, insofar as the modern approach, such as Czerny’s, arose alongside the historical one, such as Chopin’s. Also, to some extent, these approaches are intertwined conceptually; that is, one might say that the modern approach arose from an ambiguity within the historical approach itself. For example, Beethoven, as we have seen, pioneered a pervasively *legato* touch, which has been appropriated by the modern school to foster finger evenness and the maintenance of hand position. Yet, we have also seen that Beethoven’s use of *legato* did not preclude the delineation of local gestures, nor the use of “disjunct” fingerings by which to execute those gestures. Similarly, Chopin advocated finger evenness, while also claiming that each finger is inherently different, and, like Beethoven, providing disjunct fingerings.

This paradox is merely apparent, however, for *legato* is not incompatible with localized phrasing and articulation if applied on a small scale—*legato* within a gesture rather than an overarching, long-line *legato*. Schenker offered his own solution to this apparent contradiction, suggesting that expressive notations symbolize the desired effect, not necessarily the means of producing it. For example, a slur does not necessarily mean to play the notes it subsumes completely *legato*, using a linear fingering, because sometimes a passage sounds most connected when a disjunct fingering is used. In Schenker’s words, “the impression of *legato* can be created

even without actual *legato* playing...”^[50] Thus, disjunct fingerings and a sense of connectedness were not incompatible for Beethoven, Chopin, and Schenker. Yet, disjunct fingerings would at least produce a different kind of connectedness from that produced by modern fingerings; for example, using 5–5–5 would surely not produce quite the same effect as that produced by 5–4–3. In other words, in my view, different means are bound to produce qualitatively, if subtly, different ends. Hence, I propose that what Beethoven, Chopin, and Schenker referred to as connectedness or evenness was more the unity of a given gesture—its singular, decisive effect—than *legato per se*. Theirs is a form of evenness that allows ample room for difference. This idea broaches the larger issue of what assumptions about musical unity these musicians might have had.

Briefly, the very notion of the aesthetic, first explicitly formulated in the eighteenth century, encompassed a notion of unity that is compatible with difference. Art was viewed as paradigmatic of the synthesis between the universal concept and sensate particular; the function of an artwork was to express an abstract idea within a sensuous medium. As Terry Eagleton puts it (in the course of drawing a political analogy), “This fusion of general and particular, in which one shares in the whole at no risk to one’s unique specificity, resembles the very form of the aesthetic artifact...For the mystery of the aesthetic object is that each of its sensuous parts, while appearing wholly autonomous, incarnates the ‘law’ of its totality.”^[51] Or, from Coleridge’s perspective, as paraphrased by Ruth Solie, “the aim of an artwork is to create not the greatest possible amount of unity but the optimum amount consistent with preserving the separate character of its components...”^[52] In nineteenth-century formulations of the aesthetic, the artwork was viewed as analogous to a sentient subject, as an organic entity, that served to reflect and enhance the subjectivity of its perceiver. Both human and artwork were considered organic wholes created by a system of functional differences.

How does the above relate to fingering? I believe historical fingerings serve this synthesis of unity and difference: Beethoven and Chopin, among others, composed phrases whose unified effect arises in part from the delineation, interaction, and accumulation of short gestures; the latter, in turn, arise from the kind of localized touch and articulation as entailed by disjunct fingerings. For example, Barth points out that to break a slur before a point of arrival, as Beethoven often directed, creates a unity by “forming a joint” between the two parts. “While certain articulations do indeed separate, many articulations, including those before destination

⁵⁰ Schenker, *The Art of Performance*, 26. He also mentions this idea in “Abolish the Phrasing Slur,” *The Masterwork in Music: A Yearbook*, vol. 1, ed. and trans. William Drabkin (Cambridge: Cambridge University Press, 1994), 21.

⁵¹ Terry Eagleton, *The Ideology of the Aesthetic* (Cambridge: Cambridge University Press, 1990), 25.

⁵² Ruth Solie, “The Living Work: Organicism and Musical Analysis,” *19th-Century Music* 4/2 (1980): 148.

notes on the far side of bar lines or major metric groupings, join the preceding *legato* group to the arrival note. These ‘fresh’ arrivals sound distinctly different from subsumed arrivals...^[53] In other words, unity created by disjunction is fundamentally distinct from that created by connection, but possible nonetheless. Indeed, Beethoven’s music frequently instantiates the former kind of unity, entailing the separation and individuation of parts as created in part by disjunct articulations^[54]—and, by implication, disjunct fingerings.

Ex. 7 provides a salient instance of Barth’s claim, where the arrival point on the downbeat of the third measure is marked by a slur break directly before it, one that serves to connect—in the sense of relate or unify, rather than of physically connect—the climax with the preceding gestures. More generally, the total effect of a gesturally saturated passage such as this results from the distinct characterization of each individual gesture and the interaction among such characters, which obviously can only emerge if the gestures are delineated within the larger phrase to begin with—separation is a precondition for interrelation. In short, historical (disjunct) fingering is conducive to the delineation and separation of groups; this allows the characterization and interrelation among groups to emerge; both the separation and interrelation of groups yield unity by difference.^[55]

Fingerings evince the notion of the aesthetic in another respect as well. The people we have discussed (and others as well) used fingerings to convey expressive ideas in a palpable way, in which the expressive intent inheres in its physical realization. Historical fingerings allow the performer to experience a physical impulse possibly similar to what the composer experienced or imagined, and thus to sense directly the musical effect he desired. Says Bamberger of

⁵³ Barth, *The Pianist as Orator*, 113. Also see Schenker’s example of Mozart’s broken slur prior to the final note of a cadence in “Abolish the Phrasing Slur,” 22.

⁵⁴ Of course, the individuation of a group depends as much upon the content of that group—both the written notes and the way they are played—as upon the delineation of its boundaries. However, I believe that these factors are interdependent; that is, the detachment before a phrase often plays a role in how the phrase itself is played. For instance, in raising one’s hand off the keyboard in the juncture between gestures, one more readily and fully experiences the physical impetus (the “wind-up”) appropriate to the motion, sound, and character of the upcoming gesture, which, in turn, enhances the performer’s ability to manifest these aspects. See Alexandra Pierce, “Juncture,” in *Spanning: Essays on Musical Theory, Performance, and Movement* (Redlands: Center of Balance Press, 1983), 1–12.

⁵⁵ Such interrelations are not merely linear but also hierarchical; that is, the unity of a passage such as Beethoven’s in Ex. 7 arises in part from the presence of a gestural hierarchy. This idea goes back at least to Johann Philipp Kirnberger, who declared it insufficient for a piece merely to be comprised of small parts; for those parts to be interrelated and comprehensible, they must be hierarchically organized. As Judith L. Schwartz concludes, “Thus hierarchic organization becomes the key to creating—and perceiving—unity amidst diversity.” “Conceptions of Musical Unity in the 18th Century,” *The Journal of Musicology* 18/1 (2001): 68.

Beethoven's fingerings, "The fingering speaks directly and intimately, perhaps more so than any other device, since it communicates to the performer on the immediate level of physical gesture."^[56] In other words, the fingering is an analogue for what it expresses: localized, disjunct fingerings are used for, and stand for, localized, disjunct gestures. Again, Bamberger on Beethoven: "the physical gesture of the performer's hand becomes a sort of *sound analogue*: the gesture reflects his understanding and also influences his understanding..." [her italics].^[57]

Thus, for example, the dynamics and phrasing of Ex. 7 are to some degree embodied in Beethoven's fingering itself, such that the expressive idea or ideal as implied by the expressive markings need not be cognitively filtered, or deliberated independently of the physical execution. This would explain in part why Beethoven, Chopin, and Schenker, among others, did not always explicitly notate what is implied by their fingering. For if the expressive intent or effect inheres in the fingering, an explicit expressive indication would be superfluous. But even more importantly, such an explicit indication is often conducive to an exaggerated or a self-conscious rendering. Hence, a composer or editor will often provide an interpretively implicative fingering in lieu of an explicit articulation, dynamic, or tempo marking to promote a subtle, natural effect.^[58]

In sum, historical fingerings are a small but significant manifestation of the very notion of the aesthetic, regarding its synthesis of the abstract and particular, which they demonstrate on two levels. First, they create unity-by-difference by delineating short gestures, in the process allowing relations (linear and hierarchical) among such gestures to emerge, the sum of which comprise or contribute to the unified effect of the passage. Second, they assimilate an otherwise abstract expressive idea within a sensuous, tactile medium, creating a physical analogue to that idea that allows the keyboardist to realize a composer's expressive intent in an unmediated and often subtle way.

By contrast, a modern, and I believe spurious, notion of unity conceives it terms of homogeneity rather than of heterogeneity. Schenker, a sharp critic of the modern trend, saw the long, editorially imposed phrasing slur as a manifestation of a political and social ideology that understands unity only as uniformity: "For has there not been, for about the past two hundred years, a huge phrasing slur encircling the entire world, drawn by a few presumptuous peoples of the so-called Enlightenment—the editors of the text of humanity, so to speak—around all the other peoples in contradiction to their individuality and also to the concept of a higher unity growing organically from contrasts? Everywhere, in social and political life as in art, one thus

⁵⁶ Bamberger, "The Musical Significance," 271.

⁵⁷ *Ibid.*, 245.

⁵⁸ Schenker makes this point in *The Art of Performance*, 42. Rothstein invokes this point in speculating why Schenker did not publish his own performing edition of the complete Beethoven sonatas based on glosses in his personal scores. "Heinrich Schenker as an Interpreter," 24.

finds the same laziness, the same fanatic compulsion to achieve unity along the path of uniformity, simply to avoid one's duty to the particular...»^[59]

The modern approach to fingering is but a consequence of this top-down approach. For if unity is conceived simply as connection and continuation, as is implied by a phrasing slur, it becomes desirable to leave the hand in place and stay in the same position for a longer period of time. In the process, the hands become homogenized in response to a homogenized perception of the music, and are thus conducive neither to executing gestural distinctions within a unified phrase nor to realizing an expressive idea with immediacy and subtlety.^[60] To be sure, one can execute the phrasing of Ex. 10, for instance, even within a five-finger position, as in Ex. 18. Yet, in the modern version—and here is the crucial point—the conceptual is not embodied by the

⁵⁹ Schenker, “Abolish the Phrasing Slur,” 30. This essay reveals many editorial transgressions in the form of phrasing slurs that overturn a composer's desire to create “unity by contrast” (22). Incidentally, this statement offers evidence that Schenker's view of musical unity, at least prior to *Der Frei Satz*, is bottom-up rather than top-down—arising organically from contrasts inherent in the musical content rather than from a construct such as the phrasing slur that attempts (futilely) to unify the content from without. (Carl Schachter affirms that Schenker's view of musical coherence is not one “that results from uniformity but one that is based on the interaction between contrasting elements...” “A Commentary on Schenker's *Free Composition*,” in *Unfoldings: Essays in Schenkerian Theory and Analysis*, ed. Joseph N. Straus [Oxford: Oxford University Press, 1999], 188.) Indeed, scholars who criticize Schenker for his all-encompassing top-down, *Ursatz*-driven methodology (most famously, Eugene Narmour in *Beyond Schenkerism: The Need for Alternatives in Music Analysis* [Chicago: University of Chicago Press, 1977], 1–121), are largely responding to his final theory as codified in *Der Frei Satz*, but disregard Schenker's earlier thoughts on performance, which present a much different view. I thank Nicholas Cook for this insight (private communication).

⁶⁰ To be sure, modern fingering arose in response not merely to changing philosophical paradigms, but also to numerous other musical, and technological factors to which I can only briefly allude. First, the virtuosic piano music composed later in the nineteenth century, epitomized by the music of Liszt, was much less oriented toward localized gesture, much more toward longer lines and brilliance. The fingering that arose in response to this body of repertoire was then anachronistically superimposed on earlier musics in opposition to their rhetorical content. Second, the rise of edited recordings later in the twentieth century yielded a perfectionistic ideal, which then came to be superimposed onto live performance. As a result, pianists felt it necessary (if unconsciously) to embrace the more secure, predictable fingerings of the modern school in order to realize this ideal of accuracy—and also to learn and memorize music more quickly in order to meet the demands of increased concertizing (I thank an anonymous reader for this latter point). Of course, these changes in repertoire, technology, and professional circumstances can themselves be viewed as manifestations of the change in aesthetic ideology discussed above.

physical, but is merely superimposed on it, thus producing a qualitatively, if subtly, different effect.^[61]

Hence, historical and modern fingerings are tokens of diametrically opposed aesthetic ideologies. The former views unity as arising from difference, the latter as arising from sameness, in which differences are temporary deviations from or embellishments of—rather than essential constituents of—the unifying idea. No wonder, then, that historical fingerings often seem rather forced, peculiar, and self-conscious from a modern perspective—the ideology they exemplify is so vastly different. However, I believe they are actually quite natural by virtue of being congruent or isomorphic with the expressive aspects they are meant to convey. In sum, historical fingerings embody expressive nuances, modern ones are often at best neutral, at worst antithetical, with respect to those nuances.

* * *

In music, as in life, the seemingly smallest things ultimately reflect the broadest beliefs and values. Keyboard fingerings, often the aspect of playing most taken for granted—and assumed to be relatively interchangeable or inconsequential—do, in fact, bear upon the most significant interpretive issues and the highest-level aesthetic assumptions. I hope to have suggested that the aesthetic of rhetorical gesture, of unity by differentiation, and of sensuous cognition, is the more compelling choice.^[62]

Jeffrey Swinkin is a pianist and music theorist who teaches at the University of San Francisco. He has published in Indiana Theory Review, American Music Teacher, and has an article forthcoming in College Music Symposium.

⁶¹ Schachter emphasizes that using fingering primarily for the purpose of technical facility “carries with it the danger of separating the execution of the notes from that of the interpretive nuances; *shadings and articulations are superimposed by an act of will on a stereotyped and differentiated physical pattern*” [my italics]. “Introduction to the Dover edition,” viii.

⁶² I have not discussed, and am unsure of, the applicability of these ideas to non-keyboard instruments. Robert Philip does allude to the notion of “expressive fingerings” with respect to the violin in *Early Recordings and Musical Style: Changing Tastes in Instrumental Performance 1900–1950* (Cambridge: Cambridge University Press, 1992), 214. This is an invaluable source for those who wish more fully to understand the differences between historical and modern performance trends.