

Decoding Idiosyncratic Hairpins: Dynamic Changes or “Notated” Rubato?

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Abstract

The definition of hairpins as a $\langle \rangle$ gradual increase or decrease in volume is widely acknowledged today. However, numerous piano compositions of the late eighteenth and nineteenth centuries defy this conventional definition of hairpins, thereby posing interpretive problems for pianists. Hugo Riemann (1849-1919) was the first musicologist who elucidated the association of hairpins with agogic inflections, calling for the flexibility of rhythms and tempo. Furthermore, notable scholar-performers such as Jan Ekier and Clive Brown, as seen in the critical score editions of the piano works by Chopin and Brahms, assert that the hairpins are to be interpreted not only as dynamic changes but also as means of “notated” rubato, which signifies slight acceleration, retardation, or lingering. This article seeks to decode idiosyncratic hairpins through the scrutiny of the selected piano compositions by Schubert, Chopin and Brahms. The objectives are twofold: firstly, to review historical sources and commentary about hairpins by composers and musicologists; and secondly, to illuminate the interpretive possibilities of hairpins through score analysis.

Keywords: Hairpins, Dynamics, Rubato, Agogic, Performance practice, Schubert, Chopin, Brahms

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Introduction

Interpreting music can be a daunting task for performers. Western musical notation is a complicated yet imperfect system that serves as means of conveying a composer's musical ideas and intentions. Béla Bartók (1881-1945) acknowledged the limitations of the musical notation, as he wrote in his essay 'Mechanical Music': "It is a well-known fact that our notation records on music paper, more or less inadequately, the idea of the composer..."² The historical recordings of Bartók and Claude Debussy (1862-1918) playing their own works reveal that their meticulous notations—rhythmic patterns, tempo changes, dynamic markings, articulations and other performance markings—are very difficult to realize precisely but rather are often treated approximately. This evidence indicates that the imprecision and incompleteness inherent in musical notation can pose major challenges for performers. In fact, musical notation and performance marks used over the centuries have had different meanings, depending on the composer's own idiosyncratic notation. Such difference in notational meaning is acutely observed by Nikolaus Harnoncourt: "Is it not astonishing that musical works which are completely different in essence and style, such as an opera by Monteverdi and a symphony by Gustav Mahler, can be written down using the same notational symbols?"³

One of the most problematic notational symbols that does not precisely convey its meaning is the hairpin $\langle \rangle$. It is generally acknowledged that hairpins denote gradual increase (*crescendo*) or decrease (*diminuendo*) in volume. However, we are confronted with numerous piano works of Beethoven, Schubert, Chopin and Brahms, to name a few, which defy the conventional meaning of hairpins. The following examples illustrate three categories of questionable hairpins. Figure 1 shows diamond-shaped hairpins over a single chord/note or adjacent notes, which are impossible to be rendered on the piano with *crescendo* and *diminuendo*. Figure 2 presents a *diminuendo* hairpin as notated in conjunction with *cresc.*, leading to a seeming contradiction. In Figure 3, the *crescendo* hairpin appears simultaneously with *cresc.*, indicating a notational redundancy.

Since the 1960s and 1970s, there have been several modern critical "Urtext" editions—G. Henle, Wiener, Bärenreiter, among others—that present the historically-informed texts through the scholarly scrutiny of the autographs and historical sources. The early years of the 21st century have witnessed the publication of new critical editions that provide commentary and editorial decisions in an effort to revive performance practice issues and the lost performance tradition during the composer's time. Among the pioneering editions are the *Polish National Edition of the Works of Fryderyk Chopin* (Jan Ekier, PWM, 2nd revised ed., 1998-2010), The New

² Benjamin Suchoff, ed., *Béla Bartók Essays* (London: University of Nebraska Press, 1992), 292.

³ Nikolaus Harnoncourt, *Baroque Music Today: Music as Speech*, ed. Reinhard G. Pauly, trans. Mary O'Neill (London: Christopher Helm Publishers, 1998), 28.

Schubert Edition (Walther Dürr, et al., Bärenreiter, 2001-) and Johannes Brahms Scholarly-Critical Edition (Clive Brown, et al., Bärenreiter, 2006-), which observe that hairpins are interpreted not only as dynamic changes but also as “notated” rubato, which signifies slight acceleration, retardation, or lingering.

What follows is a discussion of selective historical sources and commentary given by the composers and their contemporaries, serving as indispensable evidence for the discrepancies in the meaning of hairpins. Such evidence, presented in chronological order, is intended to provide a window into the performance traditions of the nineteenth century, in particular the interpretation of hairpins.



Figure 1: Johannes Brahms, Intermezzo in E major, Op. 116, No. 4, mm. 303–308 (Bärenreiter, 19).

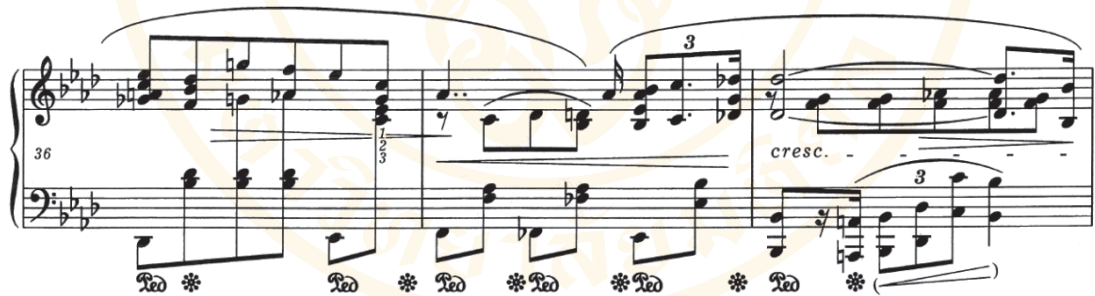


Figure 2: Frédéric Chopin, Polonaise-Fantaisie in A-flat, Op. 61, mm. 36–38 (PWM, Jan Ekier, 78).



Figure 3: Franz Schubert, Impromptu in C minor, D.899, No. 1, mm. 51–53 (Wiener Urtext Edition, 3).

Historical Precedents

The connotation of dynamic gradations as expressive nuances has its origin in the singing style of the early seventeenth century known as *messa di voce*, calling for swelling and diminishing in volume on a single note. One of the earliest notations of *messa di voce* is found in *Le nuove musiche* (Florence, 1601/2) by Giulio Caccini (1551-1618). Two prescriptive dynamic ornaments associated with *messa di voce* are: *esclamazione* (“an increasing of the voice,” i.e. a swell) and *il crescere e scemare della voce* (“becoming louder [and] then softer”).⁴

The prescriptive indication of *messa di voce* was later applied to stringed and wind instruments in the eighteenth century. The *XII Sonate a violin solo e violoncello col cimbalo, opera prima* (Twelve Sonatas for Violin, Violoncello, and Cembalo, Opus 1, Paris, 1712) by Giovanni Antonio Piani (1678-1760), is claimed to be the earliest surviving manuscript which contains the graphical notation called blackened wedges, indicating the swelling (◀) and diminishing (▶) tone through varying bow strokes (Figure 4). Nevertheless, hairpins were sparingly used in keyboard compositions of that era. By the 1780s, Franz Joseph Haydn was one of the first Classical composers who experimented with hairpins, as found in his keyboard sonatas, beginning from Hob. XVI:40 (published in 1784).⁵ The end of the eighteenth century also witnessed the appearance of four major keyboard treatises which defined hairpins as gradual dynamic changes (i.e. *crescendo* hairpin means “getting louder” or *diminuendo* hairpin means “getting softer”): Daniel Gottlob Türk’s *School of Clavier Playing* (1789), Friedrich Starke’s *Wiener Pianoforte-Schule* (1819), Johann Nepomuk Hummel’s *A Complete Theoretical and Practical Course of Instructions on the Art of Playing the Piano Forte* (1827), and Carl Czerny’s *Complete Theoretical and Practical Pianoforte School*, Op. 500 (1839).

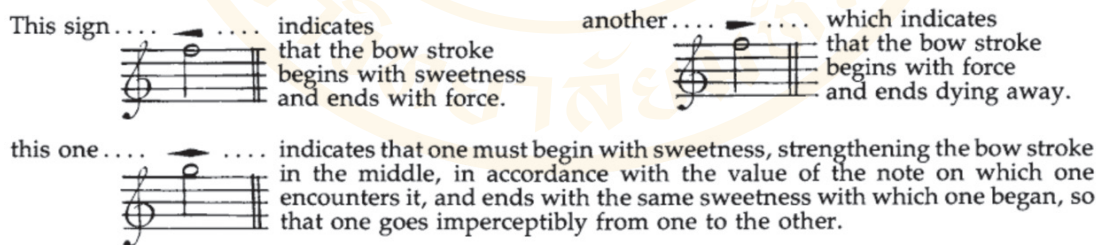


Figure 4: Giovanni Antonio Piani, *Twelve Sonatas for Violin, Violoncello, and Cembalo*, Op. 1 (A-R Editions, trans. Barbara Garvey Jackson, 2).

⁴ Roland Jackson, “Dynamics,” in *Performance Practice: A Dictionary-Guide for Musicians* (New York: Routledge, 2005), 135.

⁵ Sandra Rosenblum, *Performance Practices in Classic Piano Music* (Bloomington: Indiana University Press, 1988). 69-70.

However, beginning the nineteenth century, hairpins were extensively adopted and yet became a controversial subject among the composers and musicians. In 1826, Felix Mendelssohn's sister Fanny Hensel (1805-1847) was one of the pioneering composers who experimented with hairpins as a means of tempo flexibility as she wrote in the autograph of her own piano piece in F minor, *Allegro ma non troppo*, on 20 February 1826:

This piece must be performed with many changes in tempo, but always gently, without jerking. The signs $\langle \rangle$ stand for *accelerando* and *ritardando*.⁶

The notational experiment of hairpins can also be found in several piano compositions by Felix Mendelssohn, including his early piano works and *Lieder ohne Worte*. For instance, in the third movement of Felix's Piano Sonata No. 1 in E major, Op. 6, the confusion arises when the diamond-shaped hairpins and *cresc.* are notated in close proximity (Figure 5). The hairpins could be treated as expressive markings that connote rhythmic elasticity, thus conveying the recitative style in this instance. Fanny's remark on the hairpins could be representative of general performing practice for the music of Mendelssohn siblings, owing to their common prodigious musical skills and musical affinities.



Figure 5: Felix Mendelssohn, Piano Sonata in E major, Op. 6/III, m. 28 (G. Henle Verlag, 33).

Held in high esteem by the contemporaries of his time, Louis Spohr (1784-1859) built a formidable reputation as a German composer, violinist, conductor, teacher and a leading pioneer of the early nineteenth-century Romanticism. As a violin pedagogue, Spohr taught over two hundred pupils from all over Europe. Written in 1831, Spohr's *Violinschule (The Violin School)* was universally considered as one of the most influential violin treatises of the nineteenth century that laid the foundations of modern violin technique.⁷ In his treatise, Spohr

⁶ R. Larry Todd, *Fanny Hensel: The Other Mendelssohn* (New York: Oxford University Press, 2010), 102

⁷ Maurice Powell, liner notes for *Double Quartets* by Louis Spohr, The Academy St Martin-in-the-Fields Chamber Ensemble, Hyperion CCD22014, 1998, compact disc.


important notes. The irony here is that Spohr’s description of rubato playing in concise written instructions could not be elicited from the musical notation. There is no indication of altered rhythmic notations nor is there any performance term (e.g. rubato or *ad libitum*) in the musical illustrations, except the *diminuendo* hairpins on which the rubato playing is recommended. Furthermore, there are also several other musical examples from Spohr’s *Violinschule* that show implicit association of the *diminuendo* hairpin with a prolongation of notes: it could be said that the oral element of Spohr’s rubato suggestions could not be notated precisely.



Figure 7: Pierre Rode, Violin Concerto No. 7 in A minor, Op. 9/I, mm. 28–30 (Spohr’s *Violinschule*, trans. C. Rudolphus, 183).



Figure 8: Pierre Rode, Violin Concerto No. 7 in A minor, Op. 9/III, m. 41 (*Violinschule*, trans. C. Rudolphus, 195).

During the mid-1830s, Franz Liszt (1811-1886) was intensely engaged in revising his Douze Grandes Etudes (1837-1838) and composing his first significant piano cycle *Album d’un voyageur* (1835-1838). Of particular interest, in these two piano collections, are the unorthodox notational symbols which indicate the nuances of tempo rubato. At the bottom page of *Au bord d’une Source*, Liszt illustrated three types of notational symbols: an oblong box as a “*crescendo of movement*” (i.e. *accelerando*), a single line as a “*decrescendo of movement*” (i.e. *rallentando* or *ritenuto*), and a double line as a “hold of shorter duration than ” (i.e. agogic accent) (Figure 9).¹¹ One observes that oblong boxes are often placed above *crescendo* hairpins, calling for a quickening of tempo. On the other hand, single lines are often placed above *diminuendo* hairpins, calling for a slackening of tempo. It is regrettable that such notational symbols are

¹¹ Clive Brown, “General Issues of Performing Practice,” in *Performance Practices in Johannes Brahms’ Chamber Music* (Kassel: Bärenreiter, 2015), 6.

inadvertently omitted in the New Liszt Edition (Editio Musica Budapest).¹²

Ped. *simile*.

Les lignes doubles  indiquent les *crescendo* de mouvement.
 Les lignes simples  indiquent les *decrescendo* de mouvement.
 Les deux lignes  marquent les points de suspension moindres que les ♩

Figure 9: Franz Liszt, *Au bord d'une Source*, mm. 3–4 (Paris: Simon Richault, 1841).

Hugo Riemann (1849–1919) was widely acknowledged as one of the most significant German musicologists of the nineteenth century who elucidated the concept of tempo flexibility as means of musical expression. Riemann, in his influential *Musiklexikon* (first published in 1882), coined the term “agogics” and defined it as:

The use of the small modifications of *tempo* (also called *tempo rubato*) which is necessary for expressive playing. The agogics coexists with dynamics—a slight increasing of tempo is accompanied by *crescendo*; the lengthening of the note values that form the “dynamic peak” within a phrase; and a slight slowing down is subsequently accompanied by *diminuendo*...the agogic accent, as indicated by the notation Λ , means a slight prolongation of the note values, especially suspensions.¹³

In 1894, Riemann concurred that the dynamic hairpins suggested agogic inflections—a slight modification in rhythms and tempo. “The $\langle \rangle$ is to be understood more as agogic: \langle increases shortening of the values, \rangle decreases stress.”¹⁴ In other words, the *crescendo* hairpin implies intensification through a motion of pressing forward and urging whereas the *diminuendo* hairpin implies decline through a motion of holding back and lingering.

In 1887, Fanny Davies (1861–1934), an English pianist and pupil of Clara Schumann’s, wrote one of the most valuable eyewitness accounts of Brahms’s playing during the rehearsal

¹² Alan Walker, “Liszt and the Keyboard,” *The Musical Times* 118, no 1615 (1977): 719, <http://doi.org/10.2307/959476>.

¹³ Hugo Riemann, “Agogics and Agogic Accent,” in *Musiklexikon*, trans. J. S. Shedlock (London: Augener & Co., 1896), 13.

¹⁴ Hugo Riemann, “Zur Klärung der Phrasierungsfrage. Fortsetzung,” in *Musikalisches Wochenblatt* 25, no. 24 (7 June 1894), 286. Reproduced in Brown, “General Issues of Performing Practice,” 6.

of his C minor Piano Trio with Joseph Joachim and Robert Hausmann. She recalled that Brahms's interpretive style was free, flexible and expansive, without losing a sense of underlying pulse. What is most revelatory about Brahms's playing, according to Davies, is that Brahms's hairpin notations are perceived not only as dynamic signs but also expressive markings associated with rhythmic or agogic inflections:

The sign $\leftarrow \rightarrow$, as used by Brahms, often occurs when he wishes to express great sincerity and warmth, applied not only to tone but to rhythm also. He would linger not on one note alone, but on a whole idea, as if unable to tear himself away from its beauty. He would prefer to lengthen a bar or phrase rather than spoil it by making up the time into a metronomic bar.¹⁵

In correspondence with Clara Schumann in May 1893, Brahms discussed the Intermezzo in B minor Op. 119, No. 1 with enthusiasm and suggested how it should be played. It is fascinating to observe that hairpins are meticulously notated throughout the Op. 119, No. 1. These hairpins are not intended as dynamic markings but rather suggest Brahms's emphasis on "ritardando in every bar and note" through agogic lingering as means of rubato playing for the effects of melancholy expression and concentrated intensity (Figure 10).

The little piece is exceptionally melancholic and 'to be played very slowly' is by no means an understatement. Every bar and every note must sound like a ritard[ando], as though one wanted to extract melancholy from each, with sensual pleasure from the dissonances!¹⁶

¹⁵ Fanny Davies, "Some Personal Recollections of Brahms as Pianist and Interpreter," in *Cobbett's Cyclopedic Survey of Chamber Music*, ed. W. W. Cobbett (London: Oxford University Press, 1929), 182. Reproduced in Brown, "General Issues of Performing Practice," 6.

¹⁶ Imogen Fellingner, ed., "Preface," *Johannes Brahms Klavierstücke Op. 119* (Wiener Urtext Edition, 1974).



Figure 10: Johannes Brahms, Intermezzo in B minor, Op. 119, No. 1, mm. 1–6 (Bärenreiter, 2).

The correspondence between Arnold Schoenberg (1874-1951) and Ferruccio Busoni (1866-1924) in the years 1909-1910 provides illuminating commentary and detailed analysis of Schoenberg's *Klavierstücke* Op. 11, No. 2. Of particular note are the unorthodox hairpin markings in Op. 11, No. 2 which are apparently impossible to be played at the piano, as Busoni stated (Figure 11). Schoenberg acknowledged the hairpin markings as the influence from Brahms's compositional practice and explained:

Obviously I did not imagine that one could make these chords [with the signs < > over the chords] grow louder and softer. [...] In these cases, I always mean a very expressive but gentle *Marcato*, *sforzato*. It can be compared to this *portamento* sign or something similar ... [this crescendo hairpin on held notes] is of course also not to be taken literally. It should simply be an indication of the direction of the line. Or of the degree of intensity. More an aid to the comprehension of the line than a marking for performance.¹⁷

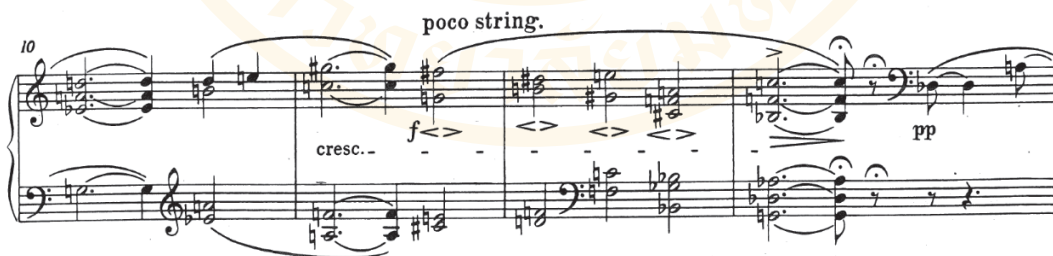


Figure 11: Arnold Schoenberg, Drei Klavierstücke, Op. 11, No. 2, mm. 10–13 (Wiener Urtext Edition, 28).

¹⁷ Antony Beaumont, ed., *Ferruccio Busoni: Selected Letters* (New York: Columbia University Press, 1987), 386-388. Reproduced in David Hyun-Su Kim, "The Brahmsian Hairpin," in *19th-Century Music* 36, no. 1 (Summer 2012): 46, <https://doi.org/10.1525/nmc.2012.36.1.046>.

Schoenberg's response clearly espouses the view that the hairpins are not intended as dynamic markings but rather descriptive notation that implies the shaping of the melodic contour and harmonic direction by means of two interpretive possibilities for the performers: (1) varying degrees of pedaling and accents for piano, and (2) varying degrees of rhythmic momentum. As for Op. 11, No. 2 (Figure 12), one may imagine the effects of vibrato and portamento from strings or wind instruments through varying degrees of pedaling (e.g. quarter pedal, half pedal, or full pedal) and pedal changes (e.g. syncopated pedal or simultaneous pedal). One may also consider articulations through varying degrees of accents and varying length of the note values.

The early recordings of the pianists Sergei Rachmaninoff (1873-1943), Alexander Scriabin (1871-1915), Bartók and Debussy are among the most important primary sources of evidence that provide fascinating insights into the composers' interpretation of their own piano works, especially showing how hairpin markings are generally interpreted as rubato in performance. Consider Rachmaninoff's own recorded performance of his Prelude in G-flat Op. 23, No. 10, as heard from *The Complete RCA Recordings*. Rachmaninoff interprets the hairpins as rhythmic flexibility, rather than dynamic nuances. A slight acceleration is heard over the *crescendo* hairpins and a slight retardation over the *diminuendo* hairpins. The bass notes on the third beat of every bar are often played with agogic lingering (Figure 12). Furthermore, David Hyun-Su Kim's analytical comparison between Brahms's music scores and the historical recordings by the members of Brahms's inner circle shed light on the late nineteenth-century performance tradition.¹⁸

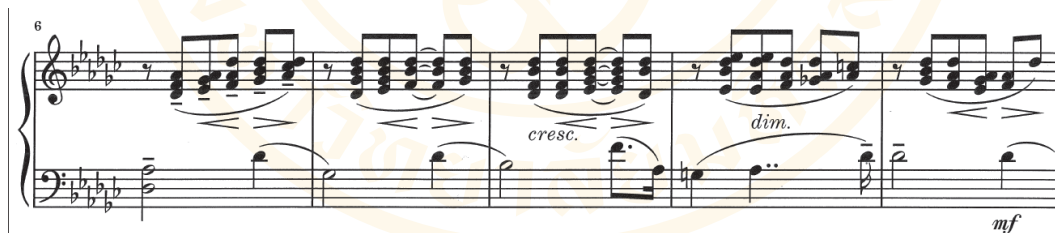



Figure 12: Sergei Rachmaninoff, Prelude in G-flat major, Op. 23, No. 10, mm. 6–10 (G. Henle Verlag, 52).

¹⁸ Kim, "The Brahmsian Hairpin," 46-57.

Hairpins as Descriptive Notation

There are apparent discrepancies between the prescriptive meaning of hairpin notation and the written sources as evidenced in the above discussion of historical precedents. However, it is unfortunate that pedagogical instructions and interpretive details about hairpins as “notated” rubato are rather scanty. Recently, however, the distinguished pianists Eric Heidsieck, Seymour Bernstein and Roberto Poli and David Kim have begun to provide illuminating discussion of the controversial hairpins as “notated” rubato, including interpretive possibilities.¹⁹ These research studies espouse the view that hairpins are not merely intended as the prescriptive and exacting markings that call for dynamic changes but rather descriptive notation that allows contextual interpretation. Despite the inevitable variance in musical realizations of the hairpins, these research studies share common approaches to agogic inflection with the identification of four hairpin types according to the corresponding musical context.

The *crescendo* hairpin () denotes a pattern of intensification in two ways: (1) by building up rhythmic momentum through temporal acceleration, usually found in energetic and lively music, and (2) by shaping the melodic peaks, harmonic tension and structural points of arrival through a broadening of tempo and lengthening of rhythmic values. In Figure 13a, the *crescendo* hairpins indicate an acceleration, signifying rhythmic momentum towards the melodic peaks. In Figure 13b, the *crescendo* hairpin indicates a broadening of tempo, signifying the cadential arrival leading to the return of the main theme in m. 36. Figure 13c exemplifies the varying meaning of *crescendo* hairpins depending on the musical context of the passage. The first *crescendo* hairpin in mm. 29-30 suggests an acceleration by means of building forward rhythmic motion to the melodic peak, while the second *crescendo* hairpin in m. 32 suggests a broadening of tempo by means of intensifying the harmonic suspension of an unresolved seventh chord, with the exclamatory sign *fz* in m. 33.

¹⁹ See Eric Heidsieck, “Dynamics or Motion? An Interpretation of Some Musical Signs in Romantic Piano Music,” trans. Charles Timbrell, *Piano Quarterly* 35, no. 140 (1987), 56-58; Seymour Bernstein, *Chopin: Interpreting His Notational Symbols* (Milwaukee: Hal Leonard, 2005); Roberto Poli, *The Secret Life of Musical Notation: Defying Interpretive Traditions* (Milwaukee: Amadeus Press, 2010) and Kim, “The Brahmsian Hairpin,” 46-57.

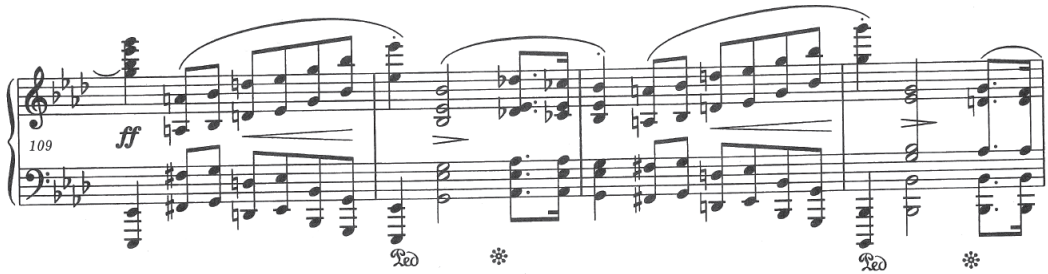


Figure 13a: Frédéric Chopin, Fantasia in F minor, Op. 49, mm. 109–112
(PWM, Jan Ekier, 72).

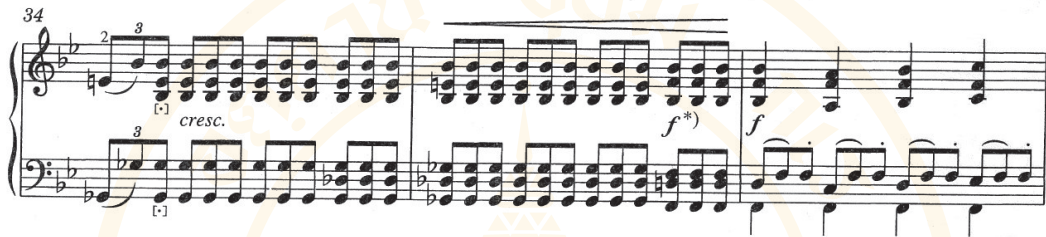


Figure 13b: Franz Schubert, Piano Sonata in B-flat major, D.960, mm. 34–36
(Wiener Urtext Edition, 161).

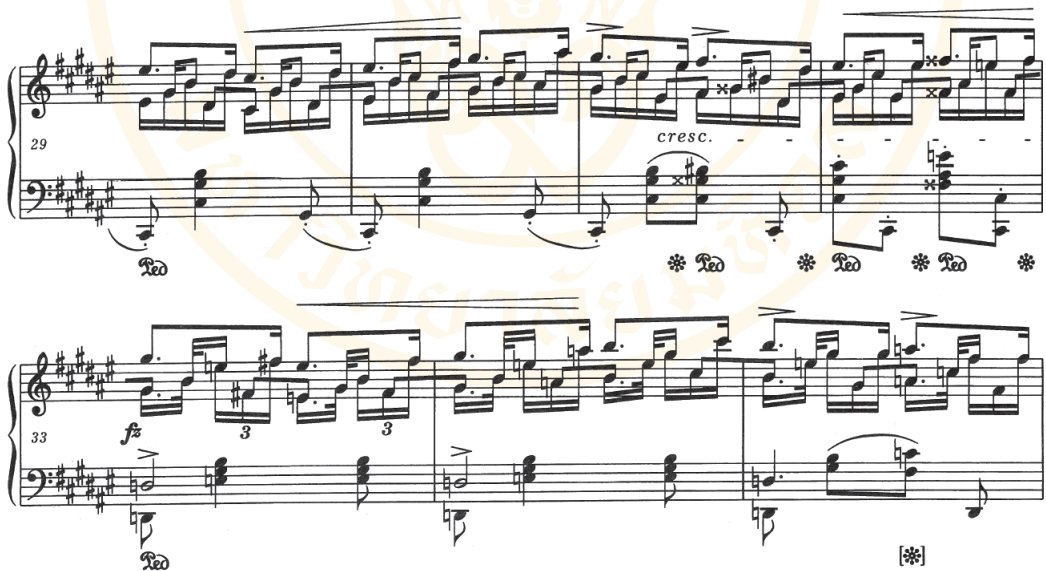


Figure 13c: Frédéric Chopin, Nocturne in F-sharp major, Op. 15, No. 2, mm. 29–35
(PWM, Jan Ekier, 41).

The *diminuendo* hairpin (\rightrightarrows) denotes a pattern of attenuation by creating rhythmic hesitation through temporal retardation, usually found at the end of phrase or *section*. In the excerpt from Chopin’s Barcarolle (Figure 14), the *diminuendo* hairpin in m. 32 calls for slowing down towards the end of the phrase before the fermata. By the same token, the *diminuendo* hairpin in mm. 39-40 calls for slowing down towards the end of the section (Figure 15).



Figure 14: Frédéric Chopin, Barcarolle in F-sharp major, Op. 61, mm. 32–33 (PWM, Jan Ekier, 93).



Figure 15: Johannes Brahms, Ballade in G minor, Op. 118, No. 3, mm. 37–40 (Wiener Urtext Edition, 9).

The diamond-shaped hairpin ($\langle \rangle$) and the short *diminuendo* hairpin (or “long” accent \rightrightarrows), commonly notated over individual notes or chords, suggest agogic accentuation through a slight lengthening for the musical effect of vocal expressiveness and profound sensibility. In Figure 1 and Figure 16, the diamond-shaped hairpins and the short *diminuendo* hairpins call for slight lingering and $\langle \rangle$ flexibility in note lengths, expressing a sense of longing.

Any passage that shows a few pairs of hairpins combined in close proximity implies that it is not only concerned with dynamic nuances, but also calls for rubato playing with varying proportion according to the context of the passage in question. Consider the examples of Figure 17 and Figure 18: the hairpins suggest that the passages should not be played in

straightforward and metronomic style, but with flexible pacing in both dynamics and rhythms.

Conclusion

The evidence of historical sources and the illustration of selected musical examples, as discussed above, clearly substantiate the descriptive meaning of hairpins as “notated” rubato. Given that hairpins are descriptive notation, careful consideration needs to be given so that rubato or agogic inflections are not rendered with too much liberty, which may distort the underlying metrical pulse and rhythmic values. Furthermore, it must be emphasized that this article does not seek to deny the long-accepted meaning of hairpins as dynamic changes but rather provides a better insight into the questionable hairpins through the scrutiny of historical sources and musical scores. The alternative meaning of hairpin associated with “notated” rubato does not necessarily represent an absolute interpretation and the fidelity to the composer’s intentions. As such, exploring the potential of the hairpins affords a considerable freedom of interpretive possibilities, as suggested by the categorization of hairpin types.

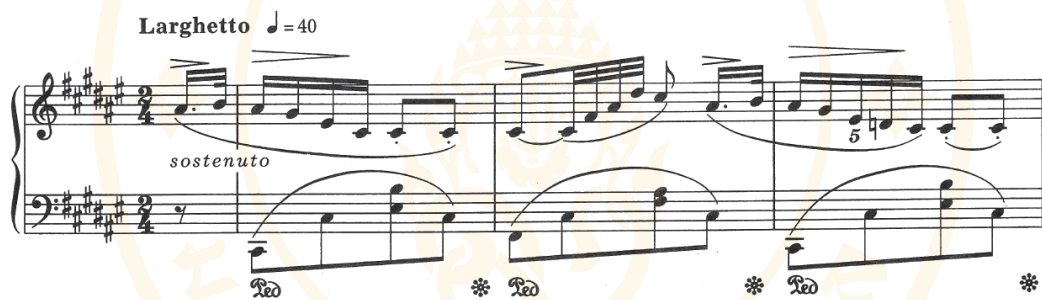


Figure 16: Frédéric Chopin, Nocturne in F-sharp major, Op. 15, No. 2, mm. 1–3
 (PWM, Jan Ekier, 40).



Figure 17: Johannes Brahms, Intermezzo in A major, Op. 118, No. 2, mm. 17–21
 (Wiener Urtext Edition, 4).

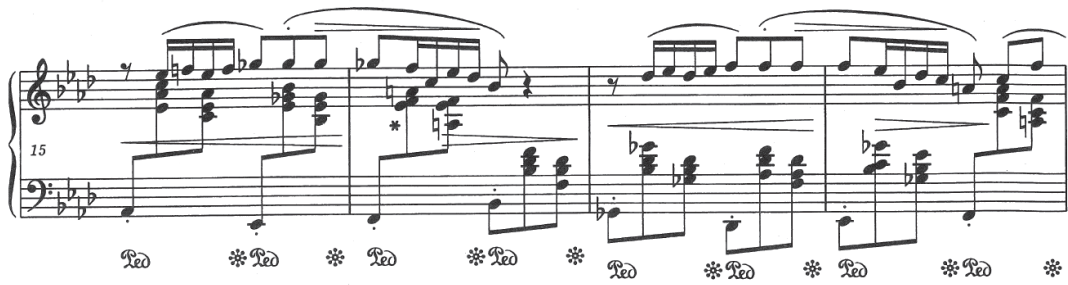
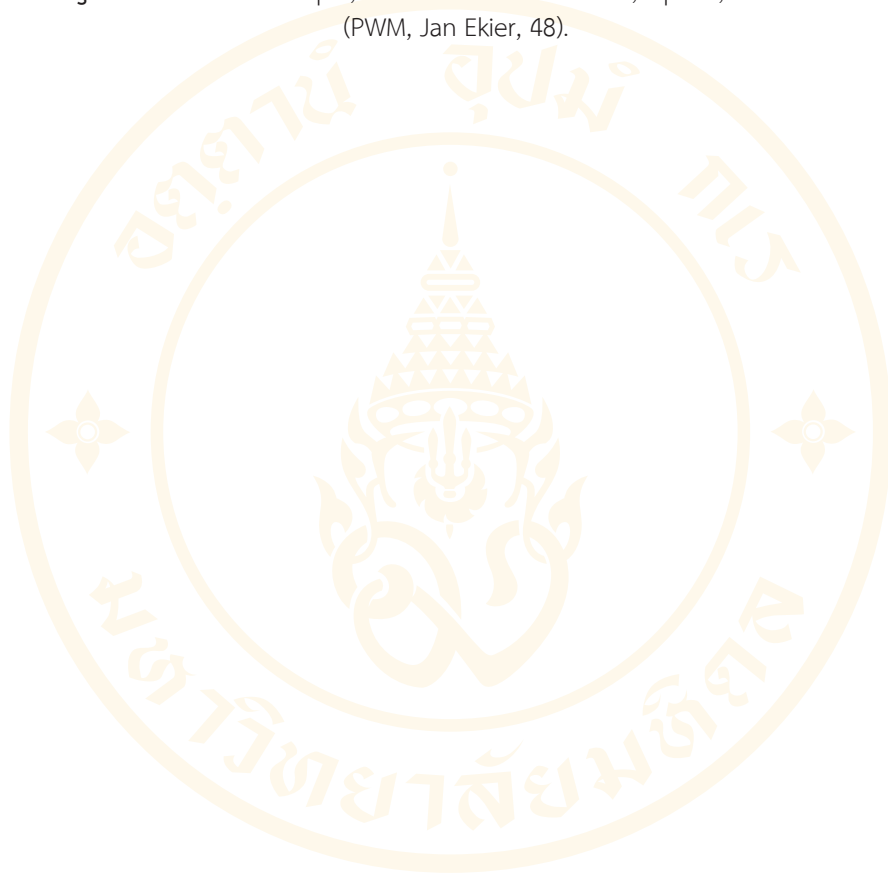


Figure 18: Frédéric Chopin, Ballade No. 4 in F minor, Op. 52, mm. 15–18
(PWM, Jan Ekier, 48).



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