FUGUES IN FOUR TWENTIETH-CENTURY MULTI-MOVEMENT PIANO SONATAS: AN ANALYTICAL STUDY FROM A PERFORMER'S PERSPECTIVE

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2012-02

A doctoral paper submitted to McGill University in partial fulfillment of the requirement of the degree of Doctor of Music in Performance Studies

Acknowledgements

I would like to thank my advisory committee members—Prof. Kyoko Hashimoto, Dr. Sara Laimon, Dr. René Rusch, and Dr. Eleanor Stubley—for their assistance along each stage of this project. I am extremely grateful to Sara for her professionalism and her expertise in the twentieth-century repertoire. Her interpretive ideas influenced the way that I approach these twentieth-century works. It has been a great pleasure to work with her. My sincerest gratitude also goes to René, who has been tremendously helpful throughout my entire doctoral study at McGill. Her brilliant analytical insights, excellent guidance, and thorough editorial comments made this dissertation possible.

I would also like to thank all my piano teachers in the past, both in Canada and in China, who have made great contributions to my development as a young pianist. I am extremely indebted to my parents, Simiao Sun and Xin Jin, who have always been there for me. Finally, I would like to express my deepest appreciation to my husband, Yu Zhang, for his love, care, and encouragement throughout my musical endeavor. His positive attitude has made my experience of writing this dissertation to be remembered as a pleasant one.

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Abstract

Through the lens of a performer, this dissertation presents a comparative analysis of four fugal movements from multi-movement piano sonatas that were written in the first half of the twentieth century: Karol Szymanowski's Sonata No. 3, Op. 36 (1917), Paul Hindemith's Third Piano Sonata (1936), Elliott Carter's Piano Sonata (1945–46), and Samuel Barber's Sonata for Piano, Op. 26 (1949). Numerous scholars have shown how twentieth-century composers have appropriated the fugue by highlighting how these artists integrated contemporary musical idioms into traditional fugal procedure. Yet, the literature remains relatively silent on how a performer can benefit from the analyses, especially when approaching these difficult works. Accordingly, this dissertation demonstrates how musical analysis can inform a performance of these works, and likewise, how an interpretation can influence an analytical approach.

Based on current scholarship, this research examines the diverse ways in which the four composers appropriate their fugues from the eighteenth- and nineteenth-century fugal practices, yet seek to "update" the genre to suit their modernist outlooks. This dissertation fills a gap in current music research and performance studies by demonstrating how an understanding of both traditional and modern musical elements and techniques in these twentieth-century works—such as approaches to structure, motivic connection, twentieth-century harmonic and rhythm techniques, and traditional contrapuntal device—can guide performers to project both large-scale relationships (i.e. motivic connection and form) and small-scale considerations (interpretative details in phrasing, tone color, articulation, dynamics, timing, etc.), to achieve a balance between the intellectual and the emotional content.

Abrégé

Ce mémoire présente, à travers la lentille d'une interprète, une analyse comparative de quatre mouvements fugué provenant de sonates pour piano à plusieurs mouvements qui ont été écrites dans la première moitié du XXe siècle : Sonate n° 3, Op. 36 (1917) par Karol Szymanowski, Troisième sonate pour piano (1936) par Paul Hindemith, Sonate pour piano (1945–46) par Elliott Carter et la Sonate pour piano, Op. 26 (1949) par Samuel Barber. De nombreux spécialistes ont démontré comment les compositeurs du XXe siècle ont approprié la fugue en mettant en évidence la façon dont ces artistes ont intégré des styles de musique de l'époque dans la procédure fuguée traditionnelle. Cependant, la littérature demeure relativement silencieuse sur la manière dont un interprète peut bénéficier de telles analyses, surtout en approchant ces œuvres difficiles. En conséquence, ce mémoire démontre comment une analyse musicale peut informer la performance de ces œuvres et, de même, comment une interprétation peut influencer une approche analytique.

Sur la base de recherches actuelle, cette recherche examine les diverses façons dont les quatre compositeurs ont approprié leurs fugues à partir des pratiques fugué des XVIIIe et XIXe siècles, mais cherchent néanmoins à « mettre à jour » le genre en fonction de leurs perspectives modernistes. Ce mémoire comble donc une lacune dans la recherche musicale et dans les études de performance en démontrant comment une compréhension des éléments musicaux traditionnelles et modernes ainsi que la technique de ces œuvres du XXe siècle—tels que les approches envers la structure, les connections motiviques, les techniques harmoniques et rythmiques du XXe siècle et le système traditionnelle de contrepoint—peut guider les performeurs à projeter de grandes relations (c.à-d connexion motivique et forme) ainsi que les petites réflexions

(considérations interprétatives phrasé, couleur du timbre, l'articulation, la dynamique, le sens du rythme, etc.), afin de parvenir à un équilibre entre le contenu intellectuel et le contenu émotionnel.

Introduction

From the baroque period to the twentieth century, the fugue plays a prominent role in piano literature. Many piano fugues form part of the standard repertoires that have been extensively studied and frequently performed, such as the 48 fugues in Bach's *The Well-Tempered Clavier*, and the fugal movements in Beethoven's late piano sonatas. The fugue is often considered a technical and musical challenge by piano students due to the complexity involved in playing three or more independent voices that are woven together in a delicate balance. They are faced with the difficult task of playing two or more voices simultaneously in each hand, asserting their individuality, yet also conveying their relationship to the governing harmonic sonorities, phrase structures, and formal procedures.

The four twentieth-century fugues discussed in this dissertation—the fugal movements in Karol Szymanowski's Sonata No. 3, Op. 36 (1917), Paul Hindemith's Third Piano Sonata (1936), Elliott Carter's Piano Sonata (1945–46), and Samuel Barber's Sonata for Piano, Op. 26 (1949)—all stand out in the fugue literature. In each case, the fugue appears as the final movement in a multi-movement sonata. As a classically trained pianist, I sense that performing these fugues requires as much musicality and pianistic skill as are required for the monumental fugal works by Bach and Beethoven. Twentieth-century harmonic languages, rhythmic devices, and virtuosic figurations add further layers of complexity to the contrapuntal texture, making these fugues—particularly those by Szymanowski, Carter, and Barber—even more challenging to read and memorize than many baroque and classical ones. Charles Rosen, for instance, in his lecture prior to his performance of Carter's piano

sonata, wittily initiated his discussion by admitting that he always had to play the sonata with the music in order to release the pressure that was caused by his "frightening experiences" of performing the fugue in the second movement.[1]

Furthermore, these twentieth-century works are liberated to various extents from tonal requirements, formal restrictions, and the voice leading rules that were common among their eighteenth- and nineteenth-century predecessors. We might thus find it difficult to grasp the phrase structure and formal organization of these fugues, which can entail various interpretive issues, such as phrasing, dynamic shaping, voicing, and timing. Accordingly, I propose that performing these twentieth-century fugues calls for an in-depth analysis that inspects formal procedure, thematic organization, twentieth-century harmonic and rhythmic novelties, as well as traditional contrapuntal devices. My dissertation takes a performer's perspective and offers a comparative analysis of four fugal movements in the sonatas by Szymanowski, Hindemith, Carter, and Barber, exploring how an analysis can inform a performance, and likewise, how a performer's interpretation might influence our analytical insights.

The current literature offers a means of understanding these works from both analytical and socio-historical standpoints. Adopting an analytical approach, the research by Tischler (1952, 1968), Below (1973), Rosen (1984), Samson (1984), Cruz-Perez (1987), Schiff (1989), Wightman (1999), and Lysinger (2004) examines the twentieth-century harmonic and rhythmic devices that are exploited in the four sonatas, demonstrating how each composer's unique harmonic languages and rhythmic techniques reveal his musical styles.[2] Although their analyses help us

[1] Charles Rosen, *The Musical Languages of Elliott Carter* (Washington: Library of Congress, 1984), 1.
[2] While most of these analytical studies are rather brief, devoting small portions to the fugal movement, Nancy Alton Keith's dissertation (1987) focuses on the fugues in Hindemith, Carter, and Barber's sonatas. Keith's work is rather a general assessment and summary of each work, which is based on existing scholarship; nevertheless, it might be used as a starting point for pianists to have an overview of these fugues.

understand how various twentieth-century harmonic and rhythmic devices influence the contrapuntal texture, performers might ask more specific questions regarding how a pianist might benefit from analyses. When performing these fugues, how can we voice the dissonant and resonant chords with a sense of transparency while still maintaining their sonorities? How can we execute complex rhythmic figurations, finding a balance between rhythmic strictness and smoothness, freedom and improvisation? How do these twentieth-century elements function in the fugal process and how can we make use of these elements to organize the large-scale pacing in a performance?

These questions invite us to revisit fugal predecessors. In particular, an observation of the "standard" fugues by J. S. Bach[3] is indispensible to a detailed analysis of the twentieth-century fugues, as it enables us to appreciate how these twentieth-century fugues conform to the standard practice, and thereby to evaluate how they deviate from the standard practice and to what degree. With regard to Bach's fugues, Walker adopts an historical approach, inspecting how Bach incorporated tonal harmony into the fugal technique that had been cultivated by the sixteenth- and seventeenth-century composers and shaped the standard fugal practice, which is predominantly recognized as the "norm" of fugal composition.[4] Oldroyd (1948) and Benjamin (2003) provide their analytical insights of the fugue based on Bach's *'48,'* examining the structural principles that constitute a standard fugue: subject and answer; exposition, middle entries, and episodes; melodic and rhythmic devices; and tonal organization. They also evaluate the aesthetic value in Bach's

[3] Paul M. Walker, "Fugue," *Oxford Music Online*, http://www.oxfordmusiconline.com/subscriber/article/grove/music/51678 (accessed August 6, 2011). Walker asserts that, although Bach's fugues present various stylistic influences, his fugues—particularly the ones in *The Well-Tempered Clavier*—are generally considered as "classic" fugues. The author then provides an analysis of the C minor fugue from Book 1 of the *WTC* to demonstrate the fugal terminology, formal procedure, and structural principles of a standard fugue.
[4] Ibid.

fugues, as each fugue encompasses a sense of balance and flow in the music, a variety of character and mood, and the process of increasing and relaxing tension. Based on these studies, my analysis investigates the various extents to which these twentieth-century fugues inherit the structural principles and aesthetic values of Bach's fugue, examining the subject entrances in the exposition, the proportions between episodic sections and middle entries, the contrasting musical expressions between various sections, and the employment of traditional contrapuntal devices.

In observing how these twentieth-century fugues draw on and turn away from the standard fugal practice, performers can gain deeper insight into both the overall picture of the fugue and its musical details. My dissertation fills a gap in current music research and performance studies by demonstrating how an understanding of both traditional and modern musical elements and techniques in these twentieth-century works can help performers discover their own approaches to performing these fugues. In my discussion of the performance of each fugue, I consider various approaches to dynamic shaping, melodic articulations, pedaling, climactic build-ups, and timing, exploring how to convey the tension/relaxation in the fugal process and how to project different musical characters that rhythmic writing and harmonic sonority might imply. Meanwhile, I also explore what analysts can gain from a performer's perspective. In particular, I observe how different performances that convey contrasting musical expressions can influence an analytical approach to the formal organization in the fugue.

An examination of the socio-culture contexts in which these four fugues were written can intensify our understanding of the musical styles of each work. Situating the four twentieth-century sonatas within their cultural contexts, Browne (1932), Samson (1980), Schiff (1983), Bye (1994), Heyman (1992), and Wightman (1999)

survey each composer's disposition towards eighteenth- and nineteenth-century musical traditions, and discuss how the diverse artistic movements in the first half of the twentieth-century influenced each composer's musical style. Based on the current scholarship, my research explores how these works reflect different stylistic influences, observing how an understanding of the stylistic influences on each composer guides a performance of his work. In my discussion of each piece, I compare two different recordings to evaluate how the performers' unique approaches to interpretive details yield different expressions that reflect the musical style of the fugue on various levels.

This dissertation is structured into four chapters, each presenting a detailed discussion of the fugues by Szymanowski, Hindemith, Carter, and Barber, respectively. I begin each chapter by posing specific questions about various interpretive issues in performing each fugue, exploring what musical or technical aspects make the fugue difficult to approach, and why. Focusing on these specific aspects, I then begin my analytical discussion based on existing research and explore how an analysis can make the fugue more approachable for pianists. In chapter 1 I explore how to convey the musical style of Szymanowski's fugue in the performance and how the performer can help "clarify" the fugue's formal structure. Chapter 2, on Hindemith's fugue, mainly observes what kind of musical expression the piece implies. Chapter 3 examines the motivic, harmonic, and rhythmic aspects of Carter's fugue, discussing how the composer's compositional concept of this sonata guides our interpretation, and inspecting how the performer can exploit harmonic dissonance and rhythmic conflicts to build musical intensity. Chapter 4 focuses on the virtuosic character of Barber's fugue, demonstrating how the composer's harmonic and rhythmic writing contributes to the virtuosic effect in the fugue.

Chapter 1

Fugue in Szymanowski's Piano Sonata No. 3, Op. 36 (1917)

I

Both scholars and performers have remarked on the complexity involved in playing Szymanowski's Third Piano Sonata. For instance, musicologist Alistair Wightman claims that it is "an extraordinarily difficult work [for performers] to interpret," thus requiring a "truly sympathetic and understanding performer."[5] Remarking on the sophistication of the formal organization of the work, Teresa Chylińska maintains that the performer must have a "feeling of participating in a live creation of the form, constructing a kind of immensely superlogical architecture."[6] Polish pianist Piotr Anderszewski, a renowned Szymanowski interpreter who is acclaimed as "a new champion" of Szymanowski interpretation after Arthur Rubinstein,[7] sees the quality of "exuberance" in Szymanowski's music,[8] and discusses the difficulty involved in his learning process:

> The difficulty with Szymanowski lies in finding the guiding thread, that line which leads one from the first note to the last. It's very subterranean, not visible at first glance.[9]

These accounts suggest that a thorough analysis is indispensible to a performance of Szymanowski's work. As a performer, I cannot agree more with Anderszewski's assertion, for my own learning experience of Szymanowski's fugue is

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[5] Alistair Wightman, *Karol Szymanowski: His Life and Work* (Brookfield: Ashgate, 1999), 201.
[6] Teresa Chylińska, *Karol Szymanowski: His Life and Works* (Los Angeles: University of Southern California, 1993), 506.
[7] Anthony Tommasini, "Another Countryman Takes Up the Cause of Szymanowski," *New York Times*, October 23, 2005, http://www.nytimes.com/2005/10/23/arts/music/23tomm.html?scp=2&sq=anderszewski%20szymanowski&st=cse (accessed August 9, 2011).
[8] Piotr Anderszewski, "Anderszewski on Szymanowski," in Piotr Anderszewski Offical Site, http://www.anderszewski.net/writings/index.cfm?writing_id=30 (accessed August 9, 2011).
[9] Ibid.

basically a process of searching for—to borrow Anderszewski's expression—a "guiding thread," that will allow me to smoothly link different sections, to render logical phrases, to produce a balanced texture, and to coherently display the large-scale organization of the movement.

Unfolding this "guiding thread" is, however, not an easy task. Reading through this piece, we see that the fugue embraces many characteristics that a standard fugue has, such as the interweaving of voices, the fifth relationship that governs the subject entries in the exposition, the alternations between middle entries and episodic sections, and the frequent use of traditional contrapuntal devices. Therefore, as baroque and classical fugues, Szymanowski's fugue invites us to implement a fugal analysis to understand the formal organization and musical effects that the contrapuntal and rhythmic devices create. In addition, throughout the fugue the thematic fragments of the subject spread out in various voices. In episodes, these fragments play against each other to form a counterpoint; in middle entries, they often act as "countersubjects" to interact with the complete statement of the subject. Moreover, the composer incorporates two themes from the first movements into the fugue. The superimposition of diverse thematic elements produces an extremely thick texture and powerful sound. We then have to consider: which thematic elements are more important in a given texture and context, and which ones can be treated as secondary? How can we emphasize the importance of the "primary" thematic elements in the texture? How can we project a balanced sound for those "secondary" elements without losing their characteristics?

Moreover, the fugue contains abundant dynamic signs, thorough articulation markings, as well as frequent tempo indications, all of which require the performer's thoughtful inspection to discover the role they play in the musical context. In addition

to the thematic complexity and numerous notational details, Szymanowski's harmonic idioms make the piece more difficult to approach. Due to the lack of harmonic syntax and tonal hierarchies, we cannot render phrasing in the same way as we approach traditional fugues, in which musical phrasing is oriented by consonance and dissonance, governed by the functional harmony.[10] As quoted earlier in Chylińska's statement, we have to explore how to build a "superlogical architecture" in our performance to help listeners perceive both the large-scale organization and structural details of the work.

Having discussed some difficulties that we might encounter in performing Szymanowski's fugue, in the next two parts I will examine various interpretive issues through musical analysis. Part II will focus on thematic, motivic, harmonic, and stylistic aspects of this fugue, whereas Part III will analyze the formal organization of the movement. Exploring the relationship between performance and analysis, I will analyze two contrasting performances of this fugue: one by Anderszewski, and the other by Martin Roscoe.[11] Recorded in 2005, the two performances display significant contrasts in both large-scale consideration and interpretive details, which I use as a source of inspiration for my own interpretation of Szymanowski's fugue.

II

Observing Szymanowski's musical languages and compositional techniques, a number of scholars have provided their analyses of the Third Piano Sonata. Godes and Cruz-Perez analyze all three piano sonatas by Szymanowski in their respective

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[10] See William E. Caplin, *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven* (New York: Oxford University Press, 1998), 23–26.
[11] Karol Szymanowski, *Piano Sonata No. 3, Op. 36,* Piotr Anderszewski, perf. *Szymanowski: Piano Sonata No 3, Métopes, Masques*, Virgin Classics compact disc 545730-2, 2005; Martin Roscoe, *Piano Sonata No. 3, Op. 36*, Martin Roscoe, perf. Szymanowski Piano Works, Vol. 4, Naxos compact disc 8.557168, 2005.

dissertations, and offer brief comparisons of the three works.[12] In their separate accounts of Szymanowski's biographical study, Samson and Wightman provide brief, yet insightful analyses of the third sonata, focusing on its thematic organization and stylistic traits.[13]

Presenting a focused investigation of Szymanowski's harmonic languages, Samson asserts that, although tonality is not completely disowned in the composer's works between 1915 and 1918, traditional harmonic functions and tonal principles are daringly altered, which makes his harmonic writing "ambiguous" and "complex."[14] In searching for theoretical models for analyzing Szymanowski's harmonic writing, Samson maintains that it is difficult to understand Szymanowski's language because the composer uses harmonies freely and intuitively without adopting any specific system.[15] Perhaps because of the unsystematic harmonic writing in the third sonata, Samson does not offer any musical examples to illustrate his harmonic and tonal analysis of this piece; he only claims that "colourful chromaticism" in this sonata reflects impressionistic influence, which is the main style of Szymanowski's works during his middle period (1915–1918).[16]

Without providing much information about his third sonata, the composer only left a brief note about this work:

> [It is] shorter than the II [Piano Sonata], four movements creating a single entity, in sound rather characteristic.[17]

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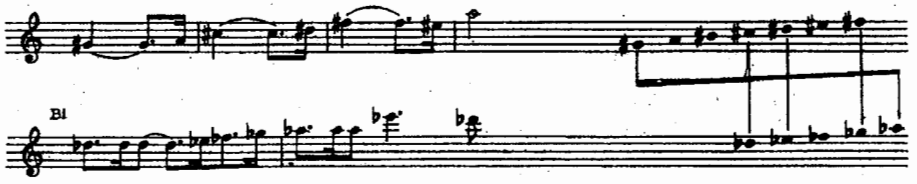
[12] Catherine Godes, "Stylistic Evolution in Szymanowski's Three Piano Sonatas" (D.M.A. diss., University of Cincinnati, 1984); Horacio Antonio Cruz-Perez, "The Piano Sonatas of Karol Szymanowski" (Ph.D. diss, Northwestern University, 1987).
[13] Jim Samson, *The Music of Szymanowski* (London: Kahn & Averill, 1980), 108–112; Wightman, 192–201.
[14] For comments on Szymanowski's middle-period harmony, see Jim Samson, *Music in Transition: A Study of Tonal Expansion and Atonality, 1900–1920* (London: J M Dent & Sons Ltd, 1977), 138–142.
[15] Jim Samson, "The Use of Analytical Models in the Analysis of Szymanowski's Harmonic Writing," in *Karol Szymanowski in Seiner Zeit* (München: W. Fink, 1984), 149–157.
[16] Samson, *Music in Transition*, 138–139.
[17] Teresa Chylińska, ed., Karol Szymanowski Korespondencja Tom 1, 1903–1919 [Karol Szymanowski Correspondence Volume 1, 1903–1919] (Krakow: Polskie Wydawnictwo Muzyczne, 1982), 536. Quoted in Wightman, 192.

To demonstrate the "characteristic" sound of the sonata, both Samson and Wightman place the piece into the composer's creative background in which it was written. Composed in 1917, the sonata was conceived during what is often regarded as the composer's "impressionist" period,[18] in which the composer was particularly fascinated by the programmatic works of Debussy, Ravel, and the late Scriabin. This is evidenced in Szymanowski's Third Symphony (1914–16), subtitled "Song of the Night," *Mythes* (1915), *Metopes* (1915), *Masques* (1915–16), and the First Violin Concerto (1916), based on the poem "May Night" by Micinski.[19] Thus, both Samson and Wightman deem that the sonata—an abstract work that bears no programmatic association—stands out in the creative output of the composer's impressionist period.[20] According to Samson, the impressionistic style of the piece is mainly reflected in the thematic material of the first movement.[21] Examining the two contrasting themes of the first movement, Samson first illustrates the modal relationship and similar melodic motions between the two themes.[22]

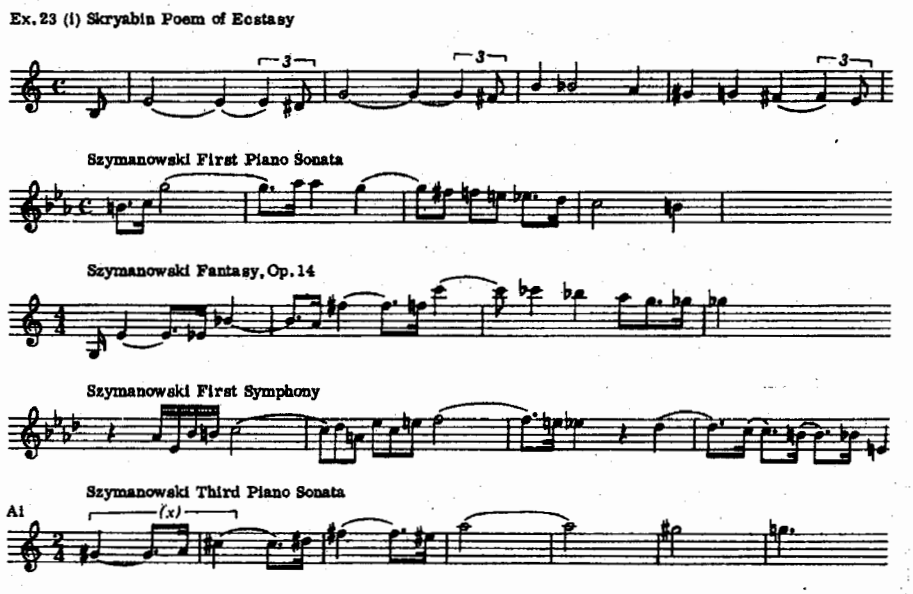
Fig. 1-1: Samson's comparison between theme A and theme B of the first movement of Szymanowski's Third Piano Sonata[23]



[18] For example, Samson regards that Szymanowski's music written during the First World War (1914–1919) were mostly influenced by impressionism. See Samson, "Impressionism and the Piano," in *The Music of Szymanowski*, 99–126.
[19] For a discussion of Szymanowski's impressionist works, see Samson, *The Music of Szymanowski*, 99–126; Wightman, 134–206.
[20] Wightman, 193.
[21] Samson, *The Music of Szymanowski*, 108–111.
[22] Ibid., 109.
[23] Ibid.

Then, Samson further explores the stylistic influences in the third sonata by comparing the opening theme of the first movement with several themes in Szymanowski's early romantic works and the ones in Scriabin's impressionist work. The author discovers that, whereas the chromatic quality of this opening theme echoes Scriabin's impressionistic work, the ascending melodic leaps and the dotted rhythmic figures in the opening theme resemble the melodic contour of Szymanowski's own "romantic" themes. Thus, Samson proposes that the musical styles of Szymanowski's third sonata not only reflect the impressionistic influence that is characteristic in the composer's middle-period works, but also recall the composer's German-influenced works from his early years.[24]

Fig. 1-2: Samson's comparison of opening theme in Szymanowski's Third Piano Sonata to the themes in his earlier works and in Scriabin's work[25]



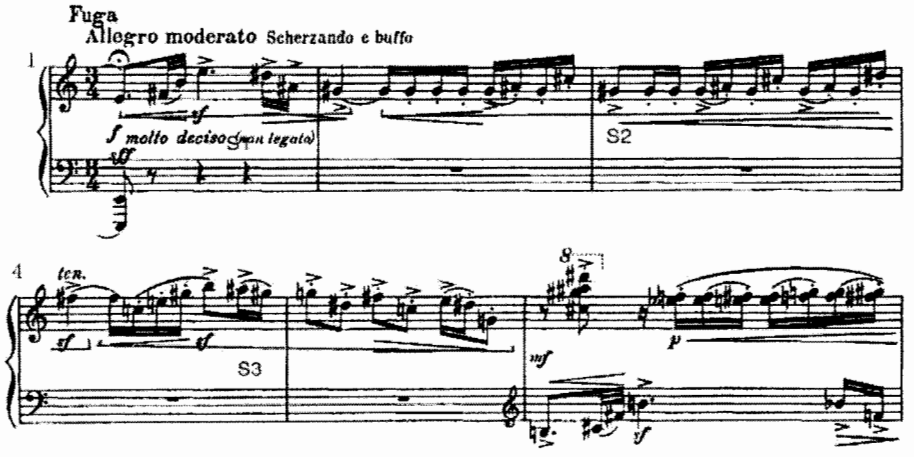
However, Samson provides no further comments on how the fugal movement reveals various stylistic influences. Given that the first movement's themes are recollected in

[24] Ibid., 108.
[25] Ibid.

the finale, we are motivated to explore how they influence the musical atmosphere and characters in the fugue, especially in the sections where they are superimposed with the fugue subject. We can further consider the overall style of the fugue, as it raises interpretive questions for performers, particularly with respect to tempo, timing, phrasing, dynamics, and voicing. In broaching the question of how to grasp the overall style and musical characters of the fugue, I begin my discussion by observing the fugue's thematic organization to demonstrate how the subject is fragmented in the contrapuntal texture, and how the fragments are superimposed with the first movement material. Then I will discuss interpretive issues that the thematic organization might entail.

Among various traditional contrapuntal devices, thematic fragmentation is the most important device used in this piece.[26] Remarking on the thematic fragmentation of the fugue subject, Godes illustrates how the subject is divided into three distinct motives (S1, S2, and S3):

Fig. 1-3: Szymanowski, Piano Sonata No. 3, Op. 36. Movement IV, mm. 1–6[27]



He then briefly describes how the three fragments differ from each other:

[26] Gode, 62–63.
[27] Ibid., 63.

> S1…is [a] fanfare [motive]…; S 2 is rather static, with emphasis on the repeated g-sharp, and S3 is tonally ambiguous, with much chromaticism and unusual melodic intervals.[28]

A closer examination of this five-bar subject, however, reveals that there are several other inherent features that call for our attention. For instance, each motive has its own melodic motion, intervallic content, rhythmic figure, dynamic shape, articulation, and musical character. As shown in Fig. 1-3, among the three motives, S1 is the only one containing a dotted rhythmic figure. Its melody features an ascending octave leap from e^1 to e^2 via perfect fourths (f^1-sharp–b^1–e^2), underlined by a crescendo towards the e^2. The ascending motion is followed by a descending perfect fourth (d^2-sharp–a^1-sharp), in which each note is marked with an accent. The dotted rhythm, the harmonic sonority of the perfect fourth, and the arch-like dynamic and melodic shape contribute to the "fanfare" sound of this motive—the musical "topic"[29] that Godes observes.[30] The opening rhythmic gesture in particular, energetically marks the beginning of the fugue.

The way that Godes's describes the character of S2 is not completely convincing. Given that this motive is composed of groups of sixteenth notes that firmly center on the G-sharps, S2 does appear "static." However, the melody expresses an inclination to break away from the domination of the repeated G-sharps, moving towards the F-sharp in bar 4. As a result, this motive conveys a strong sense of forward motion. This effect is further strengthened by the relentless sixteenth notes and the constant *crescendi* that build towards the end of the motive.

As Godes points out, S3 is special in its chromatic nature, featuring the modal mixture of E major and E minor due to the switch from G-sharps (in mm. 2–4) to the

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[28] Ibid.
[29] For a discussion of the topic theory, see Raymond Monelle, *The Musical Topic: Hunt, Military and Pastoral* (Bloomington: Indiana Univeristy Press, 2006), 3–34.
[30] Gode, 63.

G-natural (in m. 5).[31] The composer's intention to stress the chromatic quality of this motive is clear: the note values in S2 are mainly sixteenth notes, whereas they are enlarged to the eighth notes in S3 (particularly in m. 6). Most of the notes in S3 are accentuated; therefore the various intervals between these notes—major third, minor second, diminished fourth, and tritone—are clearly discernible.

Having observed the characteristics of each thematic fragment, now we can ask how these fragments function in the contrapuntal texture. Given that each motive has its own melodic, rhythmic, and dynamic features, and specific "personality," how can these musical details inspire the performer in making interpretive decisions? Let us observe how the composer employs different motives in various contexts, and how the performer can use various attributes of these motives to create diverse musical characters in a performance.

Among the three motives, S1 is perhaps the most distinctive in texture due to its dotted rhythmic figure and melodic leap. Its fanfare sound effectively signals to the listeners that a subject statement might follow. By comparison, S2 is less interesting in its melodic shape; however, its rhythmic and dynamic characters give this motive a strong sense of driving forward. Thus, S2 often serves as the rhythmic and dynamic impetus in passages that feature dynamic increase and tempo acceleration. An example of such a passage is the Doppio movimento section (Fig. 1-4a), in which S2 plays an important role in changing the musical atmosphere from the slow section to Allegro moderato. Another example is the episode in mm. 31–40 (Fig. 1-4b).[32] This

[31] Cruz-Perez, 239. He states that the fugue subject is established in E major and then is transposed to E minor in bar 5 because of the lowered mediant (G-natural). He also asserts his disagreement with Samson. Samson observes that the raised subdominant (the A-sharp) of the E major scale results in a Lydian quality of this fugue subject; whereas Cruz-Perez treats the A-sharps as passing tones, because of the strong emphasis on the G-sharps throughout mm. 2–3. But in any case, the theme turns to a minor mode in the last bar as the G-natural replaces G-sharp.

[32] See Fig. 1-11 ahead for the entire episode of mm. 31–40; this passage will be discussed in greater detail in Part III of this chapter.

passage characterizes a process in which the tempo undergoes several accelerando and ritardando; here, dynamics also gradually build from *piano dolce* to *forte*, finally reaching *fortissimo* in bar 41 (which marks the beginning of a middle entry).

Fig. 1-4a: Szymanowski, Piano Sonata No. 3, Op. 36, Movement IV, mm. 84–88

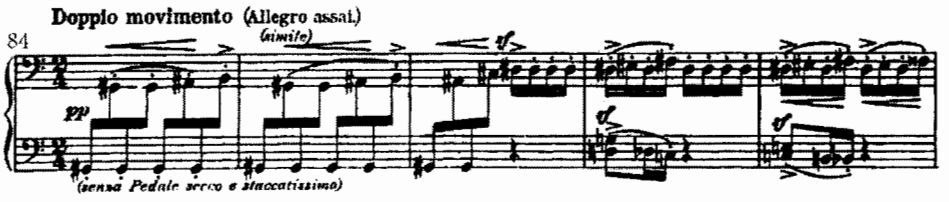
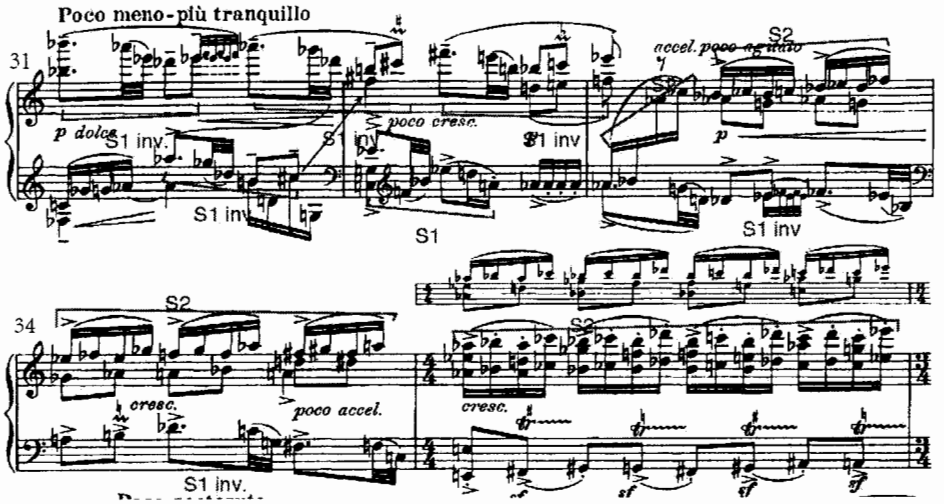


Fig. 1-4b: Szymanowski, Piano Sonata No. 3, Op. 36, Movement IV, mm. 31–35

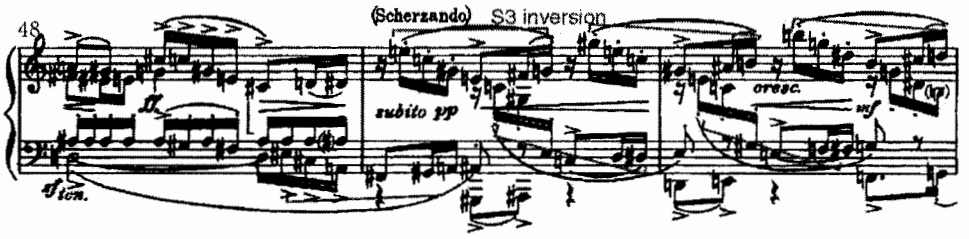


These two examples demonstrate that S2 is employed in transitional and episodic passages to convey a sense of instability and agitation. When performing these passages, I consider S2 a convenient and effective tool for facilitating dynamic and tempo changes, as we can easily manipulate tempo and dynamics for each group of sixteenth notes, thereby naturally realizing the build-up process.

Because of its chromatic nature, S3 might give listeners an impression of being "out of tune" in its context, particularly when it appears after S2, which firmly centers

on the repetitive G-sharps. For this reason, we can discern a sense of humour in S3, which corresponds to the "Scherzando e buffo" that the composer indicates at the beginning of the movement. The element of humour is particularly displayed in the Scherzando section in mm. 49–56, in which S3 serves as the major motivic component that realizes the "scherzando" character. (See Fig. 1-5)

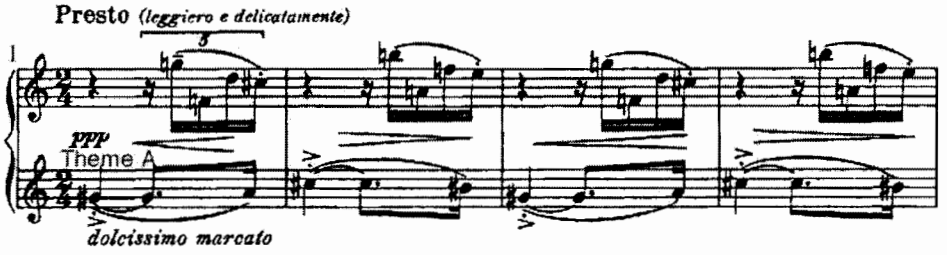
Fig. 1-5: Szymanowski, Piano Sonata No. 3, Op. 36, Movement IV, mm. 48–50



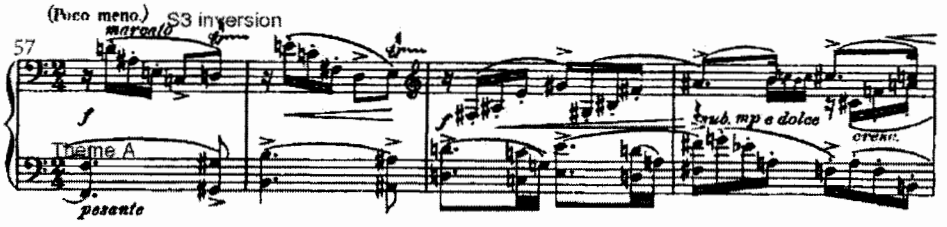
After examining how each motive functions in the context of the movement, we now have more options to shape the fugue subject. If we follow Godes's observation of the subject, which suggests that S2 is the stable center of the entire theme, we might articulate the repetitive G-sharps in mm. 2–3 with a heavier execution; consequently, we might make a diminuendo in S3 to close the theme. However, my discussion above suggests an alternative approach. After projecting the opening motive with considerable power, we can draw back the dynamic level in S2, rather than placing too much weight on the accents. Exploiting short and light articulations for S2 will provide more support for the Scherzo character of the subject. This approach also allows us to create an effective crescendo in bar 3, which leads towards the peak of the entire theme—the *sf* on the B (the dominant of E) in bar 4. Then, when playing S3, we can emphasize the staccato eighth notes to highlight the motive's chromaticism and sense of humour.

Having observed the thematic fragmentation of the fugue subject, I will now discuss the superimposition of the subject and the first movement material. The thematic integration of Szymanowski's sonata has been well documented in current scholarship. Samson, for instance, notes that Szymanowski is fond of using the fugue to thematically unify a large-scale work by incorporating earlier material into polyphonic fabric. The composer exploits this technique not only in the third piano sonata, but also in his first and second piano sonatas, as well as the second symphony.[33] In their respective discussions of the third sonata, Wightman, Cruz-Perez, and Godes show how the first movement's themes (theme A and theme B) are superimposed onto the fugue subject.[34] Their demonstrations feature the following passages:[35]

Fig. 1-6, a: Theme A of the first movement
Szymanowski, Piano Sonata No. 3, Op. 36, Movement I, mm. 1–4

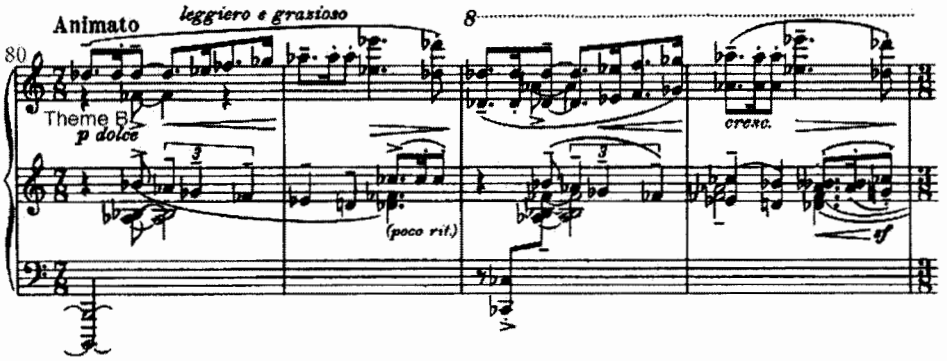


b: Superimposition of theme A and the fugue subject
Szymanowski, Piano Sonata No. 3, Op. 36, Movement IV, mm. 57–60

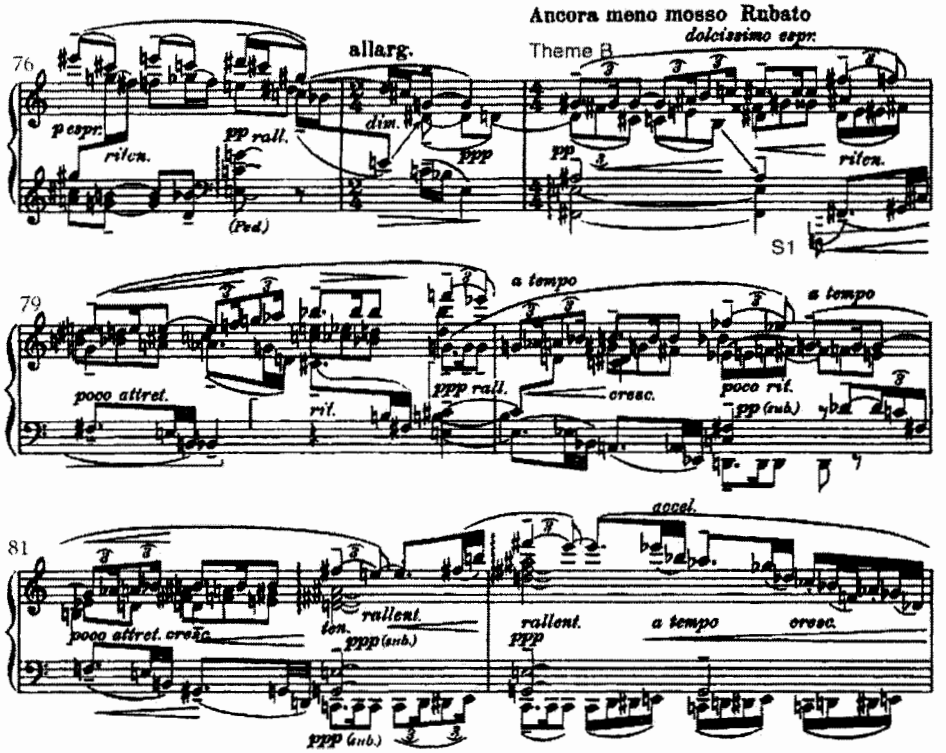


[33] Samson, *The Music of Szymanowski,* 112; Cruz-Perez, 250
[34] Wightman, 199–200. Godes, 65–72.
[35] See Wightman, 200; Godes, 68–69, 72, and 73; Cruz-Perez, 248, 250–251, 255–256.

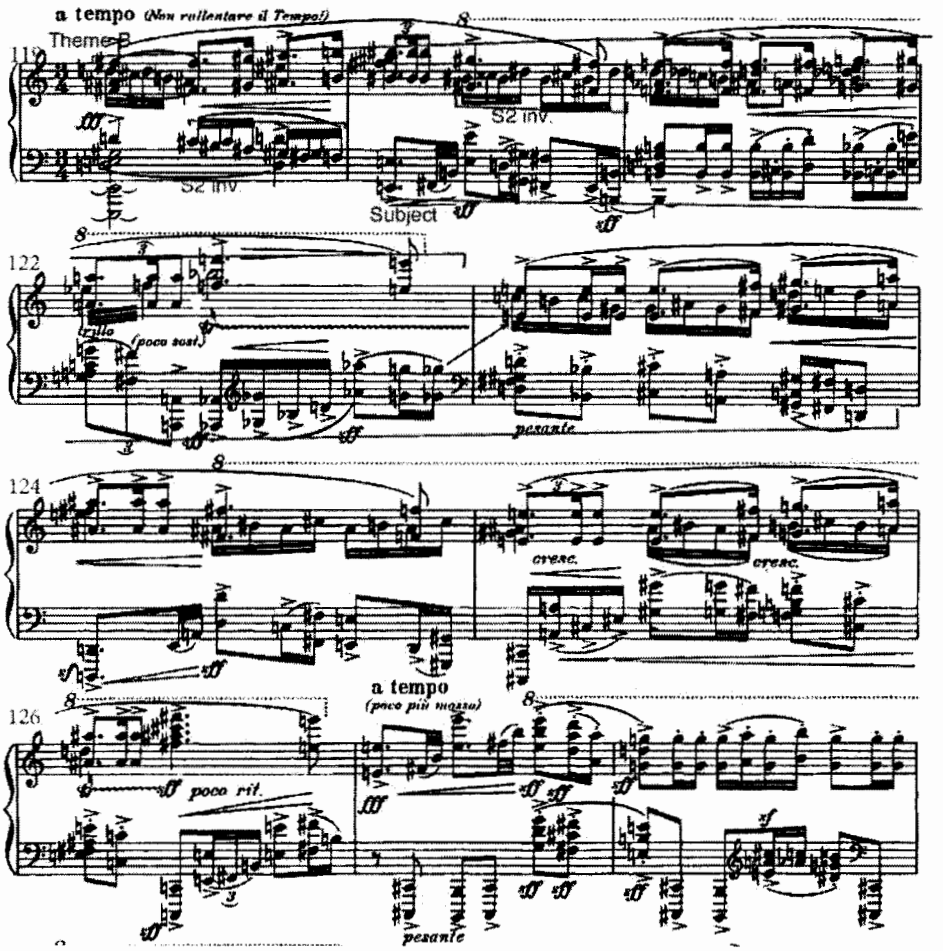
Fig. 1-7, a: Theme B of the first movement
Szymanowski, Piano Sonata No. 3, Op. 36, Movement I, mm. 80–83



b: Superimposition of theme B and the fugue subject
Szymanowski, Piano Sonata No. 3, Op. 36, Movement IV, mm. 76–82



c: Szymanowski, Piano Sonata No. 3, Op. 36, Movement IV, mm. 119–128



Cruz-Perez uses mm. 78–81 (Fig. 1-7b) as an example to further discuss how the first movement material is intimately interwoven with the fugal motives.[36] He points out that theme B, which constitutes the soprano line, is equally important with the dotted motive of the fugue subject, which is located in the bass: both thematic elements actively participate in forming the contrapuntal texture.[37] But when playing this passage, how can we assert the individulality of various thematic elements while maintaining textural clarity? Seeking to expand Cruz-Perez's observation of the

[36] Cruz-Perez, 250.
[37] Ibid.

thematic integration, the following discussion focuses on performance issues invloved in playing the passages in Fig. 1-7b and c, examining how the two thematic elements interreact with each other. The inspection of the thematic superimposition consequently reveals how theme B of the first movement—which, according to Samon, embodies both romantic expression and impressionistic spirit—influences the musical styles of the fugue.

Cruz-Perez's comment regarding mm. 78–81 suggests that the performer balance the sonority of theme B and the fugal motive equally. To do so, the performer can take advantage of the contrasting characteristics—melodic directions, rhythm patterns, timbres, and musical characters—between the two thematic elements to make them distinct in the contrpuntal texture. First, we can highlight the rhythmic conflicts between theme B and S1 (triple meter against duple). The triplets in theme B convey a sense of freedom; in the fugal context, this theme serves to release the feeling of strictness and seriousness. Its irregular compound meter contrasts with the duple pulsation of the fugue, forming polyrhythm when theme B plays against S1. While playing the triplets in the right hand, we should also maintain the character of the dotted rhythm in S1. In particular, when rendering tempo rubato, we can give much more freedom to the triplets in the right hand; yet keep a certain level of stability in the bass.

In addition, we can highlight the timbral contrasts between the soprano, which delicately floats to the surface, and the bass, which sinks to the bottom with a gloomy and mysterious sound. The timbral contrasts create an impressionistic atmosphere in this passage, which invites the performer's delicate touch to produce a diverse colour of tone. Here, the use of whole tone chords and chromaticism enriches the impressionistic color. In m. 81, theme B in soprano features a chromatic ascending

line (G–A-flat–A-natural–B-flat–B-natural), which is followed by a whole tone chord (D–F-sharp–A-sharp–E) that fills in the melodic leap from B-natural to E-natural.[38] At the same time, the bass presents a descending motion based on the inversion of S1 that moves downwards to the C major chord on the third beat. The resulting dissonant sonority on this beat (and the first beat of m. 82) creates a colourful, mysterious atmosphere in *ppp*, which prepares for the turbulent chromatic runs (m. 83) that lead into a new section.

The rhythmic, thematic, and harmonic features in this passage are well reflected in both Anderszewski and Roscoe's performances. Both display a freedom from metrical restrictions. In particular, both performers significantly stretch the timing between the second and the third beat in m. 81 in order to maximize the harmonic effect of the *subito ppp* chord on beat 3. In the meantime, the three-voice texture is well maintained in both performances; we can clearly discern the dialogue between the different thematic components in their performances.

Another passage featuring the superimposition of theme B and the fugue subject is the climactic passage of the fugue. The use of thematic superimposition to build the climax further enhances the idea of thematic unification and creates a sense of coherence at the end of the sonata. Here, the contrapuntal texture is made up of three layers that feature different thematic elements: theme B constitutes the soprano, the ceaseless sixteenth notes in the middle voice are derived from S2, and the bass presents the complete fugue subject. Each voice functions differently in the texture: whereas the outer voices bear melodic interests, the sixteenth notes serve as the rhythmic impetus that constantly drives the music towards the end of the section. In this passage, theme B, doubled in octaves, displays its "romantic" facet, stressing the

[38] I consider the F-sharp on beat 3 as the appoggiatura to the E-natural. The whole-tone harmonization in m. 426 is pointed out in Wightman, 199.

melodic leap and the rhythmic alternations between dotted rhythm and triplets. Emulating a symphonic sound in *fff*, this climactic passage evokes romantic passion, which invites the performer to treat each phrase with a sense of expansion and freedom. In particular, the triplet in theme B can be considered a "written-out" tempo rubato in this *Non rallentare il Tempo* context, stretching the timing between the triplets and the melodic leaps (in mm. 122 and 126) to expressively highlight the end of each phrase.

Taking disparate approaches to tempo flexibility, timing, and dynamic shape, Roscoe's and Anderszewski's performances of this passage attain the climactic effect in different ways. Seeking to create excitement in his performance, Roscoe takes an overall faster tempo in this section. His performance imparts a great sense of drive—both in tempo and in dynamics—towards the end of the section. By comparison, Anderszewski's performance displays a powerful sound sonority, enhancing the thickness of the texture. He also slightly liberates the tempo at the end of each phrase to exaggerate the melodic leaps, creating a greater sense of freedom. I prefer Anderszewski's interpretation, as we can clearly discern numerous musical details in his performance, such as crescendos, accents, rhythmic contrasts, and active dialogue between various melodic elements. More importantly, his performance is much more dramatic and passionate. It conveys more effectively the "romantic" expression and the feeling of finality and summit in this climactic passage.

III

Having investigated the thematic organization of the fugue, I will now analyze the formal structure of the movement. Compared to the thematic aspect, the formal aspect of Szymanowski's fugue received less discussion in current scholarship. Among

various studies of this work, only Cruz-Perez's analysis presents a formal outline of the fugue. His analysis can be summarized as follows:

Fig. 1-8: Cruz-Perez's structural analysis of the fugal finale of Szymanowski's Third Piano Sonata[39]

Exposition: mm. 1–15
Episode 1: mm. 16–24
ME 1: mm. 25–30
Episode 2: mm. 31–40
ME 2: mm. 41–46
Episode 3: mm. 47–69
ME 3: mm. 70–77
Interpolation: mm. 78–95
Episode 4: mm. 96–102
ME 4: mm. 103–111
Episode 5: mm. 112–118
Coda: mm. 119–149

Among other scholars, Wightman's opinion differs from that of Cruz-Perez, pointing out that the fugue only contains two sets of middle entries.[40] Godes even claims that it is impossible to provide a successful formal analysis of this fugue, because the complex thematic organization decidely obscures the formal outline of the fugue.[41] Although Godes might have overstated the difficulty involved in analyzing the formal organization of the piece, I agree with his observation that sectional divisions, or the boundaries between middle entries and episodes in Szymanowski's fugue, are not as explicit as in standard fugues.

Conforming to a more conventional way of analyzing the structure of a fugue, Thomas Benjamin lists five factors that can confirm sectional divisions in standard fugues:

- cadences
- textural and/or registral changes
- modulations
- clear entrances of the subject or answer

[39] This summary of sectional division is adapted from Cruz-Perez, 238–258.
[40] Wightman, 198. Unfortunately, the author does not indicate bar numbers of the two middle entries, which makes it difficult to compare his analysis with others.
[41] Godes, 63–64.

- the distinctive use of such devices as stretto, inversion, and pedal point[42]

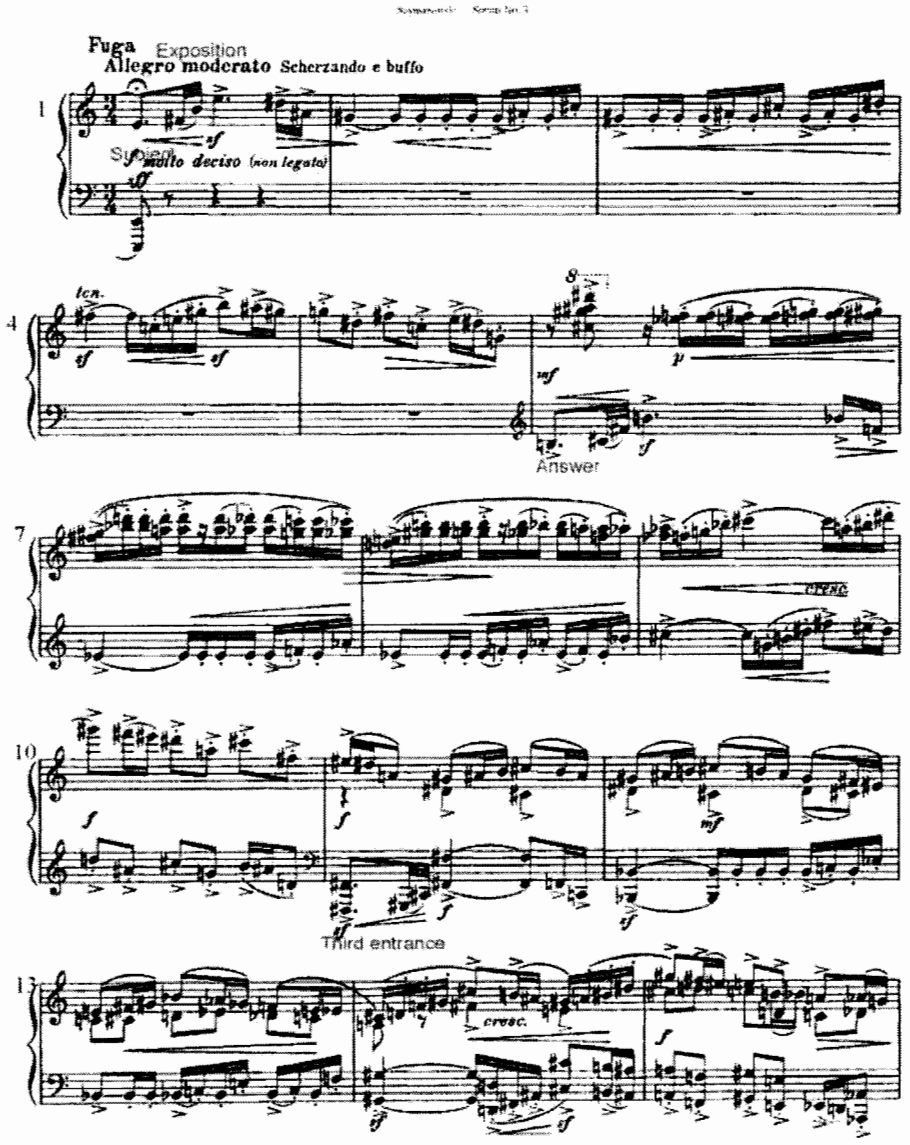
As we have discussed earlier, the diatonic tonal system is dissolved in Szymanowski's fugue. Thus, cadences and modulations, which are the products of the tonal context, no longer serve as confirming factors that identify the formal layout of the fugue. Nevertheless, the changes in rhythm, dynamics, and tempo might also produce an effect of cadence,[43] which can sometimes help us clarify form. The "cadential" gesture in m. 40 is one such example (see Fig. 1-11 ahead). Here, the relentless sixteenth notes gradually slow down, signifying the end of the episode. Meanwhile, energy is accumulated by means of dynamic increase that prepares for the arrival of the middle entry in m. 41. However, in some cases, rhythmic, dynamic and tempo factors are not reliable in guiding our perception of formal procedure. For instance, the Scherzando section in mm. 49–56 nicely ceases with a *poco rallentando* and a prolonged F-sharp, which appear to suggest the end of this episode. The next section, however, is mainly based on the first movement theme, without having a presentation of the fugue subject.

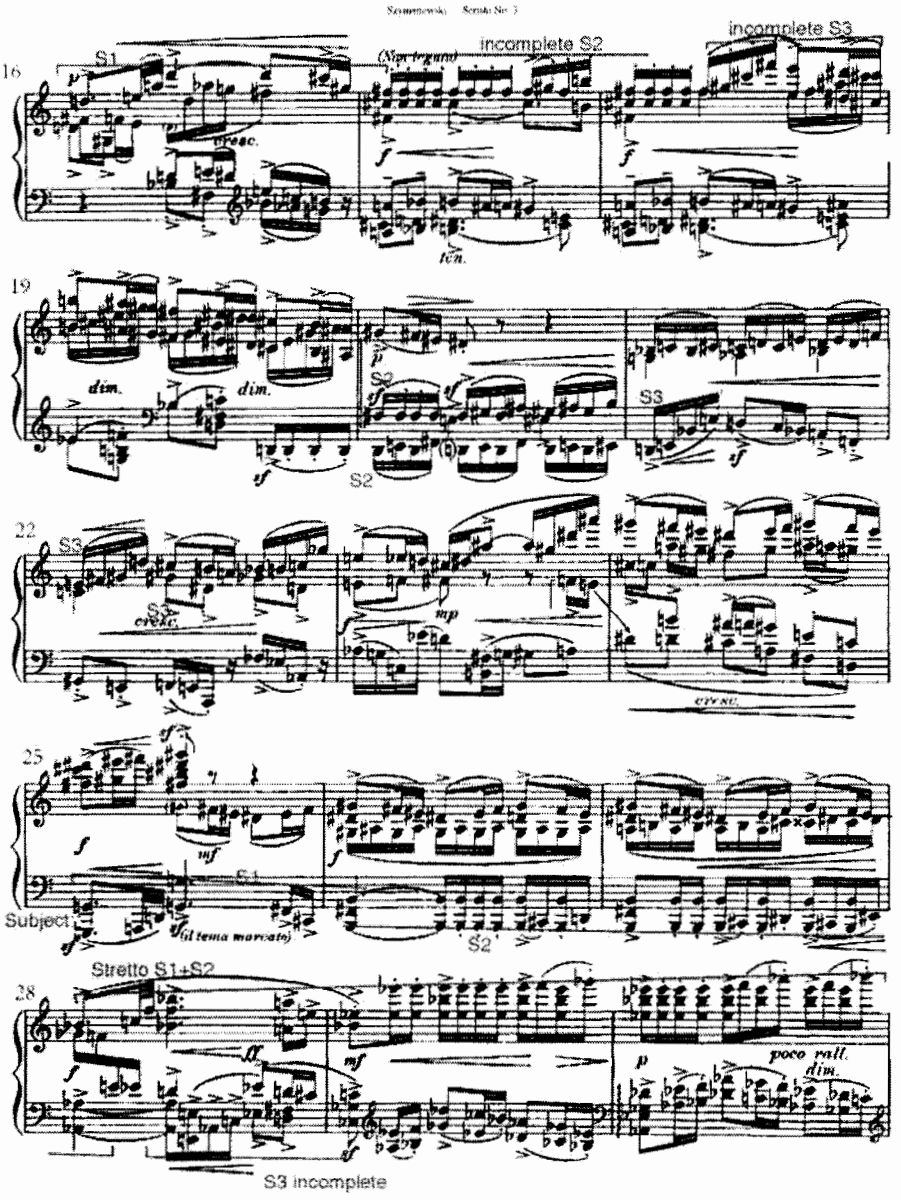
Now, let us observe how we can use textural and registral changes, as well as thematic appearances to distinguish middle entries from episodic sections. With regard to thematic requirement in middle entries and in episodes, Benjamin suggests that whereas middle entries must present at least one complete statement of the subject, episodes tend towards fragmentation of previous motives and do not require the appearance of a complete subject.[44] Following this criterion to examine the formal

[42] Thomas Benjamin, *The Craft of Tonal Counterpoint*, second edition (New York: Routledge, 2003), 211.
[43] See a discussion of cadence in twentieth-century music in Vernon Kliewer, "Melody: Linear Aspects of Twentieth-century music," in *Aspects of Twentieth-Century Music*, ed. Gary E. Wittlich (New Jersey, Prentice-Hall, INC., 1975), 270–321, especially, 296–303.
[44] Thomas Benjamin, *The Craft of Tonal Counterpoint*, 217.

outline of the fugue, I find Cruz-Perez's formal analysis to be partially problematic. To re-consider the formal outline, let us begin with an examination of the exposition.

Fig. 1-9: Szymanowski, Piano Sonata No. 3, Op. 36, Movement IV, mm. 1–30





In the exposition, the subject enters on E, B, F-sharp, and D in the order of alto (mm. 1–5), tenor (mm. 6–10), bass (mm. 11–15), and soprano (mm. 16–20). The first two entrances follow standard practice, showing the fifth relationship, whereas the third and the fourth entrance deviate from the norm, transposing the subject to other

keys.[45] The order of voice-entry is fairly standard, with the first two entrances entering in adjacent voices.[46] However, as Cruz-Perez points out, the soprano entrance is a false entrance because the two segments—S2 and S3—are truncated (see mm. 18–20).[47] Until we recognize that the subject is modified from its halfway point, we retrospectively realize that the exposition already ended with the bass entrance in mm. 11–15, and the first episode thus starts immediately in m. 16.

According to Cruz-Perez, the first middle entry begins at m. 25.[48] Here, the subject statement, which is given evident dynamic emphasis, is clearly announced in the bass; this bass entrance is then followed by a stretto entrance in soprano at m. 28. However, if we consider that both subject statements in this "middle entry" are incomplete, which lacks a full presentation of S3, can we still regard mm. 25–30 as a middle entry? Or, does this phenomenon suggest that the composer takes liberty from the standard thematic requirement in middle entries? If so, then how do these six measures relate to its adjacent sections? Does mm. 16–40 constitute the first episode? Or, can we agree with Cruz-Perez's analysis that mm. 25–30 is a brief middle entry, framed by two episodes (mm. 16–24 and mm. 31–40)?

Cruz-Perez's analysis of mm. 25–30, however, exposes a contradiction with his observation of another passage that shows a similar situation. After an extensive episodic section, the subject clearly enters in mm. 98–101, featuring registral changes

[45] Among four-voice fugues in Bach's *The Well-Tempered Clavier*, the voices usually enter with I–V–I–V, albeit there are a few exceptions. For instance, Fugue No. 1 in the first volume presents unusual entrances in its exposition with I–V–V–I. For a detailed discussion of Bach's four-voice fugue, see Benjamin, 255–257.

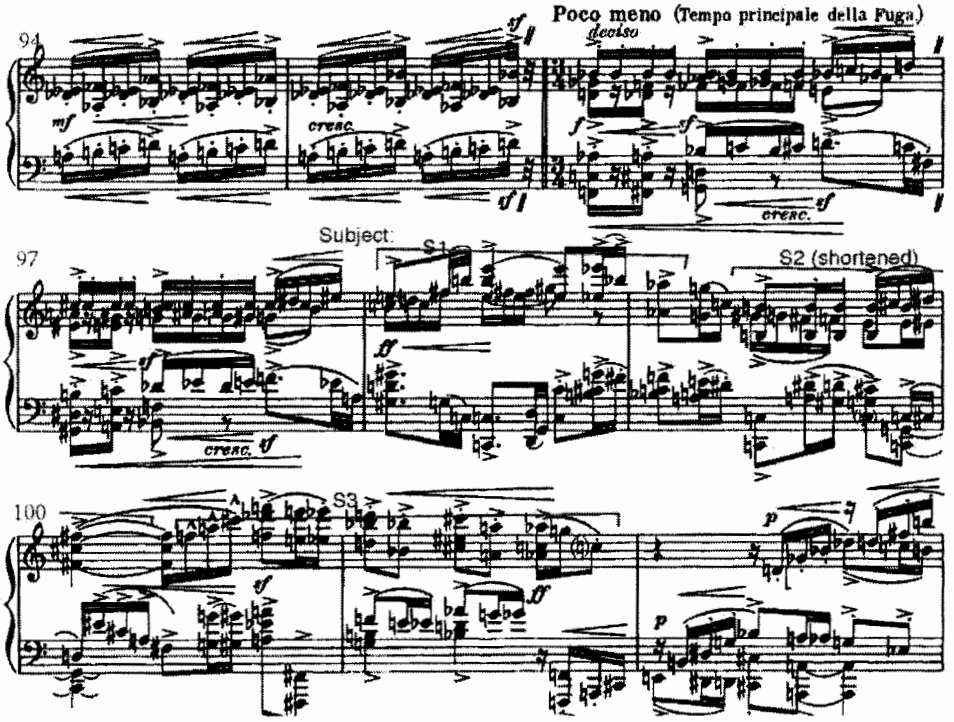
[46] Though Bach particularly prefers bass–tenor–alto–soprano order, his fugues show various voice-entry orders; nevertheless, in any case, the first two entrance must be in adjacent voices. See Benjamin, 257.

[47] Cruz-Perez, 241.

[48] Ibid., 242.

and dynamic reinforcement. Yet, the author argues that these four measures constitute an episode because S2 is truncated.[49]

Fig. 1-10: Szymanowski, Piano Sonata No. 3, Op. 36, Movement IV, mm. 98–102



Instead of offering an alternative explanation for the formal layout of the piece by outlining the strengths and weaknesses of Cruz-Perez's analysis, it might be more appropriate to consider the formal aspect of the fugue by exploring what the performer can do to "improve" the structural clarity of the fugue. I will compare Anderszewski and Roscoe's performances of the passage in Fig. 1-9 to broach a discussion of how a performance can influence our understanding of the formal organization, and how the performer can help listeners follow the process of increasing and releasing tension in the fugue.

[49] Cruz-Perez, 253.

Let us first examine Anderzewski's interpretation of this passage. When playing the exposition, Anderzewski begins each subject entrance energetically, enhancing its importance in the texture. However, he suddenly drops the dynamic level when playing the soprano entrance in m. 16. While playing the preceding entrances in a detached manner, he plays this soprano line in legato, emphasizing its lyricism and delicacy. This approach effectively relaxes the tension in this soprano entrance, helping listeners differentiate this entrance from the preceding ones. Consequently, they might be able to recognize that the first episode begins at this point.

Based on my own understanding of this soprano entrance, I would like to add one more interpretive detail that is not, however, found in Anderszewski's performance. We can make this entrance more interesting by slightly prolonging and stretching out each of the four *portato* sixteenth notes in m. 18 to yield a sense of uncertainty. These four notes are quite special in the context of this thematic entrance, as from this point on the melody becomes different from the original version of the subject. Thus, subtle changes in articulation and tempo here can guide listeners to notice the melodic changes.

Moving to Anderszewski's performance of mm. 25–30, we perceive that the performer considers this bass entrance to be an important event. To musically set up the bass entrance, Anderszewski places extra force on the last two staccato eighth notes in m. 24, and meanwhile stretches the last beat in this bar to prepare for the *sf* attack on the downbeat of m. 25. Then, he takes advantage of the harmonic dissonance between the G-natural in the left hand and the G-sharp chord in the right hand to reinforce the sonority in this measure. In Anderszewski's performance of this subject entrance, we can discern the heightened level of intensity and the performer's keen emotional involvement. His interpretation convinces me to regard mm. 25–30,

albeit briefly, as the first middle entry of the fugue, which conforms to Cruz-Perez's analysis.

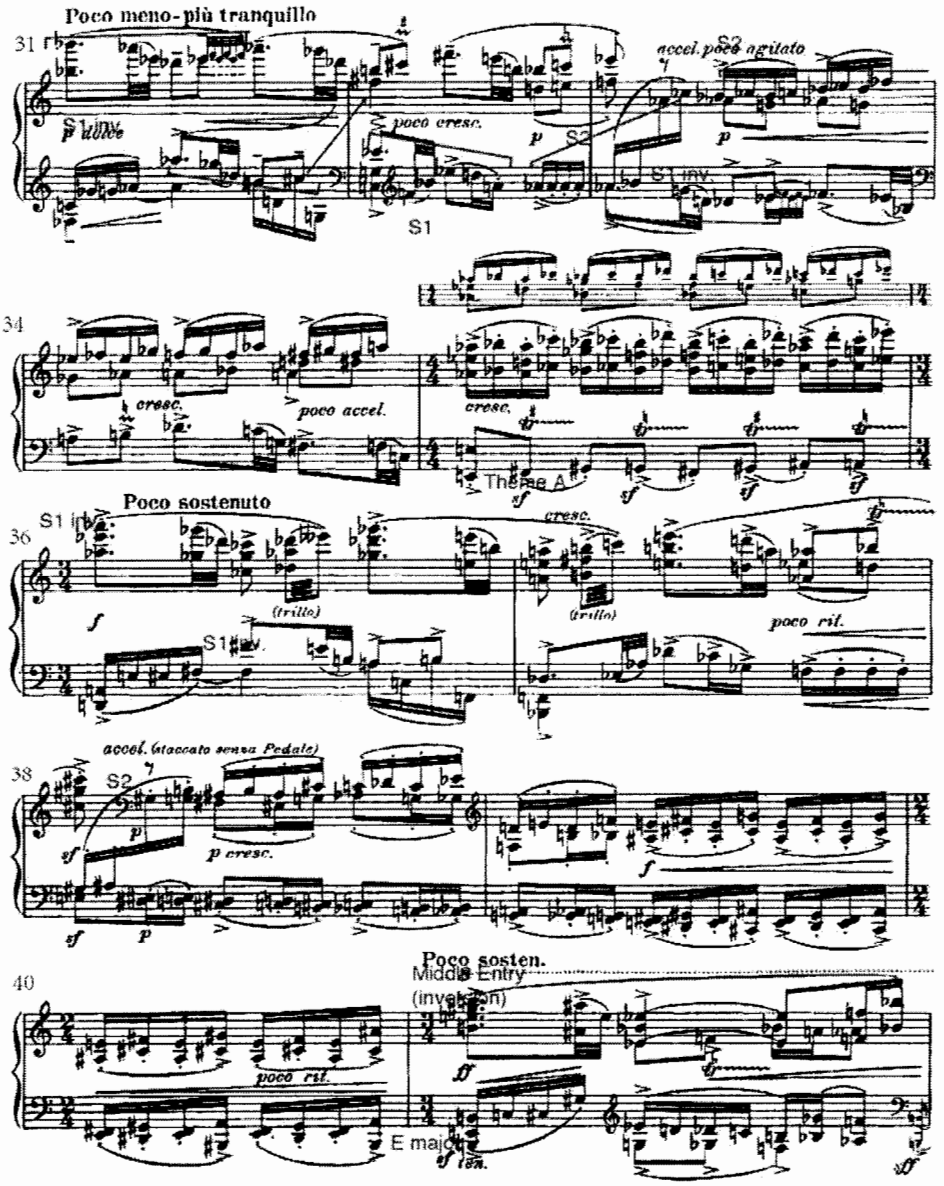
By comparison, Roscoe's performance does not effectively reflect the performer's standpoint towards the formal organization. His performance might suggest that the soprano entrance in m. 16 is a part of the exposition, as he connects m. 16 closely to the preceding bass entrance without making remarkable changes of tone colour and dynamics. However, none of his gestures indicate where the first episode begins. When playing m. 25, he puts considerable dynamic force on the bass entrance, yet he does so without using timing, articulation, and touch to create contrasting emotional expression in this entrance to support the dynamic increase. As a result, his tone is too vague to indicate whether he considers mm. 25–31 as a middle entry or part of an episode.

Perhaps Roscoe intends to emphasize the formal ambiguity of Szymanowski's fugue, inviting listeners to enjoy the tension that the ambiguity might induce. In my opinion, however, the performer does not just present musical niceties. She is responsible for communicating with the audience and for guiding them to discern the relaxation and tension that the music conveys. Particularly, when listening to a complex work such as Szymanowski's fugue, it might be challenging for listeners to follow how various sections are glued together and to understand the role that each section plays within a larger context.

As I have discussed earlier, the formal ambiguity of Szymanowski's fugue is mainly caused by the complexity of thematic organization. As thematic fragmentation is immediately employed after the exposition and all three fragments actively participate in building the texture, the distinction between middle entries and episodes are weakened to such an extent that it might not be easy for listeners to perceive

where the middle entries begin. For instance, given that the opening dotted gesture of the subject occurs quite frequently in the texture, functioning as a "countersubject" that plays against the subject or as a basic motive that constitutes an episode, listeners might not be able to recognize how important the dotted gesture might be in the context.

Fig. 1-11: Szymanowski, Piano Sonata No. 3, Op. 36, Movement IV, mm. 31–41



The episodic section in mm. 31–40, for example, demonstrates this situation. It features a building-up process towards the middle entry at m. 41. This section is clearly divided into two parts that contrast in dynamic levels: whereas the Poco meno section explores *piano dolce* sound, the Poco sostenuto section is mainly in *f*, which leads towards *ff* in the middle entry. However, using the same thematic elements, each part begins with a counterpoint based on the inverted dotted motive of S1. Thus, when the complete subject occurs in inversion at m. 41, listeners might not realize that this time, the inverted dotted gesture announces a middle entry.

It is thus important for performers to inform listeners how this build-up proceeds, and to meanwhile arouse them to perceive the anxiety conveyed in this episode. Let us observe Anderszewski's approach. Anderszewski exploits various means of highlighting the contrasts between the Poco meno section and the Poco sostenuto section. Primarily, he creates a diversity of tone colour ranging from a crystal sound for the trills, to a biting sound for the *portato* octaves. More importantly, he uses disparate approaches to the accelerandos that occur at the end of both sections. In playing the Poco meno section, he gradually accelerates the tempo from m. 33, and then smoothly and naturally launches the Poco sostenuto section without taking a rest or slowing down. In contrast, he creates a strong sense of agitation in the Poco sostenuto (mm. 36–40), constantly speeding up towards the end of the section. Anderszewski's approach to tempo effectively guides listeners to perceive various levels of intensity. Listeners, thus, discern that the Poco sostenuto section leads towards a destination that bears structural significance.

Surprisingly, Anderszewski makes a daring sudden break between m. 40 and m. 41, dramatically cutting off the inflamed sixteenth notes. Although this gesture is not indicated on the score, I find it quite effective within the context. The use of timing

encourages the performer to physically execute the melodic leap; it also mirrors the performer's emotional involvement in preparation of the moment of thematic arrival. I can imagine how the performer exaggerates her body's motion and lifts her arms before fully attacking the *ff* chord that opens the middle entry.

Returning to the outset of this chapter, I recall how Anderszewski discusses the difficulty of searching for a "guiding thread" as the key to understanding Szymanowski's music. Observing the complexities involved in performing Szymanowski's fugue, this chapter focused on the thematic and formal aspects of this work. My discussion revealed the roles that various motivic and thematic elements play in forming contrapuntal texture and in shaping musical characters. I then demonstrated that the intricate thematic network contributes to the formal ambiguity of the fugue, which requires us to find our own "guiding thread" in order to portray the musical architecture in our performance.

Chapter 2

Fugue in Hindemith's Piano Sonata No. 3 (1936)

I

Glenn Gould, one of the leading interpreters of twentieth-century music, recalled how he "came alive to contemporary music" after listening to Hindemith's *Mathis der Maler* (1934).[50] Such is the degree of approachability to be found in Hindemith's music, especially his neoclassical works of the thirties and forties.[51] Hindemith scholar Peter Evans also claims that Hindemith's keyboard music is "an excellent starting point" from which musicians can get acquainted with the modern music.[52] To support this claim, Evans draws a comparison between Schoenberg's and Hindemith's music: it is impossible to fully understand Schoenberg's twelve-tone pieces without having knowledge of the twelve-tone theory, whereas frequent use of triadic chords,[53] clear presentation of cadential gestures, and rhythmic and melodic simplicity make Hindemith's music quite accessible for performers and audiences who might not specialize in modern music.[54]

The fugue in the Third Piano Sonata illustrates the accessibility of Hindemith's music. A brief comparison between Hindemith's and Szymanowski's fugues brings to

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[50] Ibid., 65.

[51] For Hindemith's influence on Gould, see Kevin Bazzana, *Wondrous Strange: The Life and Art of Glenn Gould* (Toronto: McClelland & Stewart Ltd., 2005), 65–66, 95–96, 100. On page 100, the author discusses Gould's 20th-century repertoire. He writes: "And he [Gould] preferred the approachable, neo-classical Hindemith of the thirties and forties...."

[52] Peter Evans, "Hindemith's Keyboard Music," *The Musical Times* 97, no. 1395 (1956): 572–575. Quote is on p. 573.

[53] Evans observes that Hindemith's harmonic vocabulary is built up with simple chords, particularly triads, and superimposition of thirds and fourths. See the author's discussion of Hindemith's harmonic techniques in Evans, 573. In his own theoretical treatise, Hindemith stresses the significant role of triadic harmonies in musical composition. He writes: "Music, as long as it exists, will always take its departure from the major triad and return to it. The musician cannot escape it any more than the painter his primary colors, or the architect his three dimensions. In composition, the triad and its direct extensions can never be avoided for more than a short time without completely confusing the listener." See Paul Hindemith, *The Craft of Musical Composition*, trans. Arthur Mendel (New York, 1942), 1:22.

[54] Evans, 572.

light just how much easier it is for pianists and analysts to approach Hindemith's work. From the opening of the movement to the final climax, Szymanowski's fugue is a rather tortuous musical journey, involving many dramatic contrasts of dynamics, various combinations of themes and motives, and many unexpected changes of tempo and musical character. Considerable effort and analytical insight are required to deal with frequent tempo changes, unpredictable melodic movements, and extremely thickened texture. By comparison, Hindemith's fugue is straightforward.

I find that the thoroughly maintained three-part texture (except for occasional thickenings to attain a climactic effect), clear presentation of subject entries, rhythmic symmetry, and stepwise melodic motions make the piece fairly easy to read and memorize. In addition, the fugue displays a straight path leading towards the climax. For instance, a quick glance at this seven-page movement shows that the dynamic scheme of the fugue assumes an overall crescendo shape: whereas the dynamic levels in the first five pages mainly range between *p* and *f*, the last two pages explores a much more powerful sound and stays in *ff* and *fff*. Along with the dynamic accumulation, the level of rhythmic activity also increases towards the end of the fugue, where rhythmic augmentations occur frequently, effectively strengthening the dynamic increase. It is also quite easy to grasp the dynamic shape *within* each section, as most sections follow similar dynamic routines that increase from *mf* or *f* directly towards *ff* or *fff*.

Despite the many elements that contribute to the accessibility of Hindemith's fugue, in my experience learning the piece, I had periodic difficulties dealing with interpretive details because the score lacks performance directions indicating musical character and expression. Besides providing a few tempo suggestions, the composer offered no further notations to inform us of the playing style, such as *dolce*, *cantabile*,

and *con espressione*. It is very important to examine how various musical factors—such as dynamic change, registral span, and harmonic color—can be used to guide the musical expression of each section. Before analyzing these factors, let us look beyond the piece itself, and briefly discuss the composer's philosophical and aesthetic considerations that informed his music. These underpinning concepts serve as the starting point for our discussion—to show how Hindemith's musical style is revealed in the fugue, so as to perform the piece with greater depth of insight.

As a leading German composer of the interwar period, Hindemith had an affiliation for the neoclassical movement.[55] According to Scott Messing, the neoclassicists broke from the late Romantic tradition, leaning instead towards baroque and classical models in both form and in style, while exploiting twentieth-century musical languages and techniques.[56] In an article by Arthur G. Browne, Hindemith's musical style is summarized as follows: in Arthur G. Browne's article:

> Hindemith insists that his music is human, not superhuman; utilitarian, not romantic; purposeful, not idealistic. His music is self-contained and absolute: it eschews description, programmes, expressionism, philosophy and (of course) sentimentalism. It does not express an individual's thoughts and emotions, and then expect an audience to react to it and interpret it accordingly; it sets out to be accessible to everyone alike. There is no mystery about it.[57]

Hindemith's series of *Kammermusik*, written between 1922 and 1927, are among the early examples that demonstrate the composer's use of "absolute" genre, concise forms, polyphonic texture, brief melodic figures (as opposed to long melodic lines that are typical of romantic music), as well as an objective, straightforward expression.[58] Late in his career, Hindemith became increasingly interested in fugal

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[55] For Hindemith's role in advocating contemporary music after World War I, See Ian Kemp, "Developments Towards Neo-Classicism," in *Hindemith* (London: Oxford University Press, 1970), 7–14.

[56] Scott Messing, *Neoclassicism in Music: From the Genesis of the Concept through the Schoenberg/Stravinsky Polemic* (Ann Arbor: UMI Research Press, 1988), 1–17.

[57] Browne, Arthur G. Browne, "Paul Hindemith and the Neo-Classic Music" in *Music and Letter* 13, no. 1 (1932): 42–58. Quote is on p. 48.

[58] For comments on Hindemith's Chamber works written in 1920s, see Kemp, 8–9, 12–13; Robert P. Morgan, "Hindemith," in *Twentieth-Century Music* (New York: W. W. Norton & Company, 1991), 221–229, especially pp. 223–224.

writing. In addition to the fugal finale in Third Piano Sonata, there are many other fugal works written after the 1940s that display the composer's contrapuntal mastery, such as Symphony in E-flat (1940), Sonata for Two Pianos (1942), and *Ludus Tonalis* (1942)—a set of preludes and fugues modeled on Bach's *Well-Tempered Clavier*.[59]

Browne's statement not only describes Hindemith's neoclassical style, but also points out that this style is supported by the composer's attitude towards the relationship between the composer and public. In his book entitled "A Composer's World," Hindemith explains why it is important for composers to make music simple and accessible for the general public. He also explains the importance of establishing a "mutual understanding"[60] between the composer and the audience, and between professional musicians and amateurs:

> Once a writer's technique and style is organized in this direction, so that music which satisfies the amateur's wishes can be created, his approach to his entire work will inevitably undergo a radical change: the emphasis on moral aspects will now become recognizable also in his works written for the concertizing professional, and now he will talk with a different spirit to the general audience, which, in its basic benevolence, will be ready to accept his leadership towards better goals.[61]

Hindemith's desire to narrow the knowledge gap between the composer and the public is revealed in his many easy works written for amateur performers and students,[62] and in his serious works written for professionals (the third piano sonata being an excellent example). While his serious works are demanding for highly skilled players, they feature stylistic simplicity and structural clarity.

Having discussed Hindemith's musical style and how it is reflected in his works, I hope that as we now return to the fugue in Third Piano Sonata, we have a clearer

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[59] For comparative studies of Bach's *WTC* and Hindemith's *Ludus Tonalis*, see Hans Tischler, "Hindemith's *Ludus Tonalis* and Bach's *WTC*—A Comparison" *Music Review*, 20 (1959): 217–227; Dong-Seon Lee, "A Structural Analysis and Performance Guideline of *Ludus Tonalis* by Paul Hindemith," D.M.A. diss. (University of Washington, 1994).

[60] Browne, 43.

[61] Paul Hindemith, *A Composer's World: Horizons and Limitations* (Cambridge: Harvard University Press, 1952), 219.

[62] See Kemp, 22–26 for a discussion of Hindemith's *Gebrauchsmusik*. Kemp states that primarily written for amateurs, *Gebrauchsmusik* was aimed to restore the eighteenth-century practice by improving the intimacy between composer, performer, and listener.

idea that Hindemith's fond use of contrapuntal texture, simple melodic and rhythmic writings, and concise form is in keeping with the composer's aesthetic style—neoclassicism. The next part of this chapter will turn to musical analysis as one way to examine the performance issues that I raised earlier regarding the kinds of musical expression we might convey in our performance. In my discussion, I will consider how to make our performance more convincing and lively based on our understanding of the formal organization, harmonic colours, thematic material, melodic motions, and registral contrasts. In hopes of revealing how the fugue expands and renews the traditional practices, my discussion will also address how the performer can respond to the tension between traditional and modern musical aspects, and how to draw out this tension in the performance.

II

The fugal finale has been regarded as the most phenomenal movement in Hindemith's Third Piano Sonata. After the sonata premiered at the Library of Congress in 1937,[63] Cecil Michener Smith praised the finale in his review of this event:

> The fugue is undoubtedly one of the masterpieces of recent polyphony…No serious student of modern music can afford to overlook this spectacular fugue.[64]

With great sympathy for Hindemith's contrapuntal writing, Gould remarked in the liner notes of his recording of Hindemith's three piano sonatas:

> In Hindemith's works, to be sure, ecstasy is a commodity most frequently purveyed by fugal situations—the finale to the Third Piano Sonata being perhaps the most conspicuous example…[65]

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[63] Andres Briner, *Paul Hindemith* (Zürich: Atlantis, 1971), 119.
[64] Cecil Michener Smith, "Hindemith and the Coolidge Festival," *Modern Music* XV/4 (1937): 209–210. Quote is on p. 209.
[65] Glenn Gould, "Hindemith: Will His Time Come? Again?" Liner Notes from *Hindemith: The Three Piano Sonatas.* Glenn Gould, perf., compact disc, Columbia M 32350, 1973. This article is reprinted in Tim Page, ed., *The Glenn Gould Reader* (New York: Alfred A. Knopf, 1984), 147–150.

The "ecstasy" of the fugal finale is, perhaps, what makes this sonata well known to pianists. The piece has been performed and recorded by many great pianists, such as André Previn (1961), Glenn Gould (1973), Yorck Kronenberg (2003), and Hans Petermandl (2009). Yet contrary to its popularity on the concert stage, the piece lacks extensive study in the field of music research. Of the few works about this specific sonata, Nancy Alton Keith and Viscount Francis Thurston's dissertations provide analyses of the fugal movement, describing formal, tonal, harmonic, and thematic features.[66] However, their insights are not geared towards the performance of the piece, nor do they explore how their analytical results can benefit an interpretation.

Expanding on these studies, I intend to make my analysis informative for performers by integrating various musical elements—which are treated separately in Keith and Thurston—to explore how these elements function together in different contexts and how they contribute to the overall construction of the fugue. In doing so, our thoughts can be enriched by these different musical elements when we make interpretive decisions. Attempting to reveal the "ecstasy" of the fugue that Gould sensed, I will examine Gould's performance of this fugue to support my arguments. I will also compare his recording to another excellent recording of this piece by Hans Petermandl,[67] to observe how different interpretations can influence the analysis of a piece of music.

I begin my discussion with an illustration of the structural outline of the movement, which will initiate interpretive issues that call for a detailed inspection of thematic, harmonic, and tonal aspects. Keith and Thurston's formal analyses are

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[66] Nancy Alton Keith, "A Comparative Analysis of the Fugue in the Twentieth-Century American Piano Sonata," M.M. thesis, (University of Cincinnati, 1987), 118–164; Viscount Francis Thurston, "Hindemith's Third Piano Sonata: A New Assessment," D.M.A. diss., (The Ohio State University, 1984), 29–41.

[67] Paul Hindemith. *Piano Sonata No. 3*, Glenn Gould, perf. *Hindemith: The 3 Piano Sonatas*, Sony Music compact disc1238948 52670, 1993; Paul Hindemith, *Piano Sonate No. 3,* Hans Petermandl, perf. *Hindemith: Piano Works*, Vol. 3, Marco Polo compact disc 8.223337, 2009.

almost identical to each other.[68] They both divide the movement into ten sections, and consider this fugue as a double fugue, in which the second subject occurs at bar 65.[69] I share a similar analytical view with these authors but wish to discuss some details concerning the formal procedure of the fugue, and to explore how a performance can influence our understanding of the formal organization.

Fig. 2-1 illustrates the formal procedure, sectional divisions, as well as the use of thematic material, tonal center, and dynamic range in each section.

Fig. 2-1: Formal Outline of the Fugue in Hindemith's Third Piano Sonata[70]

"S1" Area (65 measures):

	Exposition 1	Episode	Counter-Exposition	ME 1
Bar numbers	1–17	18–27	28–45	46–65
Thematic Material	S1 on B-flat	Free counterpoint	S1	S1+CS
Dynamic levels	*f*	Mainly *mf*	*mf–f–ff*	*p (pp)*

"S2" Area (28 measures):

	Exposition 2	ME 2
Bar number	66–84	85–94
Thematic Material	S2 on B-flat	S2+CS
Dynamic level	*mf–f–ff*	*p (pp)*

"S1+S2" Area (53 measures):

	ME 3	ME 4	Recapitulation	Coda
Bar number	95–107	108–121	122–137	138–148
Thematic Material	S1+S2	S1+S2 (aug.)	S1+S2 (aug.)	S1+S2 (aug.)
Dynamic level	*f–ff*	Mainly *ff*	*ff–fff*	*mf–fff*

Although this fugue is designed as a double fugue containing two independent subjects, its thematic organization is very explicit. As shown in the above outline, we can easily regroup the ten sections into three large areas featuring the first subject (S1), the second subject (S2), and a combination of the two (S1+S2), respectively.

[68] Both Keith and Thurston draw a formal layout of the fugue, see Keith, 120–121; Thurston, 29–30.
[69] See Keith, 130–134; Thurston, 35–38.
[70] Keith and Thurston also summarize of the formal organization of the fugue in their analyses, indicating the sectional divisions and the use of thematic material. See Keith, 121; Thurston, 30.

The thematic combination brings the fugue to its culmination, as the "S1+S2" area characterizes increased dynamic levels and rhythmic activities. In addition to the triadic harmonic vocabulary, rhythmic and melodic simplicity, and the straightforward dynamic pacing, which I have previously discussed, this clear thematic organization is another factor that contributes to the piece's approachability.

On the other hand, the formal procedure of the fugue seems unusual because the proportion between middle entries and episodic material is quite unbalanced. As I discussed in Chapter 1, episodes differ from middle entries that in standard fugues, the former do not require the appearance of the complete subject, whereas the latter must contain at least one complete statement of the subject.[71] In Hindemith's fugue, all sections contain one or more complete presentations of S1 or S2, except for mm. 18–27, which feature sequential patterns based on the motive of the first subject. Thus, we can consider that these nine measures, which bridge the exposition and the counter-exposition, constitute the only episode of the fugue.

The number of episodes varies in Bach's fugues. Some fugues might not have any episode.[72] Most fugues, however, contain more than one episodic section, which not only serves as a modulatory bridge to connect one middle entry to another, but also carries musical significance in the fugal process. Based on his study of the fugues in Bach's *WTC*, George Oldroyd summarizes the purposes of episodes:

1. Effecting transition from one tonal centre to another.
2. Creating change, variety, contrast.
3. Creating color and maintaining tonal and architectural balance in respect of the whole composition.[73]

Although the thematic content in episodes might be loosely organized and omitting the appearance of complete subject, from a musical perspective, episodic sections

[71] See Benjamin, *The Craft of Tonal Counterpoint*, 217.
[72] For example, the first fugue in Bach's *Well-Tempered Clavier* I, see Benjamin's discussion of episodes, in ibid., 215.
[73] George Oldroyd, *The Technique and Spirit of Fugue* (London: Oxford University Press, 1967), 116.

play an important role in creating diverse characters in the process of increasing and relaxing tension. For instance, episodic sections, particularly the ones written with free counterpoint, often serve to relax and to change the serious and intense mood that is often caused by textural density and successive subject entrances in middle entries.[74]

Returning to Hindemith's fugue, we might ask: if the middle entries tightly follow one another without having episodic sections, which passages serve as contrasting sections to create different color in the fugal process? If we look at the dynamic scheme shown in Fig. 2-1, we notice that the fugue contains only two sections in *piano*: Middle Entry 1 and Middle Entry 2. These middle entries share similarities in their placements and in the employment of thematic elements: ME1, featuring S1 and the counter-subject, is placed right after the first exposition; ME2, using S2 and the counter-subject material, is situated next to the second exposition. From the dynamic perspective, ME1 and ME2 stand out in their contexts, because they encompass huge contrasts to the *f* and *ff* sound in their surrounding sections. However, aside from these dynamics, the composer did not provide any notation to indicate the style of playing, leaving the performer to decide what kind of expression we might seek in performing these sections, which will consequently influence the way we deal with interpretive details, such as touch, articulation, dynamic shaping, pedaling, and tempo fluctuation.

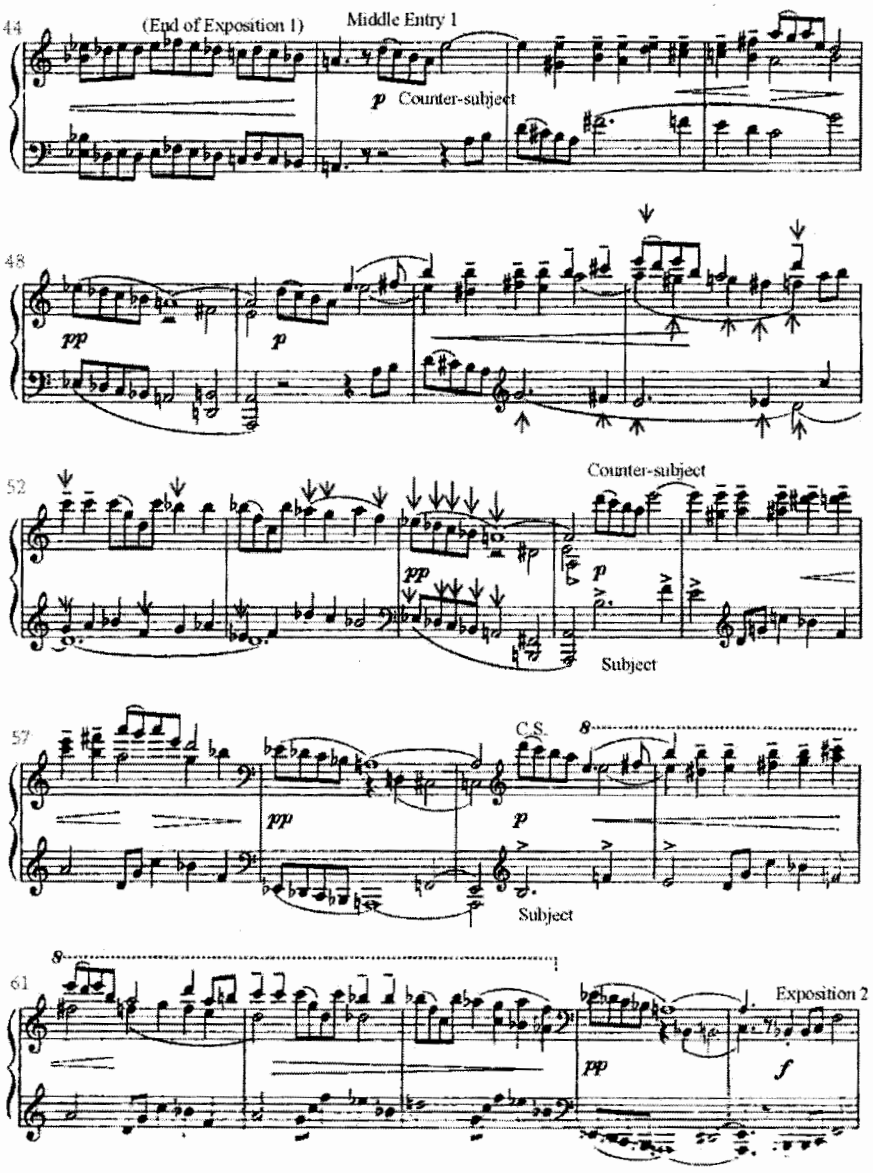
Gould and Petermandl's performances of the two passages demonstrate two disparate approaches to these details. Let us first examine their performances of ME1 (Fig. 2-2), and then explore why their interpretations differ. Gently producing a warm tone, Petermandl brings out the lyricism of this passage. He tastefully uses pedal to

[74] Benjamin, 217.

reinforce the lyricism while emphasizing the contrasting articulations between different voices. Notably, he slightly decreases the tempo before the arrival of the monophonic descending gestures in bars 48, 54, 58 and 64, in order to render registral alternations and prepare for the dynamic changes from *p* to *pp*. In particular, when playing the monophonic gesture in *pp*, he expressively highlights the textural and timbre contrasts between these gestures and the polyphonic context. His performance creates a tranquil, *dolce* atmosphere, which effectively releases the tension in the music and brings emotional contrasts to the fugal process.

Conversely, Gould's performance conveys a sense of strictness and certainty. Rather than emphasizing the lyricism of the legato lines, he produces a "dry" and energetic sound, mainly using detached articulations and firm touch. His performance better projects the independence of each voice, as he gives each linear strand an interesting dynamic shape. In addition, Gould approaches the tempo with strictness, connecting each phrase tightly. He constantly drives the melodic flow forward without taking time to prepare for the dynamic and registral changes. These interpretive details suggest that the main focus of Gould's interpretation is the continuity of the linear movement in each voice that constitutes the polyphonic fabric. For instance, through his performance we perceive that the monophonic gesture in m. 48 is the continuation of the thematic material in the previous two bars, despite dynamic and registral differences. Gould's "linear" approach inspires us to examine the melodic process in this passage.

Fig. 2-2: Hindemith, Piano Sonata III, Movement IV, mm. 44–66



In his analysis of Hindemith's contrapuntal techniques, Hans Tischler observes that Hindemith's contrapuntal writing is representative of the twentieth-century "dissonant counterpoint" or "linear counterpoint."[75] In dissonant counterpoint, harmony no longer functions as the fundamental element that guides the contrapuntal

[75] Hans Tischler, "Remarks on Hindemith's Contrapuntal Technique: Based on His Ludus Tonalis of 1942" in *Essays of Musicology—A Birthday Offering for Willi Apel* (Bloomington: Indiana University, 1968), 175–184.

procedure.[76] Rather, the composer focuses on the individuality of each linear strand in the polyphonic fabric, regardless of the harmony that contrapuntal voices produce.[77]

Seeking to unfold various techniques that contribute to the dissonant contrapuntal texture, Tischler then takes several fugal excerpts from *Ludus Tonalis* to demonstrate that dissonant counterpoint is often produced by means of polytonality.[78] Browne shares this viewpoint and points out that Hindemith often simultaneously uses major and minor to reinforce the individuality of each linear strand in the polyphonic fabric, which gives his music a sense of being "keyless."[79] This contrapuntal technique is exemplified in ME1 (Fig. 2-2), in which mm. 45–47 features the mixture of A major and A minor, and mm. 49–51 features the mixture of E major and E minor.

Despite the absence of functional harmonic progression, the music in this passage still presents a strong sense of "goal." We can clearly perceive that ME1 consists of four musical units, each of which leads towards the monophonic descending gesture. In tonal music, the conclusion of a theme is marked by a cadence that functions to confirm the tonality in the given context.[80] In twentieth-century music where traditional harmonic syntax is altered or dissolved, the sense of conclusion can be achieved through various other means, such as rhythm, melodic movement, as well as change of tempo and timbre.[81] In the passage under discussion,

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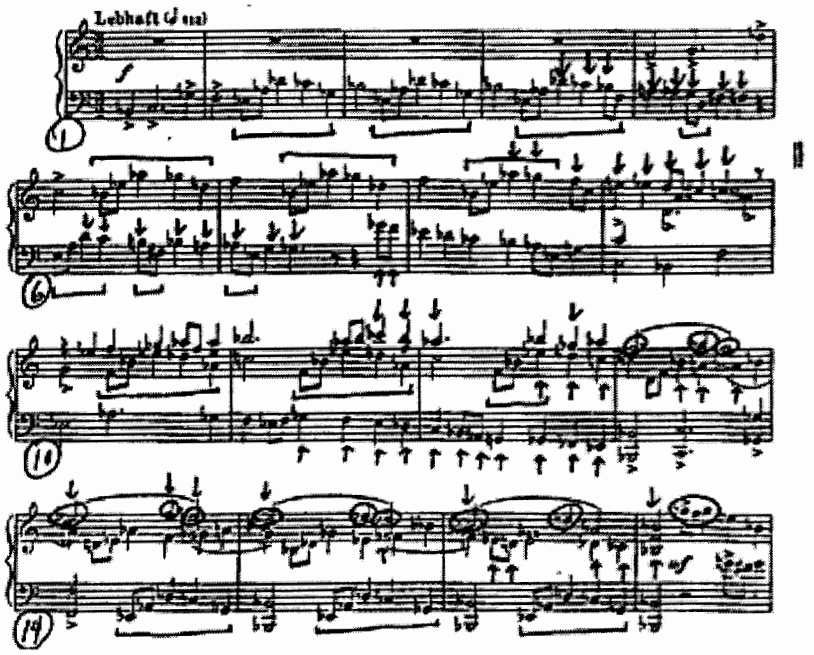
[76] Ibid., 182.
[77] Ibid.
[78] See ibid., 182–183, especially example 13, which features mixture of F major and F minor, and then A major and A minor. In his Grove article about the twentieth-century counterpoint, Carl Dahlhaus also asserts that the use of polytonality contributes to the dissonant texture. See Carl Dahlhaus, "§17. 20th Century" in Klaus-Jürgen Sachs and Carl Dahlhaus "Counterpoint" in *Grove Music Online*. Oxford Music Online, http://www.oxfordmusiconline.com/subscriber/article/grove/music/06690 (accessed January 9, 2012).
[79] Browne, 51–54.
[80] Caplin, *Classical Form,* 26–29, 42–48.
[81] Vernon Kliewer, "Melody: Linear Aspects of Twentieth-century music" in *Aspects of Twentieth-Century Music*, ed. Gary E. Wittlich (New Jersey, Prentice-Hall, INC., 1975), 270–321, especially,

the monophonic descending gesture features dynamic change from *p* to *pp*, textural alternation from polyphony to monophony, and the decrease of rhythmic activity from eighth notes to half notes, all of which combine to create a sense of closure.

More importantly, the linear motion in this passage also creates an effect of "cadence." With respect to Hindemith's melodic writing, both Tischler and Keith observe that the composer often uses stepwise melodic motion to attain an effect of cadence.[82] Keith also provides us with a number of examples illustrating how the melody moves stepwise towards the end of the theme.[83]

Fig. 2-3: Keith's illustration of the stepwise melodic motion in Hindemith's fugue[84]



296–303; William S. Rockstro, et al. "Cadence" in *Grove Music Online*. Oxford Music Online, http://www.oxfordmusiconline.com/subscriber/article/grove/music/04523 (accessed January 9, 2012).

[82] Tischler, 181; Keith, 125, 147–149, 155–156. See Tischler's example 10 for his brief discussion of a passage in Interludium 2 in *Ludus Tonalis*. Keith's discussion of Hindemith's "wedgelike" approach of cadence is more extensive. He gives four examples throughout his paper to examine the cadences in the fugue of the third sonata. His examples feature the passages in mm. 1–17, (on p. 137), mm. 26–33 (on p. 125), mm. 66–86 (on pp. 147–149), and mm. 120–137 (on pp. 155–156).

[83] Keith, 137.

[84] Ibid.

Returning to ME1, we see that the melody in each strand moves stepwise down towards the end of the monophonic gesture, pitch A. This linear motion, along with the changes of register, dynamics, and rhythmic activity, make the music strongly goal-oriented. This might explain why Gould maintains the tempo and drives each phrase towards the "cadential" gestures. Emphasizing the linear movement in the polyphonic texture, his performance helps listeners discern how Hindemith approaches the effect of cadence through melodic motion.

The differences between Gould and Petermandl's interpretations become even more pronounced when we situate ME1 and ME2 in their context and observe how they relate to their surrounding sections. In ME1, because of the frequent melodic movements towards pitch A, this section suggests A centrality. Similarly, with a melodic goal towards pitch B, ME2 implies B centrality. They form a minor second with the B-flat, around which the first fugue subject centers. B-flat is given particularly strong emphases in the last subject entrance in the first exposition, in which the B-flats are doubled in octaves. In addition, the second subject of the fugue also begins on B-flat.[85]

Keith, who also notes the minor-second relationship between these sections, unfolds its theoretical foundation from Hindemith's theoretical treatise, in which the composer considers the levels of intensity for various intervals.[86] Inspecting the acoustics of twelve pitches in chromatic scale, Hindemith arranges a series of intervals in order of increasing of tension.[87]

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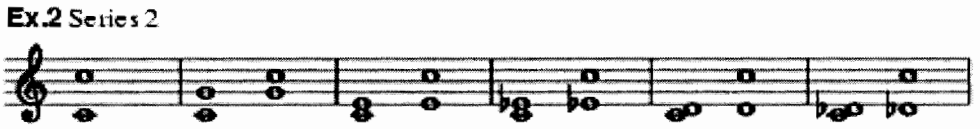
[85] Keith also points out the minor-second conflicts between the two expositions and the two middle entries; however, she does not elaborate how the centrality of B-flat, B, and A are respectively suggested in these sections. See Keith, 130.
[86] Ibid., 119–120.
[87] Paul Hindemith, *The Craft of Musical Composition, Book I, Theoretical part*. English translation by Arthur Mendel, (New York: Associated music publishers, inc., 1937). For a summary of this treatise, see Giselher Schubert, "Hindemith, Paul" in *Grove Music Online*, §6 "Works in Music Theory" http://www.oxfordmusiconline.com/subscriber/article/grove/music/13053 (accessed October 1, 2011).

Fig. 2-4: "Series 2" in Hindemith's *The Craft of Musical Composition*[88]



This series reveals that Hindemith places the highest level of intension on the minor-second interval. Although the composer never explained why he incorporated the minor-second relationship in the fugue, we might deem that the harmonic conflicts imply intensive contrasts between the two middle entries and their adjacent sections. Consequently, the harmonic tension informs the performer to sustain the level of intensity when performing the two middle entries.

Returning to the question of what kind of musical expression the performer should convey when playing ME1 and ME2, we might consider that the feeling of strictness in Gould's performance is more appropriate than the sense of relaxation in Petermandl. The dynamic level in the two middle entries appears to suggest that the performer should release the tension, which might be what motivates Petermandl to expressively bring out the sentiment implied in the legato lines, dynamic changes, and timbre contrasts. However, the musical analysis suggests an opposite approach to these sections, asking the performer to sustain the tension. Gould's performance also helps clarify the formal structure of the fugue. Whereas Petermandl's performance gives us the impression that these two sections—particularly mm. 45–54, which only features the countersubject material—function as "episodes," Gould's performance confirms their "identity" as middle entries. Some might think that Gould's approach to timing, tempo, and dynamics is too straightforward, making the music sound angular and cold. However, as I have discussed earlier, Gould's straightforward and

[88] Schubert, "Hindemith, Paul."

direct manner of playing is exactly what Hindemith's objective style calls for. Meanwhile, this kind of execution by no means eliminates the contrasts and dynamism from the music. Rather, when performing this fugue, I feel that keeping a strict tempo and making direct and sudden dynamic shifts brings excitement to my performance, which inspires me to better project the majestic character of this fugue.

Chapter 3

Fugue in Carter's Piano Sonata (1945–46)

Hindemith's fugue conveys clarity and simplicity, making the piece approachable for both performers and listeners, but complexity and innovativeness remain hallmarks of Carter's Piano Sonata, not only because of the virtuosic aspect of the piece, but also because of the rhythmic novelties, harmonic techniques, and subtle motivic connections that are involved in building the whole architecture of the work. A number of scholars have discussed various aspects that contribute to the complexity of this two-movement sonata. For instance, focusing on the harmonic structure of the piece, Charles Rosen inspects the role that harmonic overtones play in the first movement, asserting that the use of harmonics helps enrich the color and sonority that the modern piano produces.[89] In their separate accounts of Carter's sonata, Robert Below and David Schiff provide harmonic and motivic analyses based on the composer's own notes, shedding light on how the two movements, which contain contrasting sections that differ in tempo and character, are fundamentally connected by motivic relationships and harmonic structure.[90] Although these studies might not immediately assist pianists in approaching various interpretive details, such as complex rhythmic patterns, frequent tempo changes, and diverse musical "characters," they are certainly important resources; they help pianists understand how the sonata is constructed and in particular, explain how the opening page of the first movement generates most of the material in rest of the piece.

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[89] Charles Rosen, *The Musical Languages of Elliott Carter* (Washington: Library of Congress, 1984), 1–20.

[90] Robert Below, "Elliott Carter's Piano Sonata: An Important Contribution to Piano Literature" in *The Music Review* 34 (1973): 282–293; David Schiff, *The Music of Elliott Carter* (Ithaca: Cornell University Press, 1998), 123–131.

However, the above studies put much more weight on the first movement than the second, which contains the fugue. With respect to the fugue, Schiff briefly shows how the subject is modified in episodic sections,[91] while Rosen only expresses how much he enjoys the change of character that the pentatonic passage (mm. 209–226) brings to the music.[92] After examining in great detail how various motives from the opening page manifest themselves in the first movement, Below only selects two short examples to illustrate how motivic connections function in the fugue.[93]

In hopes of expanding the analytical scope that current scholarship has given to Carter's sonata, I use existing analyses as a point of entry to my discussion of the fugue. This chapter is divided into three parts, addressing motivic, harmonic, and rhythmic aspects of the fugue, respectively. Each part begins with a brief review of the current scholarship, which serves as a springboard for my own investigation of how these traits impact the polyphonic texture of the fugue. I will also discuss the roles that these three musical elements play in the fugal process. As with previous chapters, the goal of my discussion is to explore how an analysis can inform a performance. Regarding the performance of this fugue, I will not only discuss issues and difficulties that I have encountered while learning the piece and how I approach various interpretive questions using analytical tools, but also examine two contrasting performances by Charles Rosen[94] and Paul Jacobs.[95]

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[91] See Chart 7 and Chart 8 in Schiff, 129.
[92] Rosen, 10.
[93] Below, 290.
[94] Elliott Carter, *Piano Sonata*, Charles Rosen, perf. *Carter: The Complete Piano,* MusicBridge compact disc 9090, 1997.
[95] Elliott Carter, *Piano Sonata*, Paul Jacobs, perf. *Elliott Carter: A Nonesuch Retrospective*, Nonesuch Records compact disc, 2009.

I

Before examining the motivic organization of Carter's sonata, let us look at the placement of the fugue. Compared to the other three fugues observed in this thesis, which constitute complete movements on their own, the fugue in Carter's sonata is placed in the center of the second movement and is framed by non-fugal sections. As a substantial component of the movement, the fugue (mm. 104–329) is preceded by a complex process in which the music undergoes a chain of character and tempo changes from Andante (mm. 1–75) to Misterioso (mm. 76–103). Following the fugue is a return of the Andante (mm. 330–414).

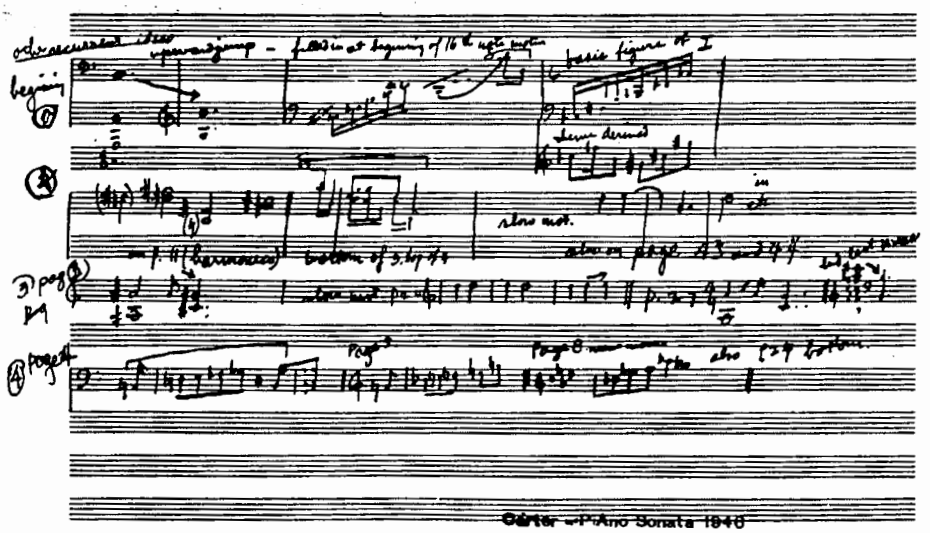
When I perform the second movement, it feels as if the sections that precede the fugue allow the performer a moment of physical relaxation from the technical demands of the first movement. Meanwhile, I find that the Andante, which encompasses numerous dynamic details, tempo fluctuation, rhythmic variety, wide registral range, and big melodic leaps, functions as a musical and emotional preparation that helps me approach the fugue with a strong sense of confidence—a precondition for a well-controlled performance of such a technically demanding fugue. Also, we can clearly perceive that fugal motives begin to emerge in the Misterioso section, in which the immensely increased intensity anticipates an important musical event.

The fascinating musical process from the opening Andante to the arrival of the fugue motivates me to explore why Carter, instead of embarking on the fugue immediately at the beginning of the second movement, placed the fugue in the middle of the movement. What musical effect did he intend to create? How does this placement influence our performance of the piece? To answer these questions, let us discuss the motivic organization of the sonata. Drawing from Schiff and Below's

motivic analyses, as well as the composer's own analytical notes, lectures, and interviews, I will first examine how contrasting motivic ideas that build different themes throughout the first movement and the slow section of the second movement are blended and absorbed in the fugue. Then, I will investigate how this musical process mirrors Carter's compositional concept of the work.

To begin our discussion, let us observe how basic motivic elements are introduced and developed. In this regard, Carter's own analytical sketch is an important source upon which most analytical studies of the piece are based.

Fig. 3-1: Carter's analysis of the motivic basis of his Piano Sonata[96]



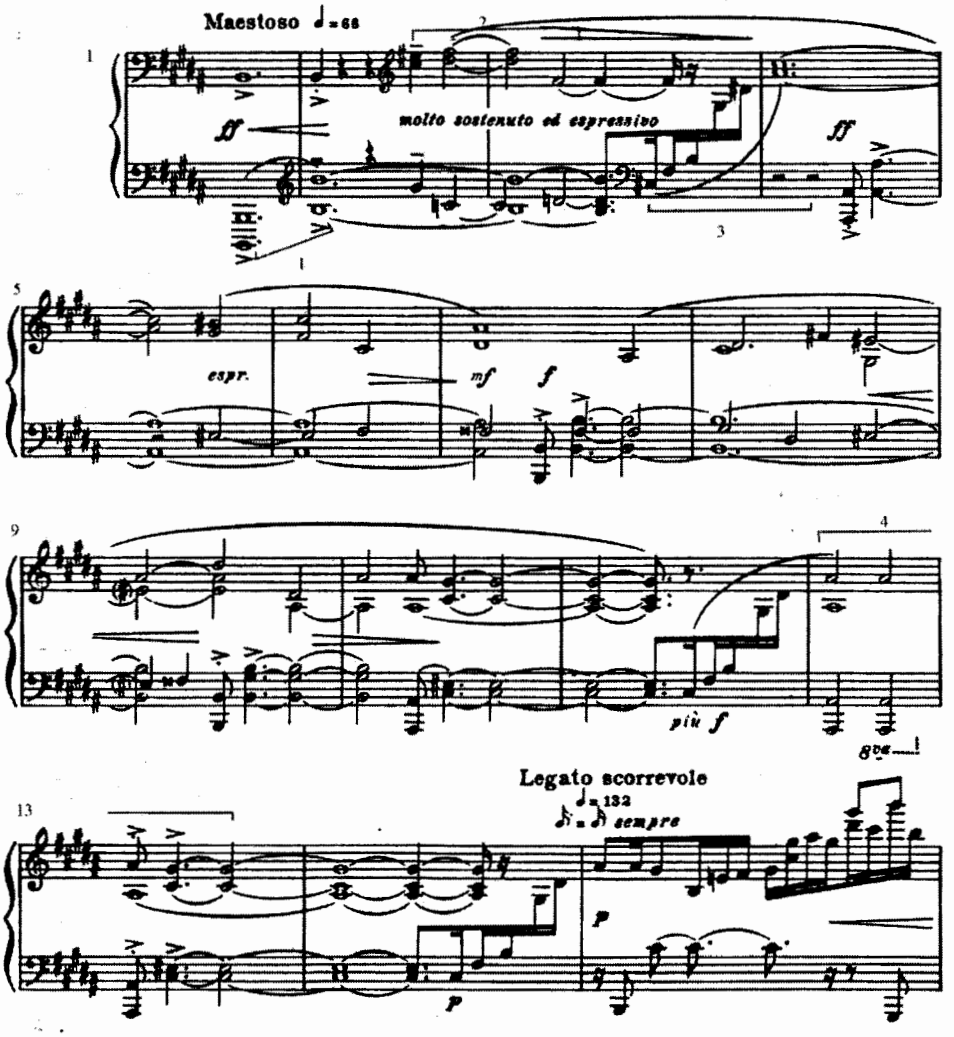
This sketch presents four short motives, and illustrates how they constitute longer themes in both movements of the sonata. Whereas each motive might appear in disparate rhythms as it develops, its melodic shape and intervallic content remain recognizable.

Examining Carter's analytical notes, Schiff demonstrates how these basic cells are introduced in the opening passage of the first movement; he then briefly discusses

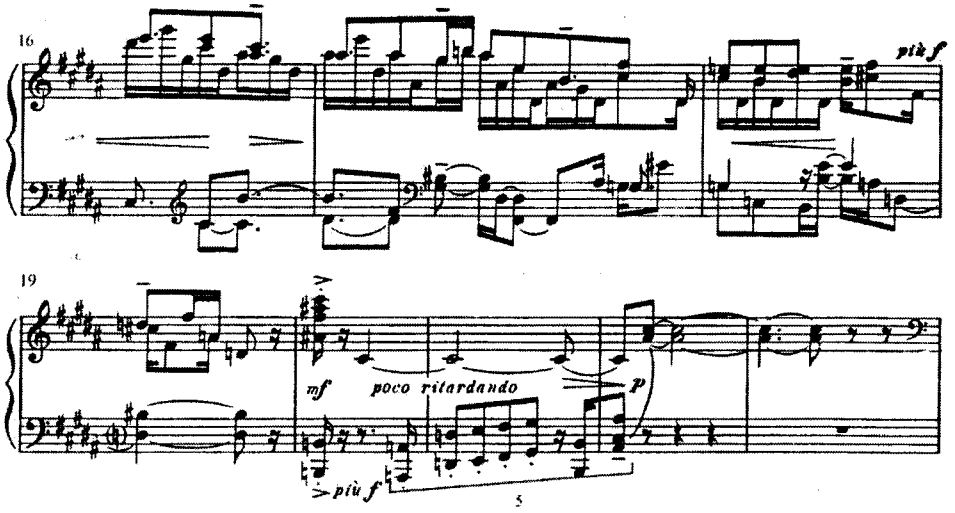
[96] This example is quoted from Rosen, 17.

the main characteristics of each motive and explains how each motive functions later in the piece.[97]

Fig. 3-2: Schiff's illustration of the five basic motives introduced in the opening of Carter's Sonata[98]



[97] Schiff, 126–128.
[98] This example is taken from Schiff, 127–128.



1. Initial jump from low B to much higher B—outlining of the sonorous expanse of the work.
2. Theme in thirds with downward leap of octave. This theme is later often played in 'harmonics' especially near the end of the whole work.
3. The rapid arpeggio figure which appears as an ornament to the above. This is confined to the first movement but fulfils a capacity of binding all the arpeggio material together.
4. Before the first rapid flight of arpeggios, a short motif A-sharp A-sharp G-sharp in dotted rhythm appears with chordal harmonies. This is cyclical and appears in many places throughout the work.
5. At the conclusion of the first flight of arpeggios a rising motif in octaves, marcatos, in the bass, which occasionally occurs in the first movement and at the end of the first slow section before the beginning of the misterioso in the second movement.[99]

According to Schiff's analysis, these motives contrast with each other in melodic contour, rhythmic pattern, intervallic content, and the manner of execution. For instance, motive 1 features an octave leap, whereas motives 2 and 4 emphasize stepwise motion; motive 2 contains a minor second, whereas motive 4 consists of a major second; motive 2 is marked with *legato espressivo*, whereas motive 5 asks for short articulation and firm touch. Presenting these contrasting ideas side by side, what musical effect does the opening introductory passage create? Moreover, one might have noticed that Schiff's motivic analysis differs slightly from what the composer

[99] Schiff, 126–127.

presented in his notes. Whereas Schiff identifies five motives in the opening passage, Carter only named four in his sketch, as he seemed to regard that the arpeggio figure (motive 3 in Schiff's analysis), which fills out three-octave span, is a variant of the opening leap. We can also ask, then, why Carter intends to establish a connection between the opening gesture and the melodic arpeggio, and why Schiff deems the arpeggio an independent motive.

Carter's own explanation regarding the compositional intents of the opening passage informs us how to begin answering the above questions. In his lecture entitled "The Composer's Choices," given in 1960s, Carter stated:

> The opening of my *Piano Sonata* of 1946…is the first passage in my works that is not primarily thematic. Its central idea comes from the total sound of the piano writing. Notice particularly the variety and flexibility of rhythm, the frequent changes of character, the oppositions of register, of manners of playing, and of slow and fast. All of these were to become increasingly important.[100]

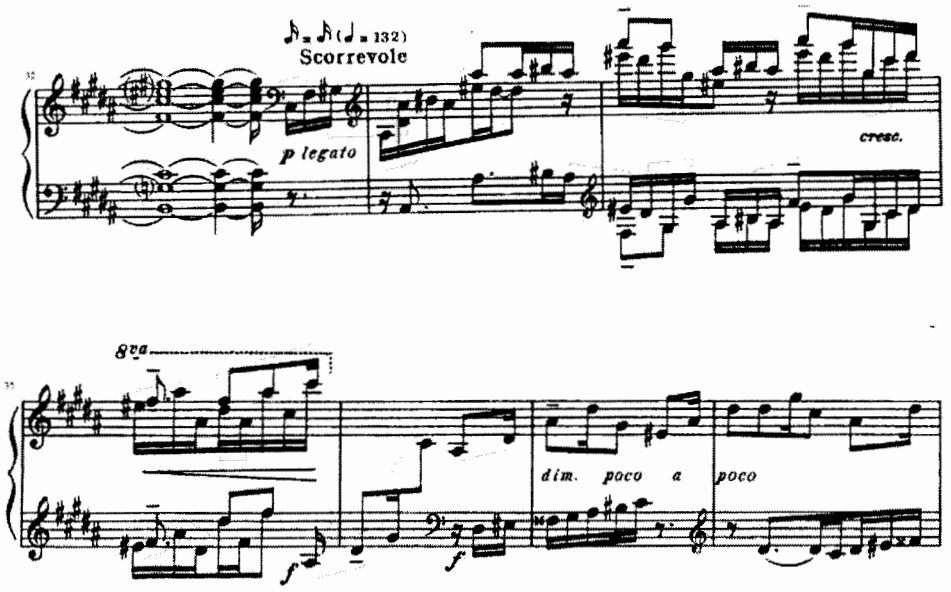
This paragraph confirms Schiff's motivic analysis that the musical texture in this opening is formed by opposite, yet self-contained ideas. Put together, these ideas are not meant to be unified to shape a continuous melodic "theme." Rather, they maintain their identities as short fragments, each conveying rich musical expression.

Schiff's analysis emphasizes the contrasts between the arpeggio figure and the opening gesture. The arpeggio enjoys its own intervallic profile—fourth and fifth—while outlining the melodic leap of the opening gesture. Looking further into the first movement, we find that numerous fourths and fifths in the Scorrevole section recall the arpeggio motive (see Fig. 3-3).[101] As I will demonstrate later, the fugue subject, containing fourths and fifths, again confirms the importance of this motive. Nevertheless, instead of considering that Schiff's analysis contradicts the composer's intent, I deem that Carter's analysis implies the performance approach of the arpeggio

[100] Elliott Carter, "The Composer's Choices," in Stone and Stone, ed. *The Writings of Elliott Carter* (Bloomington: Indiana University Press,1977), 192–197. Quote is on p. 195.
[101] This is described in Schiff's motivic analysis quoted above and is also suggested in Carter's illustration, see the top right of Carter's sketch in Fig. 3-1.

figure. The composer's preference of treating the arpeggio as an embellished version of the opening leap might suggest that the performer should emphasize the melodic outline of the arpeggio, as apposed to every note filled in the melodic leap. The wording of *scorrevole* also supports this interpretation, informing the performer to play the arpeggios lightly and swiftly.

Fig. 3-3: Carter, Piano Sonata, Movement I, mm. 32–38



Having discussed how the basic ideas are introduced, I will now examine Schiff's description to see how these ideas function in the rest of the sonata. Illustrating how each motive generates longer themes, Carter's sketch (Fig. 3-1) also helps us understand the motivic organization of the piece. Putting Schiff and Carter's examples into the musical context, I will use three short passages to briefly show Schiff's description of how the basic ideas are employed in the piece.

The examples in Fig. 3-4 illustrate that the marcato ascending octaves—motive 5 in Schiff's analysis—not only forms Meno mosso theme (m. 83) of the first movement, as illustrated in Carter's sketch (see example 4 in Fig. 3-1), but also

reappears at the end of the first slow section of the second movement (mm. 66–70), as Schiff states.[102]

Fig. 3-4a: Carter, Piano Sonata, Movement I, mm. 83–85

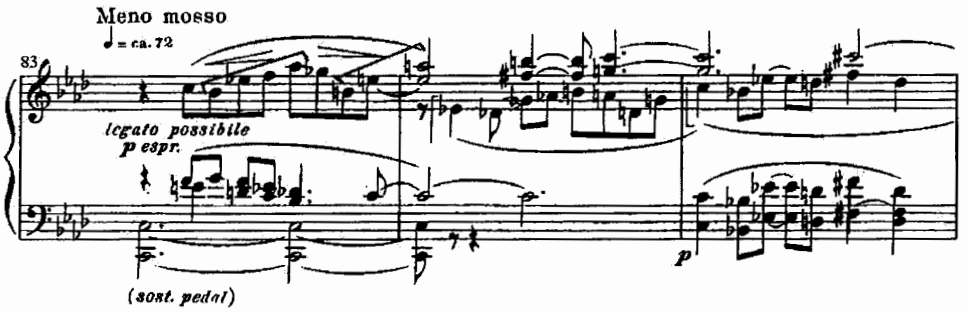


Fig. 3-4b: Carter, Piano Sonata, Movement II, mm. 68–75

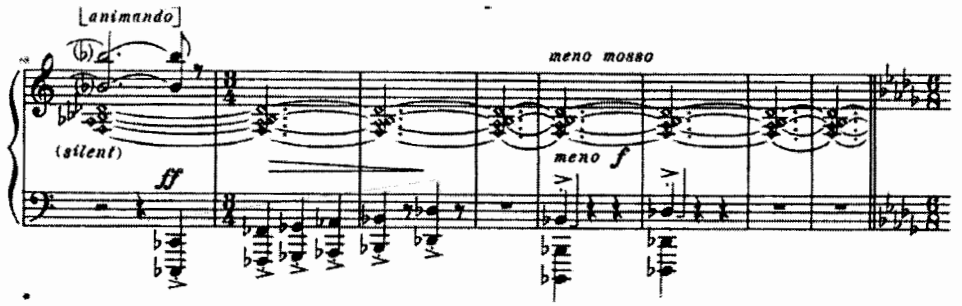
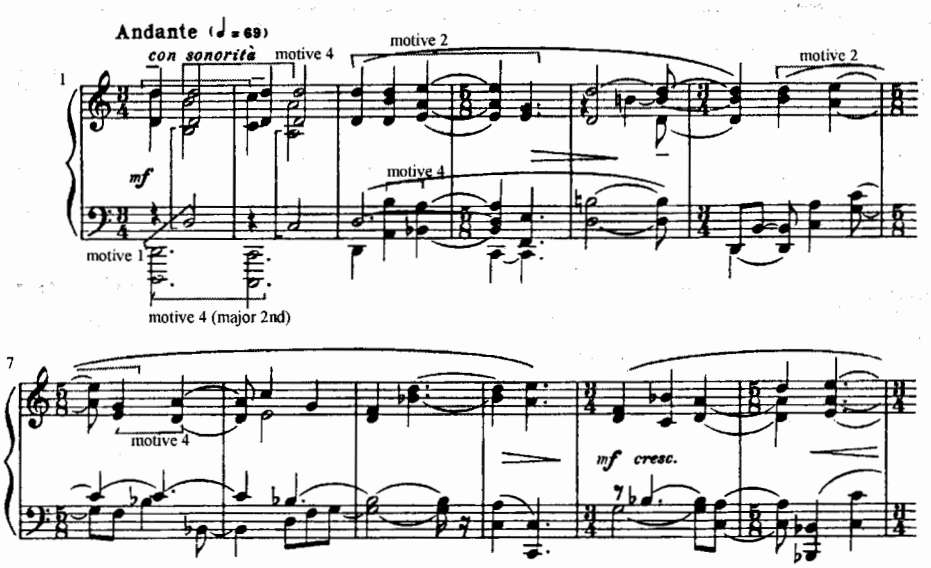


Fig. 3-5 illustrates how the Andante of the second movement uses the basic ideas that have been employed throughout the first movement, which corresponds to the opening of the first movement. In the first two bars, the octave leaps in the left hand clearly echo the opening gesture (motive 1) from the first movement. Then, the melodic motion in the right hand in mm. 3–5 recalls motive 2,[103] albeit with slight modifications of interval.[104] In addition, the major second interval, which is the main

[102] Schiff, 127.
[103] Carter demonstrated this motivic relationship in his sketch, see example 2 in Fig. 3-1.
[104] Below points out that bar 3–5 in the second movement (a') is a variant of bar 2–4 in the first movement (A) because the rising half step that begins A becomes a whole step in a' and the falling octave in A is a falling sixth in a'. See Below, 289.

characteristic of motive 4, receives emphasis in this passage.[105] For instance, the bass moves between D and C, the treble line contains a downward motion from D–B to C–A in the first two bars, and several upward moves such as D–E in bars 3, 6, and 9–10, and G–A in bar 7.

Fig. 3-5: Carter, Piano Sonata, Movement II, mm. 1–12



In these passages, one or more basic ideas constantly emerge from the musical texture; they juxtapose one another and never merge together, resulting in a very disjoined texture. These examples thus reflect the same idea of "oppositions" that the opening introductory passage exemplifies. All of the examples above are taken from the first movement and the slow section of the second movement, as neither Schiff nor the composer includes any example from the fugue in their motivic analyses. Accordingly, we might ask how the basic ideas function in the fugue, and whether the fugue continues to present the idea of "oppositions."

[105] This major-second relationship is suggested in Carter's analysis. As we can see in Example 3 in Fig. 3-1, Carter marked an upward arrow above the A-sharp-G-sharp motif, and then marked a downward arrow above D–E, which is a part of melodic line in the opening of the second movement.

In Carter's lecture, the composer did not discuss how he develops the contrasting elements later in the piece. Yet, in an interview by Charles Rosen in 1983, Carter clarified how the idea of "oppositions" was inspired; he also expressed his desire to "blend" the oppositions in his compositions.[106]

> We are so continually confronted in our lives with things that do not go together, that I feel music should somehow give the impression that things do go together, no matter how remotely they are connected.[107]

The concept of "blending of oppositions" that Carter expresses in this statement comes to life in his sonata, where contrasting motives in the first movement are finally unified in the fugue, forming a rich musical texture. While the first movement highlights motivic contrasts, the fugue in the second movement maintains its focus on the subject and minimizes contrasts. Carter makes this textural change more dramatic by withholding musical synthesis: the composer prolongs the process of searching for a way to blend all the elements together to form a fugue subject. Instead of presenting the subject at the outset of the second movement, Carter makes several tentative musical statements using the same motivic elements found in the first movement, gradually developing these fragments into a fugue subject. In the Misterioso preceding the fugue, the fugue subject emerges bit by bit with dynamic increase. When the fugue is finally launched, all the motivic fragments remain recognizable. We can observe from Fig. 3-6 that the fugue subject (begins in m. 103, beat 6) encompasses the intervallic profile of the first movement's basic ideas, embracing perfect fourths, perfect fifths, and minor and major seconds. The melody ranges from e-flat to the e^2-flat, corresponding to the opening leap.

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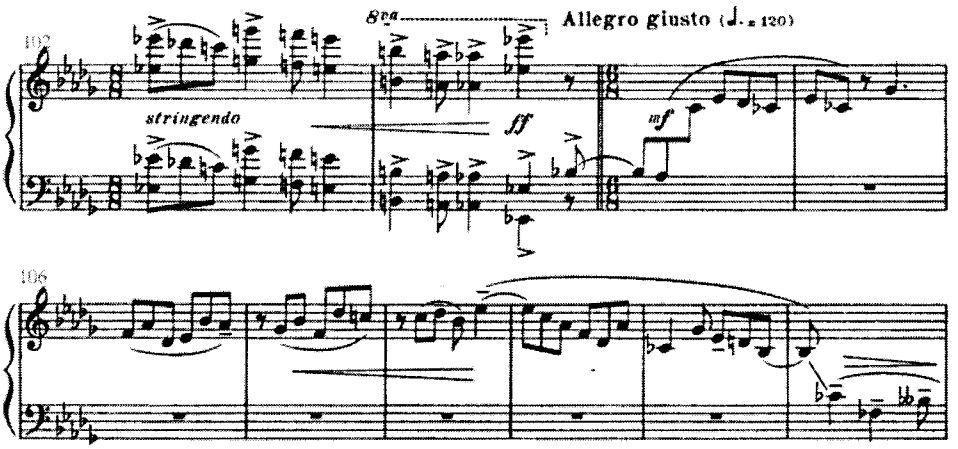
[106] Charles Rosen, "An Interview with Elliott Carter," in *The Musical Languages of Elliott Carter* (Washington: Library of Congress, 1984), 33–43. In this interview, Carter talked about the "blending" of oppositions in relation to his Cello Sonata and Double Concerto, in which different sound and characters of two different instruments remain to be emphasized, making the moment when the "oppositions" begin to blend a fascinating experience.

[107] Ibid., 36.

Fig. 3-6: Carter, Piano Sonata, Movement II, mm. 102–111



The composer's concept of "blending of oppositions" invites pianists to reconsider how to perform the opening Andante of the second movement. The tranquil, slow music of the Andante contrasts to the brilliant, virtuosic first movement, giving the impression that all the struggles and conflicts in the first movement are resolved. However, the motivic analysis reveals that the second movement is a continuation of the first movement, instead of a fresh departure. Thus, when playing the opening Andante, we should sustain the tension and feeling of anxiety that is expressed by, for example, the *precipitoso* arpeggios (mm. 47–51), the *marcato* chords (mm. 55–60), numerous minor-second clashes, and polyrhythms that frequently occur in Meno mosso (mm. 25–51). Even when performing the legato lines in this section, we are not obliged to unify the tone and make smooth lines to connect every contrasting idea; rather, we can emphasize the sonorous contrasts and bring out the variety of tone colors and dynamics.

Showing different approaches of the preparatory process before the arrival of the fugue, Jacobs and Rosen's performances reveal the composer's concept of "blending of oppositions" on different levels. Jacobs's flawless technique contributes to the clarity and fluidity of his performance. I particularly enjoy his playing of the

Misterioso section, in which he vividly depicts how the motivic fragments attempt to form the fugue subject. He takes certain liberties of timing at the beginning of the section and holds every pause slightly longer, eliciting a mysterious atmosphere. Then he gradually builds up the intensity, while keeping the *piano* sound until the very end of the section, making a very effective crescendo and stringendo at the end of the section.

In Jacobs's performance of the Andante section, however, I can hardly discern the idea of "oppositions" that the contrasting motivic elements bring to the music. In the opening of the movement, he puts too much emphasis on the long melodic lines, rather than showing listeners how the texture is composed of various basic ideas. Even in the Meno mosso section that contains numerous polyrhythms, I cannot discern the anxiety and instability that rhythmic conflicts evoke. Jocobs's interpretation certainly helps listeners understand that the Andante differs from the first movement in musical character and emotional expression; however, when listening to his performance of the slow section, listeners might not be able to perceive various contrasting motivic and rhythmic ideas, and thus cannot fully appreciate the sense of arrival and unity in the exposition of the fugue, despite of the performer's efforts in the Misterioso section.

By comparison, Rosen's performance convincingly portrays the expressive trajectory from "chaos" of the first movement to clarity of the fugue, and thus seems better suited to communicate Carter's compositional intent. In Rosen's performance of the slow section, he creates an interesting dialogue amongst the different voices, bringing out numerous harmonic details and rhythmic variety in the texture. He expressively exploits the polyrhythm to convey diverse musical emotions: he plays triplets with more agitation, yet plays eighth notes in a lyrical, *cantabile* manner,

which helps listeners clearly perceive rhythmic contrasts as they hear disparate forms of expression. Highlighting various conflicting elements and the disjoined quality of the texture, Rosen's performance of the slow section sounds freer and more improvisational. Thus, when the music suddenly becomes serious and rhythmically regular at the moment when the fugue subject enters, listeners can immediately discern a higher level of intensity and realize that a new and important section has begun.

II

Having focused on the musical context from which the fugue emerges, I will now examine the fugue itself, discussing how the tonal organization and the harmonic structure can guide performers to interpret details. Scholars have well noted the innovative harmonic design of the sonata. According to Rosen and Schiff, the hierarchical harmonic system is absent in the sonata; instead, the themes are derived from one basic chord, which is constructed as a sequence of fifths.[108]

Fig. 3-7: Rosen's demonstration of the basic chord of Carter's Piano Sonata[109]

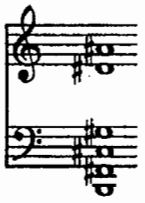
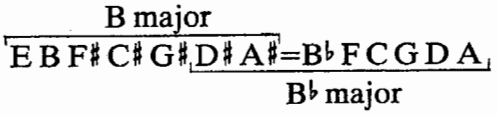


Fig. 3-8: Schiff's analysis of the harmonic structure of Carter's Piano Sonata[110]

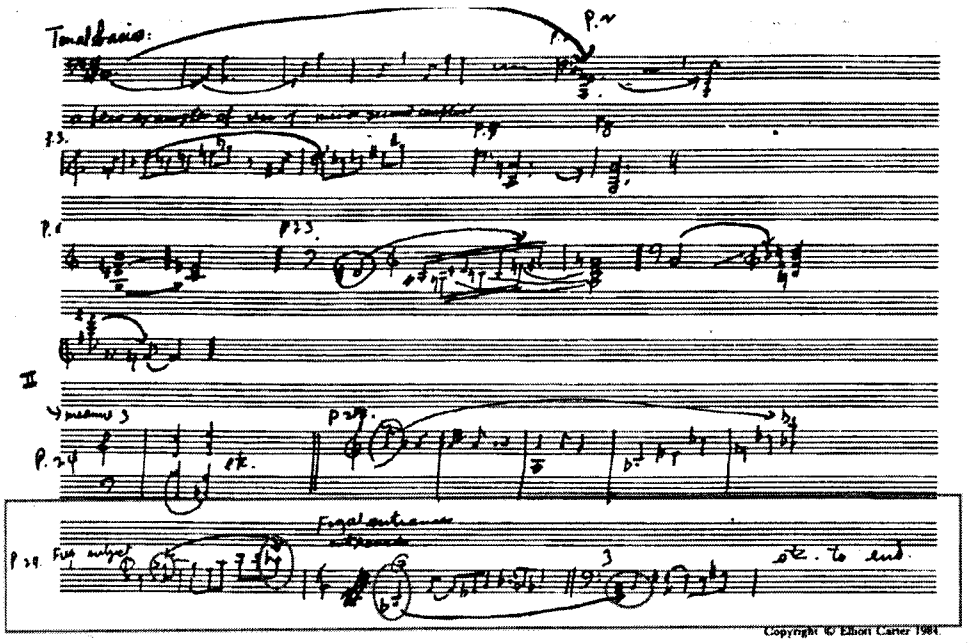


[108] Rosen, 4; Schiff, 126.
[109] Rosen, 4.
[110] Schiff, 126.

They further point out that this chord suggests a conflict between B major and B-flat/A-sharp major.[111] Below observes that this conflict is revealed right in the opening passage of the sonata, when the bass presents a progression between B (mm. 1 and 7) and A-sharp (mm. 4 and 10) in sustaining tones.[112] Revealing a remarkable phenomenon about this conflict, Rosen shows that the first movement ends on a B-flat, which contradicts the B-natural that opens the sonata.[113]

Analysts have somewhat overlooked how the B-B-flat conflict functions in the fugue, perhaps because neither B nor B-flat is emphasized here. Yet, Carter's sketch of the harmonic structure of the sonata (Fig. 3-9) provides ample examples to illustrate how he extensively employed minor-second clashes throughout the piece, including the fugue.

Fig. 3-9: Carter's analysis of the tonal basis of his Piano Sonata[114]



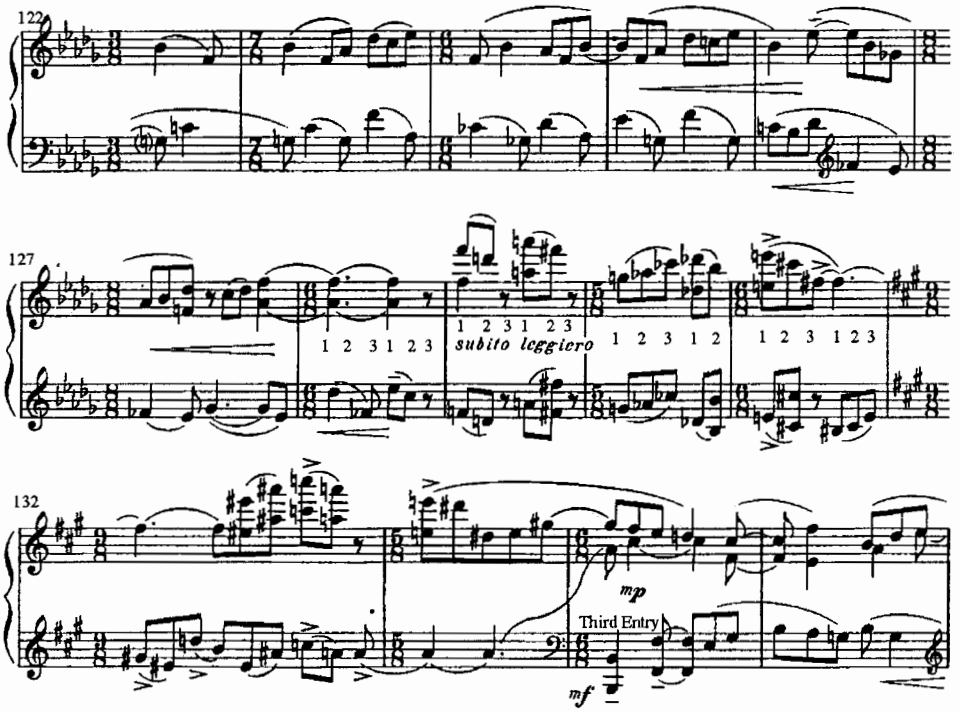
[111] Ibid.
[112] Below, 284.
[113] Rosen, 3–4.
[114] Quoted from Rosen, 16.

As we can see at the bottom left of Carter's sketch, the B-B-flat conflict (spelled here as C-flat and B-flat) appears right in the first two bars of the fugue subject. Looking further into the subject (see Fig. 3-6), we find that this minor-second dissonance is emphasized again in the last two bars.

The example at the bottom right of the sketch illustrates how the B-B-flat conflict influences the subject entries in the exposition of the fugue (mm. 104–158). The subject begins on E-flat. The answer (mm. 112–121) then transposes every note in the subject literally up a fifth to B-flat. Then, a link (mm. 122–133) follows to connect the answer and the third entry (mm. 134–142). According to Benjamin's observation of Bach's expositions, a link is often used between the answer and the third entry to relieve the "excessive predictability and regularity" in the subject entries,[115] and more importantly, to modulate back to the tonic key to allow the third entrance to begin on the tonic.[116] However, in Carter's exposition, the link brings the third entry on B-natural, forming a minor second with the B-flat of the answer. Fig. 3-10 shows this process.

[115] Benjamin, *The Craft of Tonal Counterpoint*, 207.
[116] See Benjamin, 202–209. According to Benjamin, in Bach's fugue, the third entry is "nearly always on tonic." His discussion of the third entry in the exposition is on p. 202; the discussion of the function of a link is on pp. 207–209.

Fig. 3-10: Carter, Piano Sonata, Movement II, mm. 122–135

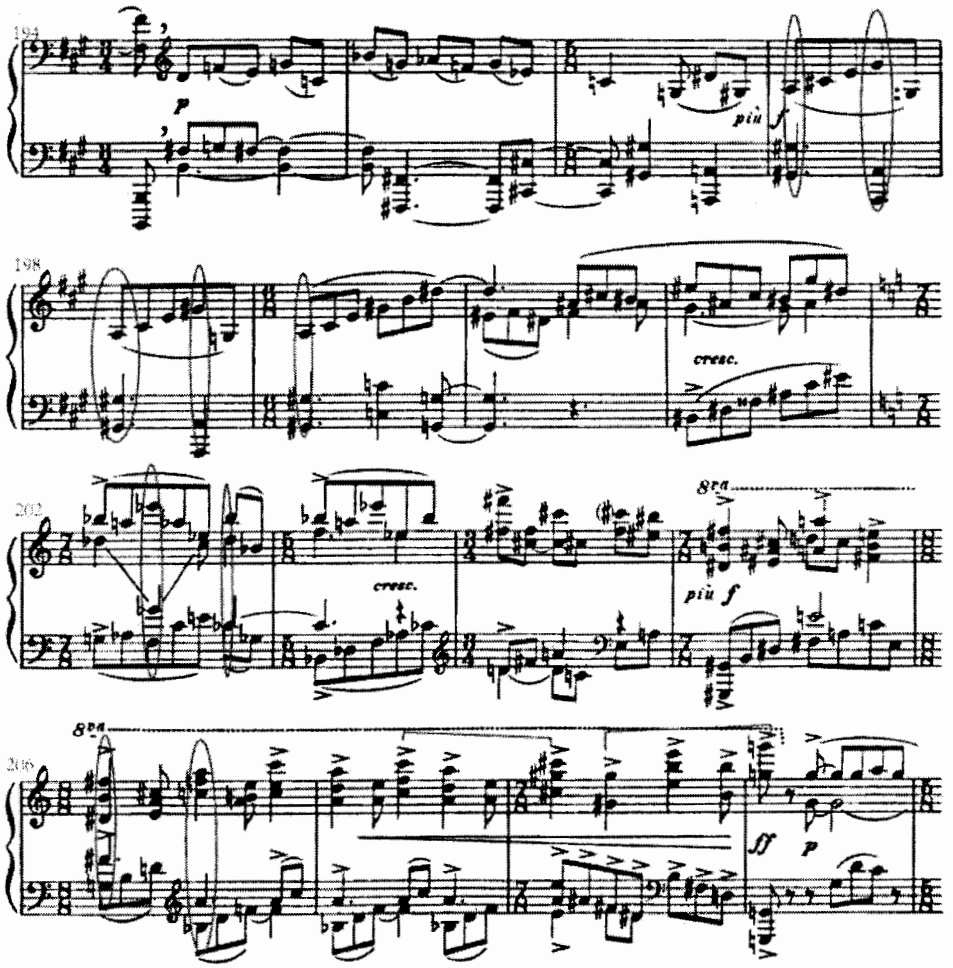


Although the link does not show an orthodox modulation in the tonal context, the accentuated E-natural—the "dominant" of B—on the downbeat of m. 131 anticipates the upcoming subject entrance on B. The E-natural is given metric emphasis. As marked in the example, we can count m. 128 and m. 129—both in 6/8—in two groups of three. The *subito leggiero* here also guides the performer to enjoy the sense of the swinging rhythm. Then, the irregular rhythmic groupings (1-2-3 / 1-2) in m. 130 create the impression that the downbeat in m. 131 "rushes in." This sudden shift of rhythm naturally motivates the performer to exert more force on this downbeat, making the harmonic change more significant.

Carter's sketch shown in Fig. 3-9 also reflects that, in addition to the B-B-flat relationship, the composer also uses many other minor-second intervals to stress this dissonant sonority in musical texture. This sonority recalls motive 2, in which the

minor-second interval is prominent; thus, by emphasizing this interval, the composer skillfully creates an echo between the harmonic and motivic aspects of the piece. In the sketch, many examples showing the use of minor seconds are taken from the end of the first movement, such as F-sharp against F-natural, and from the Più mosso section in the second movement, such as A-natural against B-flat (mm. 62–68). Besides these examples, I notice that minor-second clashes frequently occur in the fugue and profoundly influence the musical characters. The episodic section shown in Fig. 3-11 demonstrates one of such examples.

Fig. 3-11: Carter, Piano Sonata, Movement II, mm. 194–209



The minor-second clashes occur frequently throughout this passage and play an important role in reinforcing the crescendo effect. Rosen's performance of this passage demonstrates how the performer can take advantage of the minor-second sonority to effectively increase the dynamic level. Even though the first *più f* occurs rather early in the passage, Rosen sustains the gloomy *piano* sound till the last few bars so as to leave more room for the last crescendo towards the *ff* at the end of the section. While withholding the dynamic increase, the performer underlines minor-second clashes in the texture by playing each one with a heavier and firmer touch. Thus, listeners can easily perceive the tremendous increase of intensity as they hear the dark, severe sound that the minor-second clashes produce.

To close our discussion in this part, let us examine how Carter's fugue ends. We have seen that the B-B-flat relationship is established in the opening of the sonata and emphasized throughout the first movement, particularly at the end of the movement where the music dramatically ends with B-flat after the successive use of minor-second conflicts. Although the second movement favors major seconds in the opening Andante section, the minor-second relationship is still underlined in many places throughout the movement, especially in the fugue. Besides the examples we have discussed regarding the role that minor seconds play in the exposition and how they appear in episodic sections to help increase the musical intensity, we also find that the fugue subject is on E-flat, forming a minor second with the D-natural, with which the second movement opens.

However, after the exposition, the fugue subject never returns on E-flat. The textural density and dynamic force in the last set of complete presentation of the fugue subject (mm. 290–310) might lead listeners to expect a recapitulation of the fugue; however, this final presentation of the subject is on B-natural—as opposed to

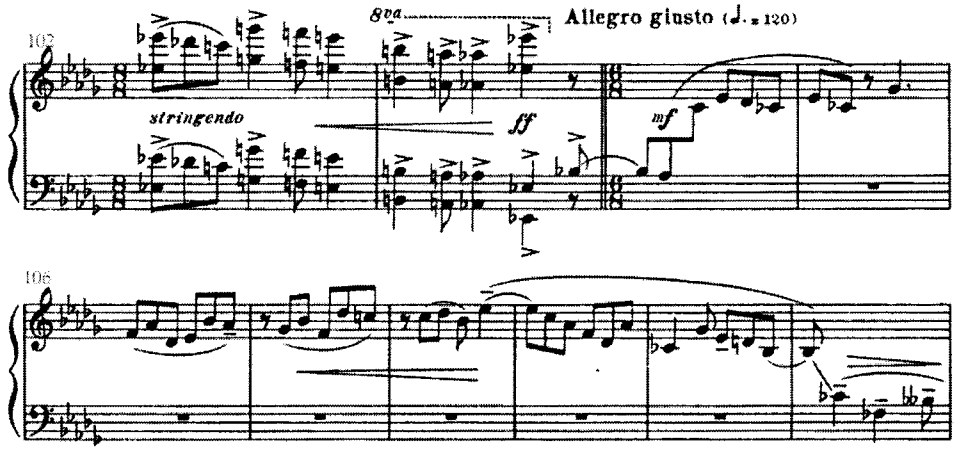
E-flat—echoing the opening sonority of the first movement. The fugue ends in sonorous chaos, with E major triads (m. 322), A-flat major triads (m. 327), and C-natural and C-sharp pedals, which again stress the minor-second conflict. A closing section is then necessary to conclude the sonata in B. Hence, we can conclude that the fugue represents the culminating point in the sonata, because on the one hand, it integrates contrasting ideas that are initiated at the beginning of the piece, and on the other, it reinforces the minor-second harmonic conflict that is established in the first movement.

III

Having discussed how Carter's fugue, as an important component of the sonata, unifies the contrasting ideas and highlights harmonic attributes, I will now examine Carter's rhythmic devices and explore how an analysis might help pianists approach the complex rhythmic writing in the fugue. Whereas Szymanowksi and Hindemith employ traditional rhythmic devices to increase the musical expression in the fugal process, Carter's rhythmic writing is rather innovative, primarily featuring twentieth-century devices, such as shifting accents, polyrhythm, and frequent changes of meter. Two short examples suffice to reveal the important role that twentieth-century rhythmic devices play in the fugal process.

Fig. 3-12 compares two passages in the fugue. It demonstrates how extensive use of syncopations and accents adds further layers of complexity to the contrapuntal texture and how these devices yield an improvisational character to the episodic section.

Fig. 3-12
a: Carter, Piano Sonata, Movement II, mm. 102–111



b: Carter, Piano Sonata, Movement II, mm. 169–176

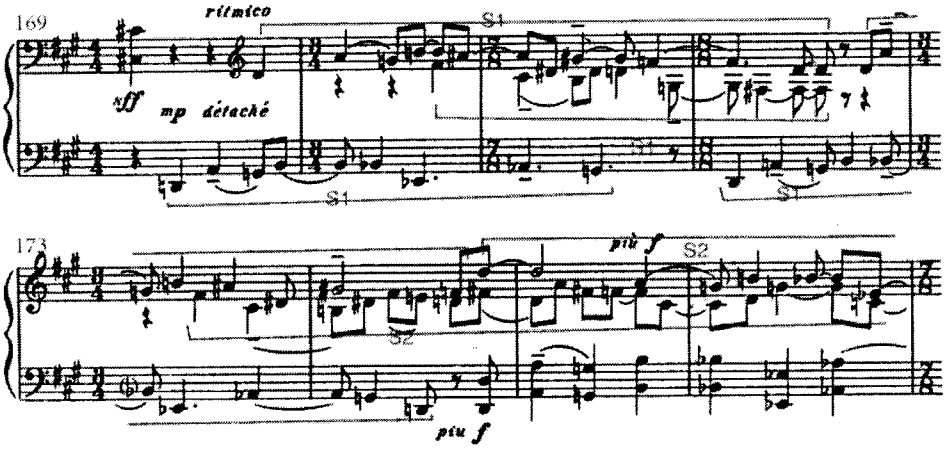
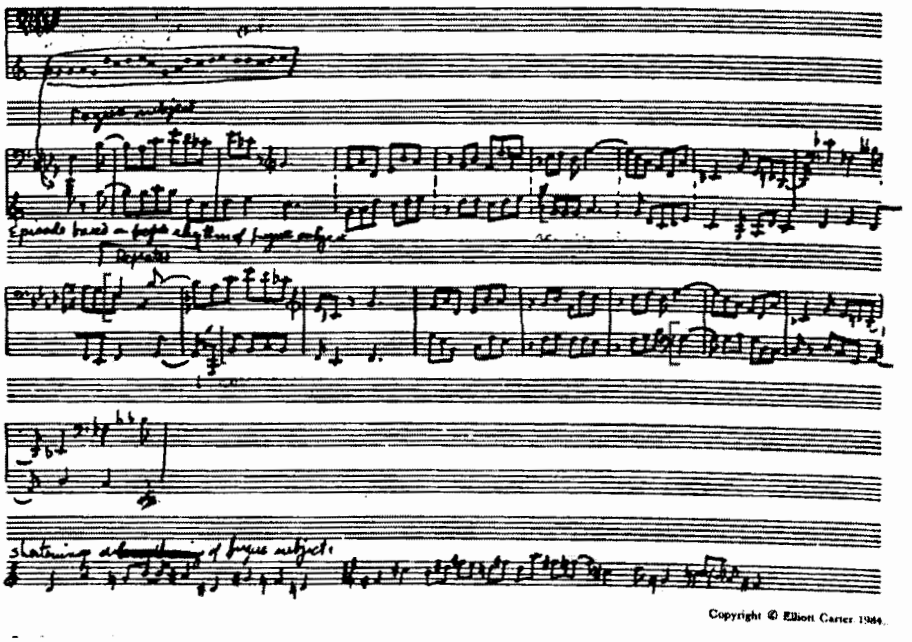


Fig. 3-12a shows the first subject statement in the exposition, where the 6/8 time signature remains throughout. Playing this subject, we can count most measures in two groups of three, except for m. 108, which we might count as "1-2-3-4 / 1-2" due to the syncopations. Fig. 3-12b shows a "jazzy" version of the subject, which bears much more rhythmic variety than the original version. This passage shows how the fugue subject is rhythmically varied and melodically truncated in an episodic section. The irregular rhythmic groupings and extensive use of syncopation evoke jazzy improvisation, inviting performers to play this episode with a sense of liberty.

The often-quoted episode in mm. 210–226, featuring the use of pentatonic scale, the sense of swinging created by constant changes of meter and rhythm pulse, and light-hearted character, displays another "jazzy" version of the fugue subject.[117] This episode, as Schiff points out, is derived from the fugue subject, yet sounds quite distant from the subject.[118] Carter himself illustrated how he fits the pentatonic row into the rhythmic shape of the subject, making this pentatonic episode an isorhythmic variation of the fugue subject.[119] From Carter's illustration shown in Fig. 3-13, we can see that the melodic row appears four times, yet each appearance enjoys different rhythmic shape. The rhythmic irregularity and the pentatonic tune evoke a sense of humor that effectively relaxes the musical intensity in the fugal procedure.

Fig. 3-13: Carter's illustration of the isorhythmic episode in his fugue[120]



[117] This passage is discussed both in Schiff, 129–130 and Rosen, 10.
[118] Schiff, 130.
[119] See also Schiff's discussion of this passage, where he also uses Carter's illustration of this passage. Schiff, 129–130.
[120] Quoated from Rosen, 18.

Having seen how Carter uses rhythm to create diverse musical characters in the fugal process, I will now discuss the complexity involved in playing Carter's rhythm. Perhaps many pianists deem the rhythmic complexity as the most important factor that makes Carter's sonata particularly difficult to learn and to perform. In my experience learning the four twentieth-century fugues, I find that Carter's rhythmic writing is much more difficult to grasp than the other three fugues. In Carter's fugue, shifting accents and frequent use of polyrhythm makes demands that the player coordinates both hands while maintaining the individuality of each rhythmic pattern. In addition, the composer's precise rhythmic notations require the pianist's accurate execution that projects minute rhythmic details. Yet, we cannot attain this rhythmic precision simply by practicing Carter's fugue with a metronome, as we might do for Bach's fugues. As Rosen asserts, although Carter provides metronome marks in many sections of the sonata, it is impossible to use a metronome when playing a piece with irregular rhythmic groupings and constant changes of meter.[121] Sharing his experience of playing Carter's music, Rosen stresses the importance of understanding the composer's rhythmic notations:

> Carter once quoted a remark by a member of the Boston Symphony who said, "The trouble with your music is that it doesn't make sense if you don't play the dynamics." I would go further than that. Until the musicians know why these rhythms are notated the way they are it will be impossible to play the music meaningfully.[122]

In hopes of shedding light on how rhythmic analysis might help improve a performance of the fugue, I will inspect the rhythmic writing in the last episode of the fugue and demonstrate how Carter uses rhythm to reinforce dynamic increase. I will then explore how the performer can make use of rhythmic attributes in the passage to heighten the emotional expression in a performance.

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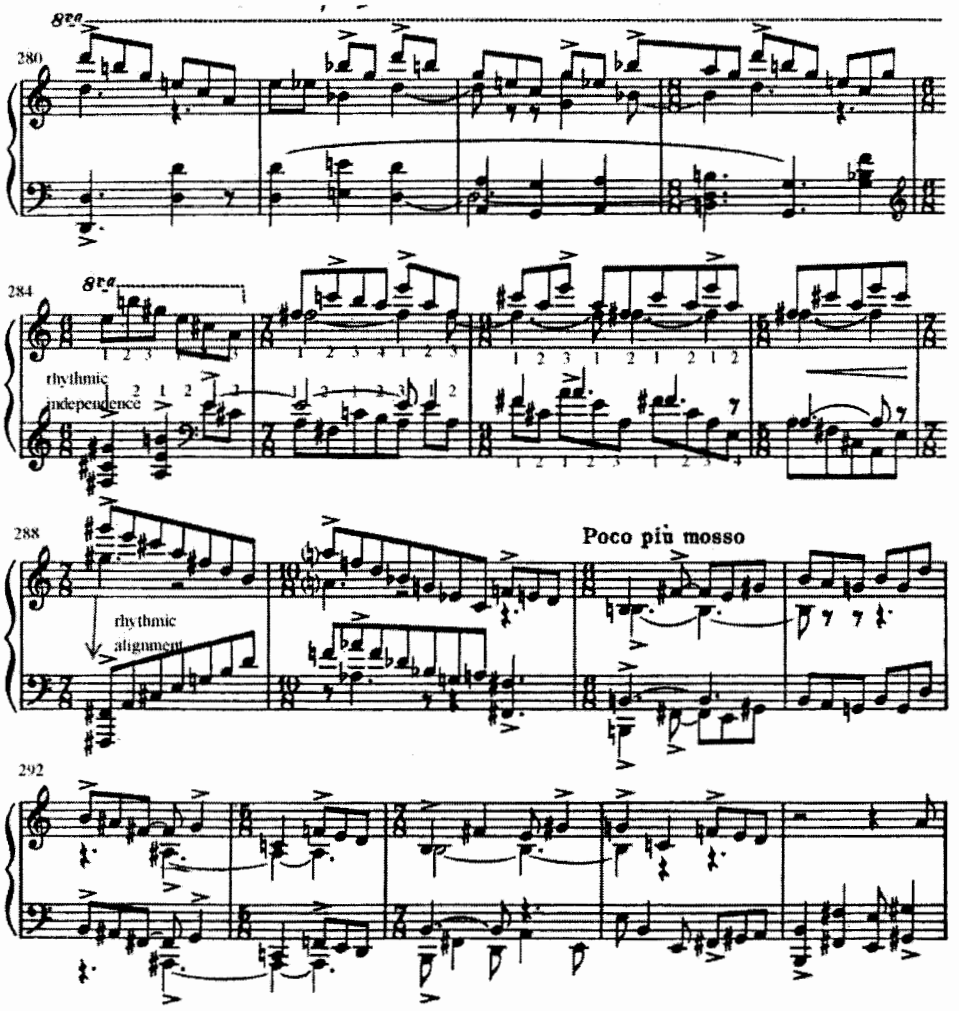
[121] Commenting on playing Carter's rhythm, Rosen asserts: "Carter gives metronome marks in the sonata but the metronome is no help when the time signature changes from 10/16 to 14/16." See Rosen, 10.

[122] See Rosen's discussion on performing Carter' s music, in Rosen, 11–15. Quote is on p. 11.

Fig. 3-14: Carter, Piano Sonata, Movement II, mm. 280–296



In this passage we observe that irregular rhythmic groupings help enrich the texture and give each voice a contrasting character. For instance, in mm. 280–283, rhythmic irregularities and active accents in the right hand evokes a playful, scherzando character, while the left hand plays the pentatonic melody in a lyrical, legato manner. Due to the shifting accents and hemiolas, the downbeats and accents between the two hands never line up. For example, m. 284 features interplay between two groups of three and three groups of two. In m. 285, both hands count the hybrid triple time in

dissimilar ways: the right hand is grouped as 4+3, while the left hand as 2+3+2. However, the rhythmic conflicts terminate at m. 288, from which point, both hands begin to align and drive together towards Poco più mosso.

This passage represents a process in which the music precedes from rhythmic independence, which features contrasting rhythmic patterns among various voices, to rhythmic alignment, in which all the voices enjoy the same rhythmic shape.[123] When performing this passage, I feel that the switch from rhythmic independence to alignment effectively creates an impetus that drives towards the point of arrival. Although the music bears no extensive crescendo or accelerando leading to the Poco più mosso, rhythmic conflicts give us an impression that the energy anxiously accumulates to reach the long-awaited point, as the popping-up accents finally give way to the rapid flow of the arpeggios in m. 288. When both hands drive towards the same destination, the rhythmic alignment would naturally motivate the performer to raise the level of dynamics, to accelerate the tempo, and to carry much more emotional excitement into the new section.

The alternation between rhythmic independence and rhythmic alignment is an important rhythmic attribute that occurs throughout the whole sonata. The opening of the second movement, for instance, demonstrates rhythmic independence in the Meno mosso section (mm. 25–51) and rhythmic alignment in the Più mosso section (mm. 52–75). In my discussion of Rosen's performance of the Andante in the second movement, I observed that his improvisational manner of performance enhances the notion of "oppositions" conveyed in motivic conflicts. Having examined Carter's rhythmic writing, one might find that the sense of liberty and spontaneity in Rosen's performance also ably reflects the rhythmic attributes of this piece. For instance, he

[123] My thanks go to Prof. Sara Laimon for making this point.

plays the Meno mosso section with a sense of timelessness, amplifying the idea of freedom that rhythmic alternations between triplets and duplets suggest; whereas he plays the Più mosso section with great rhythmic precision and squareness, underlining the seriousness that the tenutos, octaves, and the accents convey. In his performance of the fugue, Rosen brings out various levels of musical expression in the fugal process by emphasizing the contrasts between rhythmic independence and rhythmic alignment. In particular, when playing the episode in mm. 169–180, Rosen thoroughly projects diverse rhythmic nuances, such as syncopations and shifting accents, which contribute to the "jazzy" character of this passage. In the meantime, highlighting conflicting rhythmic patterns, he creates a vivid "argument" amongst the three voices, gradually building up the intensity towards the arrival of the middle entry in m. 181. Compared to Jacobs's performance, Rosen's performance might be less perfect in terms of technical control, however, his performance allows us to better perceive the process in which the conflicts in motivic, harmonic, and rhythmic aspects are created, emphasized, and solved, which is the essential idea of Carter's Piano Sonata.

Chapter 4

Fugue in Barber's Piano Sonata, Op. 26 (1949)

I

In Catharine D. Lysinger's dissertation "Sonata for Piano, Op. 26: A Reflection of Barber's Struggle between Neo-Classicism and Modernism," the author claims that the formal procedure of the piece follows eighteenth- and nineteenth-century practices, which reveals Barber's "conservative" tendencies.[124] Conversely, various musical details, such as the half-step motivic gesture that appears throughout the piece and the extensive use of chromaticism, display the composer's modernist identity.[125] More importantly, Lysinger also establishes a connection between musical analysis and performance by comparing Horowitz and Browning's recordings of the sonata.[126] According to the author, Browning's performance conveys finer harmonic colours and motivic cohesion, yet his musical expression is rather restrained, demonstrating the modernist's "objective" approach.[127] By comparison, Horowitz's performance encapsulates the large picture of the sonata, displaying dramatic contrasts of tone, lengthened phrase shape, and impulsive dynamic impetus.[128]

I have used Lysinger's research on the relationship between analysis and performance as a model for my own study of this piece. My discussion in this chapter

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[124] Catharine D. Lysinger, "Sonata for Piano, Op. 26: A Reflection of Samuel Barber's Struggle between Neo-Classicism and Modernism" (D.M.A. diss., University of Houston, 2004). Lysinger's discussion of the formal organization of the Barber's fugue is in pp. 39–43.
[125] Ibid., 43–59. The harmonic discussion of the fugue is in pp. 43–45, and the motivic discussion is in pp. 56–59.
[126] Samuel Barber, *Sonata for Piano, Op. 26*, Vladimir Horowitz, perf. *Horowitz Plays Prokofiev, Barber, Kabelevsky*, RCA/Victor Red Seal compact disc 60377, 1990; Samuel Barber, *Sonata for Piano, Op. 26*, John Browning, perf. *The Complete Solo Piano Music of Samuel Barber*, digital disc, Music Masters Classics 01612-67122-2, 1993.
[127] For a comparison of Horowitz and Browning's performance of Barber's sonata, see Lysinger, 60–76. Quote is on p. 76.
[128] Ibid.

is based on Lysinger's motivic, harmonic, and formal analysis as well as her performance study. Instead of merely commenting on her arguments, I reexamine some analytical and interpretive issues from the virtuosic aspect of the fugue, which might be of interest to pianists performing Barber's sonata. Before analyzing the fugue, I will briefly discuss the association between Barber's Piano Sonata and the internationally renowned virtuoso, Vladimir Horowitz, because the virtuosic effect of Barber's sonata owes much to Horowitz, who premiered and promoted this sonata.[129]

With regard to Horowitz's influence, Barber himself confirmed that Horowitz's performance style provided much inspiration in composing the piano sonata:

> Of course he had a great influence on me for writing for piano. Good God! He taught me so much about piano. He used to play Scriabin for me all night in Mount Kisco…My piano teacher, Vengerova, was a great teacher, but hearing Horowitz play was for me a great experience. I learned so much.[130]

Horowitz's influence is reflected both in the large-scale design of the piece and in musical details.[131] For instance, according to Barbara B. Heyman, the correspondence between the performer and the composer regarding this sonata reveal that the fugal finale was written at Horowitz's request for a last movement that is "very flashy" yet "with content."[132] In addition, comparing the published edition of the sonata with several manuscript versions, Heyman points out some revisions that seem to be made based on Horowitz's suggestions, as these revisions correspond with Horowitz's virtuosic style of performance.[133] Some examples include the added thirty-second

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[129] See Barbara B. Heyman, *Samuel Barber: The Composer and His Music* (New York: Oxford University Press, 1992), 294–310. According to Heyman, Horowitz premiered Barber's Piano Sonata on December 9, 1949 in Havana, Cuba, and soon after, he performed this piece in many different cities in the US.

[130] Barber, interviewed by Robert Sherman, WQXR, September 30, 1978. Quoted from Heyman, 300.

[131] For a discussion of the collaboration between Barber and Horowitz, see Heyman, 300–306.

[132] After hearing the first three movements of the sonata, Horowitz claimed: "I saw three movements and told him the sonata would sound better if he made a very flashy last movement, but with content. So he did that fugue, which is the best thing in the sonata." Glenn Plaskin, *Horowitz* (New York: William Morrow, 1983), 229. Quoted from Heyman, 241.

[133] Heyman, 301–305.

notes at the end of the second movement,[134] several pedal indications,[135] and the insertion of the cadenza after bar 97 in the fugue.[136] Observing the overall style of the sonata, American pianist John Browning also deemed that the sonata is designed specifically for Horowitz, as the piece encompasses the "old Russian style of pianism...the big tone, broad romantic style, ample but intelligent use of the pedal, lush sonorities, strong voicings—in short, all the best attributes of Horowitz."[137]

Perhaps because of Horowitz's keen association with the composer, music commentators often highlight the virtuosic aspect of the sonata. They regard the piece, the fugal finale in particular, as an ideal forum for performers to display their technical virtuosity. For instance, after Horowitz gave the New York premiere in January 1950, Olin Downes proclaimed:

> Many pianists will now attempt its performance, but few can expect to approach the authority and imagination, the power and the delicacy, on occasion, as also the rather incredible virtuosity which went into its performance yesterday evening.[138]

Remarking on the technical demand of the fugue, composer Francis Poulenc stated:

> ...It [the sonata] ends up with a fantastically difficult to play fugue.... Bursting with energy, this finale knocks you out ('Vous-met knock-out') in (something less than) five minutes.[139]

Yet the virtuosic aspect of this piece has not been discussed much by analysts. Besides Lysinger's research, Keith and Tischler also examine formal, harmonic, and melodic aspects of the fugue.[140] None of these authors, however, observe the role that various pianistic devices play in this work. In hopes of unfolding how the fugue

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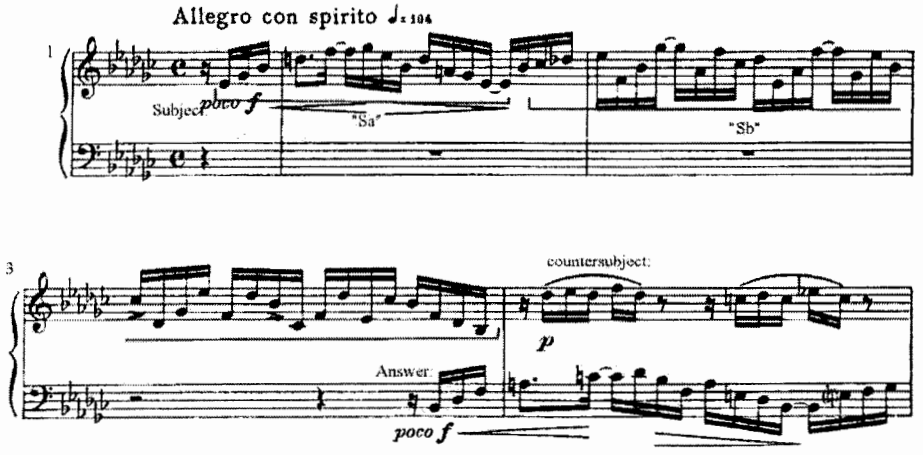
[134] Ibid. See especially the footnote on p. 301 and musical examples on p. 303, which show how the end of the second movement was revised.
[135] Heyman, 304. According to the author, the words *con molto pedale* over measure 3 in the second movement was added at Horowitz's suggestion.
[136] Ibid. Heyman suggests that Horowitz might have requested to add this cadenza after he played through the fugue. On p. 305, the author also shows Barber's holograph before the insertion and the final version.
[137] John Browning, "Samuel Barber's Nocturne, Op. 33," *Clavier* (January 1986): 20. Quoted from Heyman, 300.
[138] Olin Downes, "Horowitz Offers Barber's Sonata," *New York Times* (January 25, 1950): 27. Quoted from Heyman, 294.
[139] Quoted in Heyman, 250.
[140] Keith, "A Comparative Analysis of the Fugue in the Twentieth-Century American Piano Sonata," 5–67; Hans Tischler, "Barber's Piano Sonata Op. 26," *Music and Letters* 33 (October 1952): 352–354.

fulfills Horowitz's expectation for a "flashy" and substantial finale, I will observe how Barber skillfully reshapes the melody and rhythm of the thematic elements of the fugue subject and the countersubject to create the virtuosic effect. I will also demonstrate that virtuosic figurations do not merely serve for pianists as a means of showing off their techniques; rather, these figurations help increase textural variety and dynamic contrast, and heighten musical expression in the fugal process.

II

Let us begins with an examination of the thematic organization of Barber's fugue. As Keith and Tischler demonstrate, the fugue subject is designed in "head" and "tail" fashion.[141] The "head" (Sa) has an arch shape both in melodic contour and in dynamics, whereas the "tail" (Sb) proceeds in downward direction.

Fig. 4-1: The subject and the countersubject in Barber's fugue[142]



[141] See Keith, 16; Tischler, 353. Tischler draws similarities between Barber's subject to the old Italian fugue subjects, as both are deigned as the "head" and "tail" fashion. He also points out that while Italian fugues tend to drop the "tail" section of the subject after the exposition, the two parts in Barber's subject are given equal importance throughout the fugue.

[142] Keith illustrates the two parts division of the fugue subject. See Keith, 16.

After the exposition, the two segments of the subject are treated as independent entities with equal importance; these two segments, along with the countersubject, serve as the main thematic elements for episodic sections.[143] For instance, the episodes in mm. 13–19 and mm. 55–63 are entirely based on the countersubject, whereas mm. 37–45 features the counterpoint between "Sa" and "Sb." The thematic fragmentation in Barber's fugue is reminiscent of Szymanowski's fugue, in which three contrasting segments of the subject combine with each other or with first-movement material to form contrapuntal texture. However, in distinction to Szymanowski's fugue, in which the borrowed first-movement theme contributes a great deal in creating diverse musical colours, Barber's fugue does not recollect old material. As demonstrated in the following examples, the composer furnishes the simple thematic elements of the subject and the countersubject with rhythmic interests and dynamic varieties to form a rich polyphonic fabric, creating a virtuosic effect in the fugue.

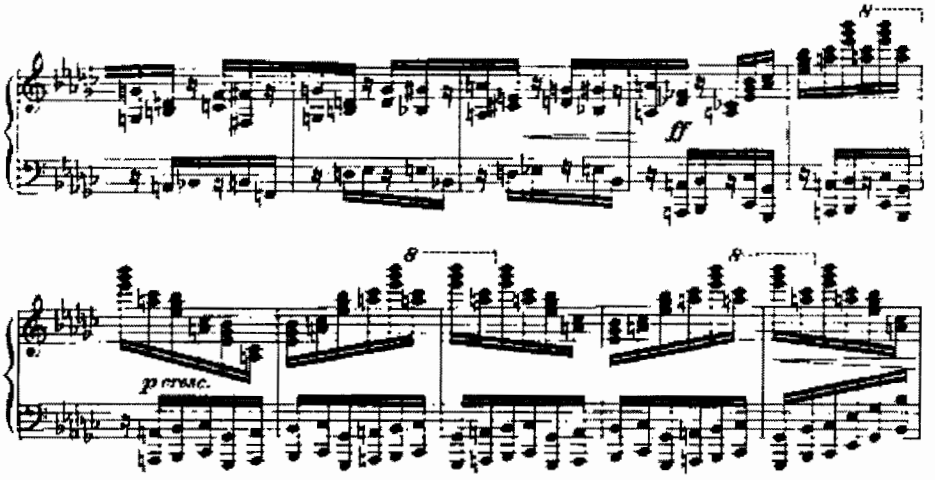
The coda section (m. 99 on), which features successive octaves, powerful chords, and sweeping arpeggiation, is one of the most brilliant passages in the fugue to showcase the performer's virtuosity. Yet, most of these virtuosic figurations are based on simple melodic elements of the subject. The coda begins with the entrance of augmented Sa, which is enriched with thick chords to form an extremely thick texture; then, the rest of the coda underlines a minor-second motive. This motive, according to Lysinger, is an important motive that unifies the entire sonata, as it is prominent in the opening measures in each of the four movements.[144] She points out that in the fugue subject, the minor-second motive is stressed by the peak notes (F–G-flat) in "Sa" and

[143] See Tischler, 353.
[144] See Tischler's discussion of the minor-second motive in ibid., 47–59, especially 49–59.

the two accented notes (C-flat–B-flat) in "Sb."[145] Examining the ending of the fugue, she then shows that the minor-second motive reappears in the *marcatissimo* ostinato bass and also in the last two measures of the fugue, which creates a sense of "symmetry and cohesion" at the end of the sonata.[146]

But I would like to go a step further: the composer does not just "fit" the minor-second motive into the texture to allow the coda to echo previous material; rather, the coda reveals the composer's intent to emphasize this important motive. This is because the composer writes virtuosic figurations based on this motive to make minor-second sonority prevail at the fugue's conclusion. Perhaps the most noteworthy example is the arpeggio in mm. 119–125, which features the harsh, dissonant sonority of minor seconds. Showcasing the performer's technical virtuosity, this passage requires the pianist to swiftly and accurately switch the right hand from one register to another, and to realize the dynamic change from *piano* to *fortissimo*. In the meantime, the bold sonority encourages the performer to play this difficult passage daringly, expressing the wildness and passion of the final conclusion of the sonata.

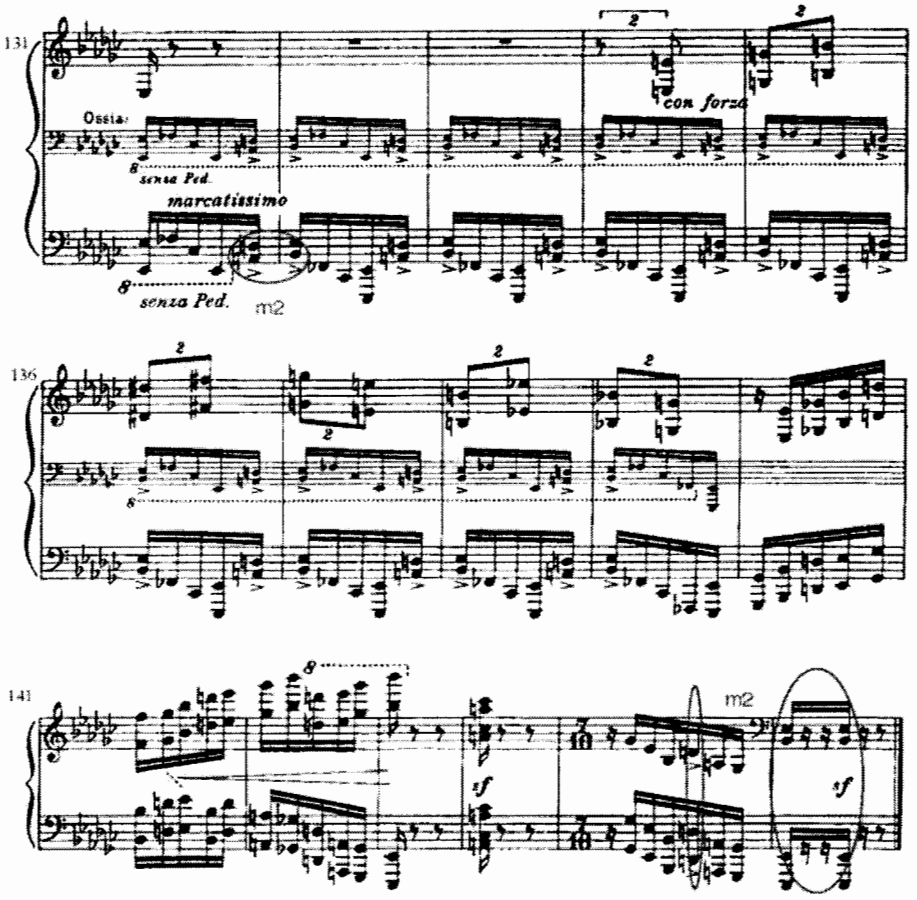
Fig. 4-2: Barber, Piano Sonata, Op. 26, Movement IV, mm. 116–125



[145] Lysinger, 47.
[146] Ibid., 55–57.

The passage in Fig. 4-3 demonstrates how the composer uses rhythmic collisions to intensify the importance of the minor-second motive. In mm. 134–139, the polyrhythm between both hands suggests that the ostinato bass enjoys the same importance as "Sa" in the right hand, rather than serving as an accompaniment. The rhythmic independence of the bass and the accents that are placed on the minor-second motive guide the performer to create three layers of sound in the texture—"Sa," the accentuated minor-second motive, and the bass—and to amplify rhythmic collisions between different voices.

Fig. 4-3: Barber, Piano Sonata, Op. 26, Movement IV, mm. 131–146[147]



[147] The minor-second motive in the ostinato bass and the one in the last two measures are pointed out in Lysinger, 58.

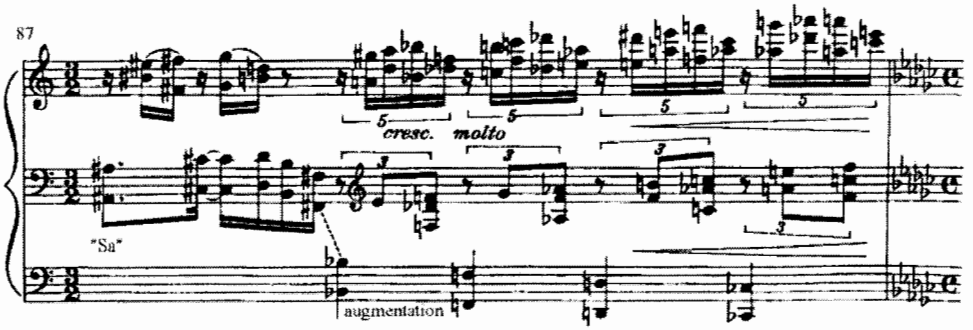
Featuring augmentation in the right hand and polyrhythm between the two hands, in this example mm. 134–139 also shows the simultaneous use of traditional and twentieth-century rhythmic devices. With regard to the role that rhythm plays in the twentieth-century fugues, I have discussed how Carter's rhythmic novelties influence the contrapuntal texture. Similar to Carter's fugue, Barber's piece also characterizes rhythmic variety. The constant use of syncopation and offbeat rhythm is a particularly important factor that makes this Allegro con spirito movement sound sprightly and "flashy." However, Barber's rhythmic writing does not receive much attention in the field of musical research. Among various studies of Barber's fugue, only Keith's inspects Barber's rhythmic writing, showing how Barber uses traditional rhythmic devices to build musical intensity.[148] This neglect is perhaps because of the fact that Barber primarily employs traditional devices such as augmentation, diminution, and stretto, to manipulate the subject and the countersubject, which might make his rhythmic writing appear more conventional than that of Carter.

Nevertheless, a great attribute of Barber's rhythmic treatment is that he skillfully combines twentieth-century devices with traditional ones and makes the two interact. In mm. 134–139, for instance, the rhythmic augmentation in the right hand expresses a sense of resistance and expansion, which opposes to the anxiety and agitation conveyed in rhythmic "disagreement" between both hands and in the relentless ostinato bass. Thus, the use of augmentation reinforces the rhythmic complexity involved in playing the polyrhythm. The contrast between the idea of expansion and agitation amplifies the sense of struggle that is embodied in the minor-second dissonance prevailing in this passage.

[148] Keith, 57–66.

Fig. 4-4 illustrates another example of the simultaneous use of polyrhythm and augmentation. This measure, featuring thickened texture, immense dynamic increase, and rhythmic complexity, leads towards the recapitulation of the fugue, which remarks on the climax of the movement. Keith points out that the polyrhythm vividly expresses a sense of "urgency" that supports the climactic arrival.[149] Nonetheless, he overlooks how the rhythmic augmentation in the bass influences the musical effect of the rhythmic collisions in the upper voices. I find that in this passage, the polyrhythm serves to support the idea of expansion in the bass, because the pianistic writing here encourages the performer to stretch the timing in upper voices, in order to render the big leaps between the bass and the triplets and to produce a full, rounded tone for the subject in the bass. Slightly expanding each quarter pulse also allows the performer to make a crescendo within each polyrhythmic group, which can effectively enhance the *crescendo molto* towards the *ff* in the next measure.

Fig. 4-4: Barber, Piano Sonata, Op. 26, Movement IV, m. 87

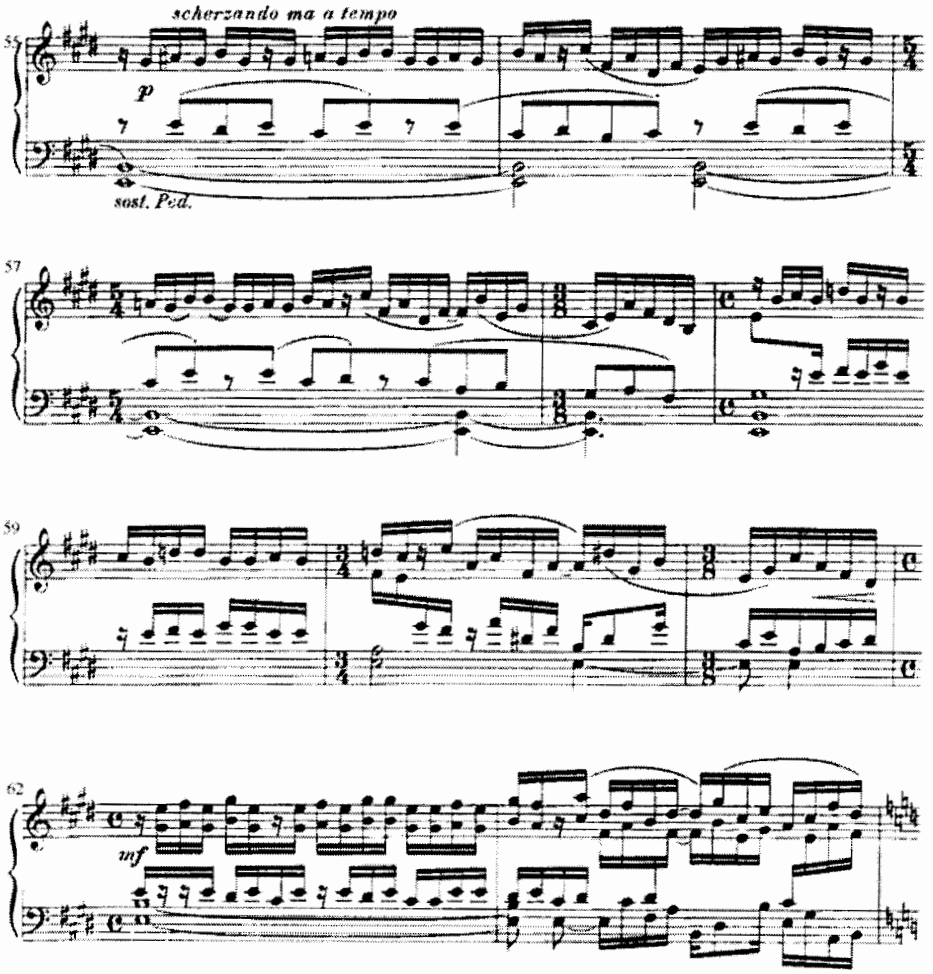


The examples discussed so far feature dazzling chords, big leaps, arpeggios, and rhythmic conflicts, all of which create turbulence and passion in the music, and display the pianist's virtuosity. The next example shows a contrasting passage that enjoys bright harmonic colour and scherzando character; yet, rhythmic variety and

[149] Ibid., 64.

frequent changes of articulation require the pianist's thorough practice to project numerous musical details at a swift tempo. In my examination of this passage, I will compare Browning and Horowitz's performances, which leads to a discussion of how their performances reveal the large-scale organization of the fugue on different levels.

Fig. 4-5: Barber, Piano Sonata, Op. 26, Movement IV, mm. 55–63



This episodic section opens with a sense of simplicity and relaxation. In the first four measures, the right hand plays a simple tune based on the countersubject, while the left hand plays the melodically inverted and rhythmically augmented countersubject. Then, the technical requirement becomes increasingly demanding

from m. 59 onward, where both hands begin to play the countersubject in sixteenth notes. When playing these sixteenth notes, one has to carefully render different articulations and the conflicting rhythmic patterns between both hands, while bringing out a scherzando character. Increasing the textural density, these fast sixteenth notes create an effect that the dynamics build towards the end of the section, where the right hand plays the countersubject in double sixths. Playing double sixths in a fast tempo is one of the most challenging piano techniques, which is tested in Chopin's Étude Op. 25, no. 8 and in the first two variations in Brahms's Paganini Variations Book I, as the pianist has to widely stretch her hand and strike the two notes at exactly the same time, while smoothly connecting every chord to acquire an evenness in tone. The double-sixth figures in this fugal passage also demand that the pianist maintains a well-balanced voicing and projects the contrast between the vivacity of detached sixteenths notes in m. 62 and the lyricism of the legato lines in m. 63.

When playing this difficult figuration in a rapid tempo, I sense an increased level of intensity and excitement; I thus regard these double sixths as an effective device that Barber uses to build the musical expression. However, after listening to Browning's recording, I find that he decreases the tempo and dynamic level in m. 63, even though the composer does not indicate so. Observing Browning's performance of this passage, Lysinger notes the performer's use of timing from the harmonic perspective. With regard to the harmonic traits of this episode, the author points out that the emphasis on E-major triadic harmonies in this episode contrasts to the extensive use of chromaticism in the rest of the movement.[150] Therefore, Lysinger deems that the timing Browning takes in m. 63 not only helps project the harmonic

[150] See Lysinger, 43–44.

change at the end of the section, but also nicely brings the section to its closure.[151] However, upon closer examination of Browning's performance, I find that the timing he takes in m. 63 might not just for the sake of structural clarity. Rather, I can discern his intent to convey a sense of relaxation in this E-major episode. This intent is also reflected in the tempo fluctuation that Browning frequently uses throughout the section. He stretches the melodic flow at the end of each phrase, which considerably reduces the intensity that rhythmic impetus and pianistic devices create.

Horowitz's performance demonstrates a contrasting approach to this episode. He begins the section with a sense of freedom and simplicity, and then gradually increases the tension as the texture is thickened. Although playing in an impressively fast tempo,[152] he maintains it throughout the section, even in the measures with difficult double sixths. His performance of this passage is breathtaking, conveying a strong driving sense meanwhile displaying a sparkling colour of tone. In his performance, we can better perceive rhythmic attributes, textural thickening, and gradually increased musical intensity. Horowitz's thoroughly maintained tempo does not affect the structural clarity; rather, by suddenly dropping the dynamics and changing the tone colour at m. 64, he effectively highlights the harmonic changes and the new musical character in the next section.

Besides this episode, many other sections in the fugue reveal Browning and Horowitz's disparate approaches to timing, which consequently influences listeners' perception of the large-scale organization of the fugue. According to Lysinger's observation, Horowitz performs the fugue "in one, vast wave of energy" and pictures a long and constant buildup process towards the final climax, whereas Browning

[151] Ibid., 68–69.
[152] Comparing the performance time of Browning and Horowitz's recordings, Lysinger finds that the total timing of Horowitz's recording of the finale is about thirty seconds shorter than Browning's. See Ibid., 62.

carefully clarifies the beginning and the end of each section, which allows listeners to recognize each thematic entrance, yet somewhat affects the overall structural flow of the fugue.[153] However, Lysinger does not explain why Horowitz's performance might better reflect the formal organization of the fugue. To close this chapter, I return to the discussion of the thematic organization of the fugue to explain how the thematic fragmentation of the subject influences the formal organization of the fugue. I then discuss Browning and Horowitz's disparate approaches to the formal organization.

I have suggested that the two segments of the fugue subject are treated as independent entities. The complete subject statement, as Tischler observes, only occurs twice after the exposition, once in mm. 20–22, right after the first episode, and the other in mm. 90–95, which is the recapitulation.[154] Hence, the fugue only has two middle entries; the section between the two middle entries is episodic. Nevertheless, this lengthy episodic "territory" from m. 23 to m. 89, is sectional: each section differs in thematic elements, dynamic level, textural density, rhythmic and melodic devices, as well as musical character.

Horowitz and Browning's performances reveal the two performers' distinct views on the organization and the musical expression of the episodic material. Browning's performance emphasizes the sectional divisions within the episodic area (69 measures in length), as the performer often takes time to project the beginning and the end of each section. He also seeks to highlight the emotional contrasts between various sections, and engenders a sense of freedom and relaxation in the sections that are mainly in *piano*, such as the "E-major" episode that we discussed. By comparison, rather than using tempo fluctuation, Horowitz shows the change of musical expression in lyrical sections by producing warm tones and creating a transparent

[153] Lysinger, 68–69.
[154] Tischler, 353.

texture.[155] He also tightens up all the episodic sections to make them an entity that builds towards the culmination of the fugue at the recapitulation. Compared to Browning's performance, Horowitz's interpretation makes the arrival of the climax much more vigorous and effective. More importantly, the ceaseless impetus in Horowitz's performance reinforces the "flashy," virtuosic character of the fugue.

[155] With regard to Lysinger's comments on Horowitz's general approach to texture, see Lysinger, 64.

Conclusion

In Glenn Gould's "So You Want to Write a Fugue," a light-hearted song composed *about* the writing of fugues in the form of a fugue,[156] the text expresses a sentiment of "anti-tradition":

> So you want to write a fugue
> ...
> Cast away all that you were told
> And the theory that you read
> Just ignore the rules and try"[157]

However, written in a manner of a four-voice baroque fugue, the music recalls baroque fugal tradition, and so runs contrary to guidance offered in the lyrics. In his article elucidating the implications of this song, Gould uses twentieth-century fugal writing as an example to demonstrate the kind of tension suggested between the music and the text.[158] Without mentioning any particular composer, Gould observes that the twentieth-century composers' fugal writing features "non-oriented tonality,"[159] and considers the fugue—as "one of the most durable creative devices"—to be adaptable to various music styles.[160]

The tension implied in Gould's song is well reflected in the four twentieth-century fugues by Szymanowski, Hindemith, Carter, and Barber. Featuring diverse stylistic influences, these works exemplify Gould's observation regarding the adaptability of the fugue. In my analysis based on current research of these twentieth-century works, I demonstrated that these fugues retain the outward shape of their

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[156] Glenn Gould, "So You Want to Write a Fugue?" for four voices and string quartets, in *The Glenn Gould Silver Jubilee Album*, audio CD (Sony B00000C28N, 1988).
[157] See Gould's own interpretation of the lyrics in his article "So You Want to Write A Fugue?" which accompanies a disc bound into the April 1964 issue of *HiFi/Stereo Review*. This article is reprinted in Tim Page, ed, *The Glenn Gould Reader* (New York, Alfred A. Knopf, 1984), 234–241.
[158] Ibid.
[159] Gould's wording. See his discussion of the adaptability of the fugue in Page, *The Glenn Gould Reader*, 236–238.

traditional counterparts, embracing the interaction between subject and answer, active interplay amongst contrapuntal voices, thematic manipulation using conventional melodic and rhythmic devices, and alternations between episodes and middle entries that carry the process of increasing and releasing tension. However, while drawing from traditional practices, the four fugues radically deviate from their eighteenth- and nineteenth-century predecessors. The hierarchical tonal system, which had functioned as the governing factor in traditional fugal procedure, is altered or dissolved to various degrees in these twentieth-century works. As a result, cadential progressions and modulations rarely function to confirm the formal structure in the fugue.

Through the lens of a performer, my dissertation examined the complexity involved in performing these twentieth-century fugues, seeking to explore how harmonic, rhythmic, thematic, and formal analysis can inform a performance. Although in some passages, tonal center is at times implied by the appearance of triadic harmonies (such as the "E-major" section in Barber's fugue), consonance and dissonance no longer serve to shape phrasing and give the music a sense of direction as they do in eighteenth- and nineteenth-century fugues. Yet, my analysis showed that the composers use dissonant clashes and chromaticism extensively to strengthen dynamic build-ups while also exploiting rhythmic conflicts as a means of fuelling the musical intensity. Analyzing the motivations that harmonic vocabulary and rhythmic devices carry within the context of each work can help performers approach phrasing and dynamics in the fugues.

In addition to harmonic and rhythmic details, I examined the overall organization of these fugues. In Szymanowski's fugue, the lack of conspicuous key scheme blurs the distinction between episodic sections and middle entries, making its formal structure sometimes difficult to grasp. By comparing different interpretations

of this fugue, I demonstrated that the performers' thoughtful approaches to timing and voicing might influence our perceptions of the formal organization of the work. Moreover, I noticed that Hindemith's, Carter's, and Barber's fugues feature unbalanced proportions between middle entries and episodic material. Carter's and Barber's works contain long build-up processes in extensive episodic sections, whereas in Hindemith's double fugue, the subjects enter successively, barely allowing a relaxation of tension in the fugal process. Seeking to picture the overall formal organization of the fugue in a performance, I demonstrated that performers can use diverse approaches to tempo fluctuation, touch, and dynamic pacing to convey contrasting expressions between episodic sections and middle entries.

Further observing the twentieth-century fugues with "non-oriented tonality," Gould claims the sense of "unceasing motion" of the fugue fascinated the twentieth-century composers and pushed them to employ the fugue as an "organizational" device.[161] This claim suggests that, for the twentieth-century composers who abandoned tonal harmony in their fugues, the fugue is capable of creating a sense of textural density and accumulation of tension without requiring inherent tonal organization. Perhaps the fugue's sense of "unceasing motion" is readily perceivable when we perform and listen to a fugal work. The forward motion and the textural gravity inherent in the fugue bring me a great sense of satisfaction, as the fugue by nature conveys infinite possibilities of "variation,"[162] in which the subject is fragmented, rhythmically and melodically reshaped, and superimposed with various motivic fragments. Each of these events yields diverse forms of expression, yet emphasizes the subject. Further enhancing this sense of variation, the four twentieth-century composers exploit modern harmonic languages and rhythmic devices to

[161] Ibid., 237.
[162] Ibid.

manipulate the thematic material. Nevertheless, their experiments allow their fugues to retain the outward shape of standard fugues, despite the absence of the tonal principles that functioned to "glue" each thematic, rhythmic, and formal event together in their traditional predecessors. Thus, writing the fugue in the twentieth century might not signify a return to the eighteenth-century tradition.[163] Rather, as suggested in Gould's claim, the twentieth-century composers employ the fugue as an "organizational" means to carry out their harmonic and rhythmic experiment, while creating the feeling of gravity and culmination that is indispensible to the finales of multi-movement sonatas.

I find that performing these four fugues together in chronological order is a fascinating experience, as it invites us to revisit the various stylistic influences in the first half of the twentieth century. While the timbral contrasts in Szymanowski's piece present an impressionistic sound world that requires the performer to create a variety of tone colours, Hindemith's fugue, as an epitome of the neoclassical music of the interwar period, calls for a simple, straightforward manner of execution. Carter creates a disjointed texture in his work, whereas Barber emphasizes the lyricism of melodic lines. Both composers creatively incorporate jazz elements into some episodes of their fugues, endowing a delightful, improvisational facet to the fugue that is often deemed a serious, learned genre. The four twentieth-century fugues resist standardization, each revealing the composer's unique approach to "updating" the fugue to suit his individual stylistic persuasions. As we discover the composers' approaches through musical analysis, we can find a path to unfolding the harmonic languages, rhythmic complexity, thematic organization, and formal procedure in the fugue. More importantly, we can experience the enormous satisfaction that composers

[163] For instance, Gould proposed that despite of Hindemith's keen involvement in fugal writing throughout his life, his linear compositions written with a "daringly altered" harmonic language might "represent something other than" simply reviving the baroque tradition. See Page, 240.

may feel in writing a fugue:

> The fun of it will get you,
> And the joy of it will fetch you.
> It's a pleasure that is bound to satisfy.[164]

[164] Ibid., 235.

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