

**FERRUCCIO BUSONI'S USE OF THE SOSTENUTO PEDAL:
EXPANSION OF THE PEDALLING TECHNIQUE**

by

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Abstract

This dissertation is a comprehensive examination of the use of the sostenuto pedal by Ferruccio Busoni (1866-1924) in the first Appendix of his edition of Bach's Well-Tempered Clavier (1894) and *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)* (1923). Although Busoni notated the use of the sostenuto pedal in these two works, scholars have largely overlooked the significance of his groundbreaking pedalling techniques. To contextualize the historical significance of Busoni's use of the sostenuto pedal in the history of the piano repertoire, I analyze the use of the sostenuto pedal in *Consolation No. 3* and *Danse des Sylphes* by Franz Liszt (1811-1886), for Liszt was the only major composer who notated his use of the sostenuto pedal before Busoni. I then use these findings to discuss Busoni's first Appendix and *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)*, which represent Busoni's extensive use of the sostenuto pedal but has not been discussed fully in scholarly literature. To illustrate Busoni's impact, I demonstrate that his use of the sostenuto pedal pre-dated similar pedalling techniques employed by twentieth-century composers, including Percy Grainger (1882-1961), Luciano Berio (1925-2003), and George Crumb (1929-). My research findings provide a contextualized explanation of Busoni's pedalling techniques and identify his contributions to the development of piano playing. Grounded in the most up-to-date and authoritative research, I show that Busoni found new ways to prolong and release tones by using the sostenuto pedal. He developed the use of the sostenuto pedal from merely prolonging a pedal point, as Liszt did, to devising four new pedalling techniques: 1) he altered the customary sequence of sound production of the piano: attack, sustain, and release; 2) he enabled the performance of contrasting articulations and dynamics in multi-layered textures; 3) he prolonged

pedal points and increased the clarity of individual layers within multi-layered textures; 4) he formed polychords. Busoni's use of the sostenuto pedal, I argue, expanded the pedalling technique of the piano.

Lay Summary

This dissertation explores the use of the sostenuto pedal by Ferruccio Busoni (1866-1924) in the first Appendix of his edition of Bach's Well-Tempered Clavier (1894) and *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)* (1923). I argue that in these two works, Busoni expanded the pedalling technique of the piano by finding new ways to sustain and release tones. To highlight the originality of Busoni's pedalling, I compare his use of the sostenuto pedal with its only antecedent: the use of the sostenuto pedal by Franz Liszt (1811-1886) in his letter to William Steinway, written in 1883. Additionally, I show that Busoni pioneered pedalling techniques employed by three twentieth-century composers: Percy Grainger (1882-1961), Luciano Berio (1925-2003), and George Crumb (1929-). My research aims to acknowledge Busoni's contribution to the development of piano playing in the nineteenth and twentieth centuries.

Preface

This thesis, written under the guidance of Dr. Hedy Law, is an original, unpublished work which stands as intellectual property of its author, Edmundo Alejandro González Alvarado. Musical examples from Franz Liszt's piano works are reprinted with kind permission from Editio Musica Budapest. The musical example from Luciano Berio's *Sequenza IV* is reprinted with kind permission from Universal Edition. The musical example from George Crumb's *Makrokosmos* is reprinted with kind permission from Peters Edition. All other musical examples are in the public domain.

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In loving memory of my father, Rubén

Chapter 1: Introduction

And the pianoforte has one possession wholly peculiar to itself, an inimitable device, a photograph of the sky, a ray of moonlight—the Pedal.

The effects of the pedal are unexhausted, because they have remained even to this day the drudges of a narrow-souled and senseless harmonic theory; the treatment accorded to them is like trying to mold air or water into geometric forms. Beethoven, who incontestably achieved the greatest progress on and for the pianoforte, divined the mysteries of the pedal, and to him we owe the first liberties.

The pedal is ill-repute. For this, absurd irregularities must bear the blame. Let us experiment with sensible irregularities.

Ferruccio Busoni (1866-1924). *Sketch of a New Esthetic of Music* (1911).¹

With this statement in his *Sketch of a New Esthetic of Music* (1911), Ferruccio Busoni advocated an approach to the piano pedal that transcended its conventional use. As the passage above emphasizes, Busoni conceived the use of the pedal as a means of expression. He claimed that contemporary pianists were not fully exploring the “unexhausted” effects of the pedal, saying, explicitly, that the pedal was “ill-repute.” For this reason, Busoni proposed an expansion of the pedalling technique. The use of the pedal should not be “the drudges of a narrow-souled and senseless harmonic theory,” as if the composer tried to “mold air or water into geometric forms.” Rather, it can generate distinct sound effects, and the possibilities should be boundless. Remarkably, he did not mention in this passage the pedalling technique developed by nineteenth-century composers such as Chopin and Liszt. Instead, he took Beethoven as his only model. To

¹ Ferruccio Busoni, *Sketch of a New Esthetic of Music* (New York: Schirmer, 1911), 44. The original passage in German was first published in Galston Gottfried's book *Studienbuch* in 1910. The translation was later added to the English edition of Busoni's *Sketch of a New Esthetic of Music*. The original text in German reads: “Und das Klavier besitzt etwas, das ihm ganz allein eigen ist, ein un-nachahmliches Mittel, eine Photographie des Himmels, einen Strahl des Mondlichtes: das Pedal. Die Wirkungen des Pedals sind noch unerschöpft, weil sie noch immer die Sklaven einer engherzigen und unvernünftigen harmonischen Theorie geblieben sind: man geht damit um, als ob man Luft oder Wasser in geometrische Formen bringen wollte. Beethoven, welcher unbestreitbar den größten Fortschritt des Klavieres vollführte, ahnte die Natur des Pedals und ihm verdanken wir die ersten Feinheiten. Das Pedal ist verrufen. Sinnlose Ungesetzlichkeiten sind daran schuld. Man versuche es mit sinnreichen Ungesetzlichkeiten.” Galston Gottfried, *Studienbuch* (Berlin: Verlag von Bruno Cassirer, 1910), 218-219.

continue the legacy of Beethoven's pedalling technique, Busoni provided two opposing terms as a conceptual framework: "absurd irregularities" and "sensible irregularities." Absurd irregularities seem unreasoned, often unintended effects. The use of the pedal would generate "absurd irregularities" when the sustaining of tones does not serve expressive purposes effectively. By contrast, sensible irregularities are reasoned, intentional effects. Although they are still anomalies, "sensible irregularities" would serve expressive purposes effectively. Busoni's experimentation with the pedal aimed to create a progressive use of the pedal in which the sustaining and release of tones would be a means of pianistic expression.

In *Studienbuch*, where Busoni first published the passage quoted above, he provided two examples of Beethoven's use of the damper pedal: 1) mm. 143-148 and mm. 153-158 of the first movement of his Sonata Op. 31 No. 2, and 2) mm. 1-8 of the third movement of his Sonata Op. 53 (see Example 1.1 and 1.2).² In the first example, the long pedal marking in mm. 142-148 of the first movement of Sonata Op. 31 No. 2 (marked "Ped. *" in Example 1.1) indicates that the performer uses the damper pedal to sustain the arpeggio of A major in the first inversion in m. 143 and the first two beats of m. 144 (i.e., C-sharp, E, A, c-sharp, e, a, c-sharp¹, e¹, a¹) as well as all the notes of the following recitative in mm. 144-148.³ The recitative consists of all seven pitches of the D-minor harmonic scale (i.e., a¹, b-flat¹, g¹, e², d², c-sharp², f¹). The use of the damper pedal, therefore, produces an atmospheric or what I call "hazy" sound by sustaining the resonances of all the tones of both the A major arpeggio and the recitative. Similarly, in mm. 153-158, the performer sustains a C-major chord in the first inversion in mm. 153 and 154 (i.e., E, G, c, e, g, c¹, e¹, g¹, c²), while playing with his right hand a recitative in mm. 155-158 that

² See Gottfried, *Studienbuch*, 219.

³ The octave designation uses the following system: C¹, C, c, c¹, c², c³, c⁴. Middle C is indicated as c¹.

includes the chord tones of c^1 , g^1 , and c , and the pitches $d\text{-flat}^2$, $d\text{-flat}^1$, $b\text{-flat}$, $a\text{-flat}^1$, $b\text{-flat}^1$. This accumulation of resonances again produces a “hazy” sound. The use of the damper pedal in these two passages, mm. 143-148 and mm. 153-158, generates an unusual sonority, making them stand apart from the rest of the movement. To emphasize the sustained resonances in figurative terms, Busoni remarked that Beethoven intended these passages to sound “as if one were speaking in a cave” (*als ob man in eine Höhle hineinspräche*).⁴

Example 1.1. Ludwig van Beethoven, first movement of Sonata Op. 31 No. 2, mm. 137-158.

137 *p* *sf* **Largo** *con espressione e semplice*

146 **Allegro** *cresc.*

152 **Adagio** **Largo** *sf* *p* *pp* *con espressione e semplice*

⁴ Gottfried, *Studienbuch*, 219.

In the second example provided by Busoni, the opening of the third movement of Sonata Op. 53, the use of the damper pedal (marked “Ped. *” in Example 1.2) blends the C major chord (the tonic of the Sonata) in mm. 1-2, 4-6, and 8, together with the G major harmony (the dominant of C major) in mm. 3 and 7. The performer uses the damper pedal from m. 1 to sustain the bass, C, the broken chord of C major, and the upper melody that he plays with his left hand. In m. 3, the broken chord of G major matches the melody that outlines the chord tones of the G major chord (i.e., d^2 , g^1). Typically, a performer would instinctively change the damper pedal in m. 3 to avoid the overlap of the C major chord and the G major chord. However, Beethoven indicated that the passage should be sustained without changing the damper pedal until the end of the phrase in m. 8. Thus, the performer sustains the C major harmony of mm. 1-2 over the G major harmony of m. 3. Moreover, in m. 4, the performer sustains the accumulated resonances of mm. 1-3 over another C major harmony. The performer keeps sustaining the damper pedal down in m. 7, when the harmony changes again to the G major chord. He is to release the damper pedal only after the first beat of the following measure, where the melody ends with a c^2 . This use of the damper pedal is another instance where Beethoven accumulated the resonances of two different chords, in this case, the tonic and dominant of C major, to generate a “hazy” effect.

In his book *Beethoven The Pianist*, Tilman Skowroneck discusses the use of the damper pedal in this excerpt. He notes that Beethoven wrote the following instruction on the first page of the manuscript of this movement: “where ped. is indicated, the whole of the damping of the bass as well of the treble is lifted.”⁵ Skowroneck concludes that Beethoven purposely used the damper pedal to sustain the bass, the broken chords and the tones of the melodic line in mm. 1-8 to

⁵ Tilman Skowroneck, *Beethoven the Pianist* (Cambridge: Cambridge University Press, 2010), 210.

generate a specific sound effect.⁶ To my mind, Beethoven's idea of sustaining resonances in the recitatives of mm. 143-148 and mm. 153-158 of his Sonata Op. 31 No. 2, and mm. 1-8 of the first movement of Sonata Op. 53 exemplify what Busoni called "sensible irregularities."

Example 1.2. Ludwig van Beethoven, third movement of Sonata Op. 53, mm. 1-12.



Despite his attention to pedalling, Busoni inserted only a few pedal markings in his piano works. His major piano works—his piano transcription of Bach's works, the *Fantasia Contrappuntistica* (1910), the six Sonatinas (1910-1920), and the *Klavierübung* (1917-1924)—include few pedal indications. Some of those pedal markings, however, expanded the traditional pedalling techniques of that time. For instance, he notated an unusually long pedal indication in mm. 104-110 of his Sonatina No. 4 (*In Diem Nativitatis Christi MCMXVII*) (1917). Busoni's use

⁶ Ibid, 213.

of the damper pedal in mm. 104-110 of his Sonatina No. 4 (marked “Pedale tenuto”) sustains the A minor seventh broken chord in mm. 104-106 (i.e., A¹, E, G, and c, played by the left hand, and e played by the right hand), together with all the tones of the ascending line in mm. 107-110 consisting of the pitches G, B, c-sharp, f-sharp, g, b, c-sharp¹, f-sharp¹, g¹, and b¹ (see Example 1.3). Since the performer plays the notes of the ascending line while sustaining the A minor seventh chord, the listener may perceive the tones B, C-sharp, and F-sharp as an extension of the A minor seventh chord. The use of the damper pedal thus blends the A minor seventh chord with the tones of the ascending line into a single sonority. The tone B then becomes the major ninth of the chord, D-flat (enharmonically spelled as C-sharp) becomes the diminished eleventh, and F-sharp becomes the major thirteenth. The resulting extended chord can be described as Am^{#13}. The ascending line ends with the pitch b¹ on the fourth beat of m. 110, which becomes an unresolved suspension in mm. 111-112, and, in effect turns the A minor seventh chord into the A minor ninth chord. As pointed out by scholar James Parakilas, composers in the twentieth century such as Debussy and Messiaen used the damper pedal to “gather together and hold in suspension sounds that jar with each other harmonically and otherwise.”⁷ I argue that in mm. 104-110 of Sonatina No. 4, Busoni used the damper pedal to sustain all the tones of the A minor seventh broken chord and the ascending line, forming an extended chord.

⁷ James Parakilas, *Piano Roles: A New History of the Piano* (New Haven: Yale University Press, 2008), 293.

Example 1.3. Ferruccio Busoni, Sonatina No. 4 (*in diem Nativitatis Christi MCMXVII*), mm 101-112.



As shown in the examples above, Busoni placed special emphasis on the effects of the pedal. Therefore, his use of the piano pedals in his musical works and his discussion of his pedalling technique in musical writings deserve scholarly attention. This dissertation focuses on one aspect of Busoni's pedalling technique: his use of the sostenuto pedal. To elucidate this aspect, I will examine two primary sources: 1) the "first Appendix" of Busoni's edition of the first book of Bach's Well-Tempered Clavier BWV 846-869 (1894), and, 2) *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)* (1923). These two sources are the only ones in his piano repertory in which Busoni explicitly notated the use of the sostenuto pedal. Their significance has not been explained in detail in scholarly literature. Major scholarly works that examine Busoni's music such as Edward Dent's *Ferruccio Busoni: A Biography* (1933), Antony Beaumont's *Busoni the Composer* (1985), Della Couling's *Ferruccio Busoni: A Musical Ishmael* (2005), Larry Sitsky's *Busoni and the Piano: The Works, the Writings, and the Recordings* (2009), Gregory Kogan's *Busoni as Pianist* (2010), and Erinn Knyt's *Ferruccio Busoni and His*

Legacy (2017), have not fully explained Busoni's uses of the sostenuto pedal.⁸ Furthermore, scholarly works that discuss uses of the piano pedals throughout the piano repertoire such as Victor Wolfram's *The Sostenuto Pedal* (1965), Joseph Banowetz's *The Pianist's Guide to Pedaling* (1985), David Rowland's *A History of Pianoforte Pedalling* (1993), Rowland's "The Piano Since C. 1825" (1999), Edwin Good's *Giraffes, Black Dragons, and Other Pianos* (2001), Stuart Isacoff's *A Natural History of the Piano* (2001), James Parakilas's *Piano Roles: A New History of the Piano* (2008), and Marilyn Nonken's *The Spectral Piano: From Liszt, Scriabin, and Debussy to the Digital Age* (2014), do not examine Busoni's experiments with the sostenuto pedal.⁹ For these reasons, this dissertation offers an exhaustive analysis of Busoni's use of the sostenuto pedal in the first Appendix of his edition of the first book of Bach's Well-Tempered Clavier and *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)*.

⁸ See Edward J. Dent, *Ferruccio Busoni: A Biography* (London: Oxford University Press, 1933); Antony Beaumont, *Busoni the Composer* (Bloomington: Indiana University Press, 1985); Marc-André Roberge, *Ferruccio Busoni: A Bio-Bibliography* (New York: Greenwood Press, 1991); Della Couling, *Ferruccio Busoni: A Musical Ishmael* (Lanham: Scarecrow Press, Inc., 2005); Larry Sitsky, *Busoni and the Piano: The Works, the Writings, and the Recordings* (Hillsdale, NY: Pendragon Press, 2009); Gregory Kogan, *Busoni as Pianist* (Rochester: University of Rochester Press, 2010); Erinn Knyt, *Ferruccio Busoni and His Legacy* (Bloomington: Indiana University Press, 2017).

⁹ See Victor Wolfram, *The Sostenuto Pedal* (Stillwater: Oklahoma State Publications, 1965); Joseph Banowetz, *The Pianist's Guide to Pedaling* (Bloomington: Indiana University Press, 1985); David Rowland, *A History of Pianoforte Pedalling* (Cambridge: Cambridge University Press, 1993); David Rowland, "The Piano Since C.1825," in *The Cambridge Companion to the Piano*, ed. David Rowland (Cambridge: Cambridge University Press, 1998), 40–56; Edwin M. Good, *Giraffes, Black Dragons, and Other Piano* (Stanford: Stanford University Press, 2001); Stuart Isacoff, *A Natural History of the Piano: The Instrument, the Music, the Musicians—from Mozart to Modern Jazz, and Everything in Between* (New York: Alfred A. Knopf, 2011); Parakilas, *Piano Roles*; Marilyn Nonken, *The Spectral Piano: From Liszt, Scriabin, and Debussy to the Digital Age* (Cambridge: Cambridge University Press, 2014).

1.1 Literature Review

As mentioned above, the main scholarly sources that examine the use of the sostenuto pedal in the piano repertoire neglect Busoni's role in expanding the sostenuto pedalling technique. Victor Wolfram's *The Sostenuto Pedal* (1965), Joseph Banowetz's *The Pianist's Guide to Pedaling* (1985), and David Rowland's *A History of Pianoforte Pedalling* (1993) do not examine Busoni's use of the sostenuto pedal in the "first Appendix" of his edition of Bach's Well-Tempered Clavier and *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)*. Instead, Rowland, Banowetz and Wolfram focus their research on uses of the sostenuto pedal by Franz Liszt (1811-1886), Claude Debussy (1862-1918), and Maurice Ravel (1875-1937).¹⁰

Whereas Liszt's contribution to the development of the sostenuto pedal is evident in the letter he sent to William Steinway, the other composers that are often associated with the use of the sostenuto pedal—Debussy and Ravel—did not write any sostenuto pedal markings in their piano works. Some scholars, however, suggest using the sostenuto pedal in their pieces. Roy Howat notes that both Debussy and Ravel performed on pianos with a sostenuto pedal. He specifically identifies four pianos—one Pleyel grand piano and three Steinway grand pianos—which Debussy and Ravel occasionally played. Howat argues that the fact that Debussy and Ravel did not indicate the use of the sostenuto pedal does not necessarily mean that they disapproved its use. He suggests using the sostenuto pedal in several works by Debussy, such as mm. 43-44 of the Prelude No 6 from Book II, "General Lavine," mm. 110-115 of "Jardins sous la pluie" from *Estampes*, mm. 33-35 of Etude No. 3 "Pour les Quartes," and the following works

¹⁰ Ibid.

by Ravel: m. 578 of “Scarbo” from *Gaspard de la nuit*, mm. 59-60 of the “Menuet” from *Le tombeau de Couperin* and mm. 168-169 of the second movement of his *Sonatine*.¹¹ Following the same line of inquiry, Paul Roberts affirms that although an appropriate use of the damper pedal is crucial in Ravel’s piano music, Ravel did not notate it meticulously. Roberts suggests that Ravel was aware that the use of the sostenuto pedal would be beneficial in some passages of his music but he did not indicate it because he “had had no way of demonstrating the *sostenuto* mechanism” on his own piano.¹² Roberts suggests using the sostenuto pedal in mm. 168-169 of the second movement of Ravel’s *Sonatine* and the “Epilogue” of *Valses Nobles et Sentimentales*.¹³ The use of the sostenuto pedal in other works by Debussy and Ravel has been discussed in numerous publications.¹⁴ These suggestions should not be confused with historical facts. Both Howat and Roberts make claims based on the assumption that Debussy and Ravel approved the sostenuto pedal in their works merely because they occasionally played on pianos equipped with this pedal. However, there is not a single score or document in which Debussy or Ravel notated their use of the sostenuto pedal. It is therefore misleading to suggest that either of them used the sostenuto pedal in principled ways in their piano works.

To assess Busoni’s role in the development of the use of the sostenuto pedal from a documented and historical perspective, I will examine Liszt’s uses of the sostenuto pedal in

¹¹ Roy Howat, *The Art of French Piano Music: Debussy, Ravel, Faure, Chabrier* (New Haven: Yale University Press, 2009), 287-289.

¹² Paul Roberts, *Reflections: The Piano Music of Maurice Ravel* (Milwaukee: Amadeus Press, 2012), 179.

¹³ *Ibid.*

¹⁴ See Wolfram, *The Sostenuto Pedal*, 32-41; Elizabeth McCrae, “Ravel’s Valses Nobles et Sentimentales: Analysis, Stylistic Considerations, Performance Problems” (PhD diss., Boston University School for the Arts, 1974), 149-154; Joseph Banowetz, “Pedaling technique,” in *Teaching Piano*, ed. Denes Agay (New York: Yorktown Music Press, Inc., 1981), 120; Margaret A. Houck, “The History and Development of the Sostenuto Pedal and Its Use in Selected 20th-Century Repertoire” (M.M. diss., California State University, 1982), 19-21; Mary Ray Johnson, “The Development of Techniques for Teaching the Various Uses of the Pedals of the Contemporary Grand Piano” (PhD diss., University of Florida, 1989); Sandra Rosenblum, “Pedaling the Piano: A Brief Survey from the Eighteenth Century to the Present,” *Performance Practice Review* 6, no. 2 (1993): 158-178, 173-176; Maria Metaxaki, “Considerations for Pedalling Debussy’s Piano Music” (PhD diss., City University London, 2005), 73-74.

Chapter Two of this dissertation. Liszt was the first major composer who notated his use of the sostenuto pedal, which he did in two musical examples attached to a letter to William Steinway in 1883. These examples, I propose, set the only precedents for Busoni's first Appendix.

Liszt's use of the sostenuto pedal is well documented. He owned a Steinway grand piano with a sostenuto pedal. The piano was a gift for Liszt from William Steinway (1835-1896), business manager of the American company Steinway & Sons, who sent it from New York to Weimar in 1882.¹⁵ In a letter of acknowledgement to Steinway, written in November 1883, Liszt praised the instrument for its "power, tone, cantabile, and perfect harmonic effect." He wrote: "Concerning the use of the sostenuto pedal, I am enclosing to you two examples: *Danse des Sylphes* of Berlioz and N. 3 of my *Consolations*. For today, I am only writing out the opening bars of both pieces, together with the remark that, if it should suit you, I will gladly make a complete transcription, with a precise adaptation for the said pedal."¹⁶ Liszt's letter to William Steinway has been reprinted, translated and discussed in various sources.¹⁷ Although scholars acknowledge Liszt's use of the sostenuto pedal in the fragments of his *Consolation* No. 3 and *Danse des Sylphes* as the first notated examples of the use of the sostenuto pedal in the piano repertoire, no scholar has published a detailed analysis of Liszt's use of the sostenuto pedal. In Chapter Two, I will contribute to the scholarly literature by examining Liszt's use of the sostenuto pedal in these two sources: the two fragments of *Consolation* No. 3 and *Danse des*

¹⁵ Geraldine Keeling, "Liszt and Steinway," in *Liszt the Progressive*, ed. Hans Kagebeck and Johan Lagerfelt (Lewiston, NY: Edwin Mellen Press, 2001), 99.

¹⁶ Franz Liszt, *Liszt Letters in the Library of Congress*, introduced, translated, annotated, and edited by Michael Short (Hillsdale, NY: Pendragon Press, 2002), 236-237.

¹⁷ Discussions about Liszt's use of the sostenuto pedal can be found in Wolfram, *The Sostenuto Pedal*, 24-30; Houck, "The History and Development," 20; Rowland, *A History of Pianoforte*, 153; Kenneth Hamilton, *Liszt, Sonata in B Minor* (Cambridge: Cambridge University Press, 1996), 68; France Clidat, "The Transcendental Studies: A Lisztian Pianist's Impressions," In *New Light on Liszt and His Music: Essays in Honor of Alan Walker 65th Birthday*, ed. Michael Saffle and James Deaville (New York: Pendragon Press, 1997), 315-318; Keeling, "Liszt and Steinway," 99-100; Liszt, *Liszt Letters*, 236-237. Kenneth Hamilton, *After the Golden Age: Romantic Pianism and Modern Performance* (New York: Oxford University Press, 2008), 174.

Sylphes. To substantiate my claim, I will discuss the use of the sostenuto pedal in other passages of *Consolation* No. 3 and *Danse des Sylphes*. Based on my analyses, I also suggest the use of the sostenuto pedal in other Liszt's piano works, namely, his transcription of Mozart's "Confutatis" from *Requiem* K.626 and his transcription of Berlioz's *Symphonie Fantastique*.

In January 1894, eleven years after Liszt wrote his letter to William Steinway, Busoni first published his use of the sostenuto pedal in what he called the "first Appendix" of his edition of the first book of Bach's Well-Tempered Clavier. He got acquainted with the sostenuto pedal when he moved to the United States to teach piano at the New England Conservatory in September 1891.¹⁸ Scholar Kenneth Hamilton observes that Busoni did not have access to the sostenuto pedal before his arrival to America.¹⁹ By the time Busoni published his edition of the first book of Bach's Well-Tempered Clavier, in January of 1894, he had known the sostenuto pedal for over two years. This period marks the first phase of Busoni's experimentation with the sostenuto pedal.

Busoni's edition of the first book of Bach's Well-Tempered Clavier (1894) was published as the first of a twenty-five-volume edition of Bach's keyboard works, supervised by Busoni himself (see Appendix A). In the Introduction to this volume, Busoni clarified the pedagogical purpose of this edition: "the present edition ... aims in a certain sense at re-founding, as it were, this inexhaustible material into an advanced method."²⁰ Busoni's "advanced method" consists of his edition of Bach's Inventions BWV 772-786, the first book of the Well-Tempered Clavier, and three piano transcriptions of Bach's works (i.e., Prelude and Fugue in D Major for Organ BWV

¹⁸ Marc-André Roberge, "Ferruccio Busoni in the United States," *American Music* 13, no. 3 (Fall 1995): 297-298.

¹⁹ Hamilton, *After the Golden Age*, 175.

²⁰ Johann Sebastian Bach, *Well-Tempered Clavier* ed. Ferruccio Busoni (New York: Schirmer, 1894), ii. Busoni wrote the Introduction of this edition in English.

532, Prelude and Fugue in E-flat major for Organ BWV 552, and Chaconne in D minor for Violin BWV 1004). Furthermore, Busoni offered the following pedagogical exercise:

Every really ambitious student of the piano ought to take up the still unarranged organ-compositions by Bach, and try reading them at sight with as great completeness and richness of harmony as is possible on the pianoforte (doubling the pedal-part in octaves wherever feasible). The manner in which this is to be executed is suggested in the *Examples of Transcription* given as an Appendix to Part I.²¹

Thus, according to Busoni, the first Appendix is a pedagogical guide to transcribing Bach's organ works for the piano. He divided it into five sections: 1) doublings; 2) registration; 3) additions, omissions, and liberties; 4) the use of the piano pedals; 5) interpretation (style of playing). In the fourth section, Busoni discussed the sostenuto pedal and provided fifteen examples to demonstrate various pedalling techniques (Examples 76-90 according to Busoni's numbering system). These fifteen examples, I propose, mark an important milestone in Busoni's expansion of his pedalling technique.

In his book *After the Golden Age: Romantic Pianism and Modern Performance* (2008), scholar Kenneth Hamilton recognizes the historical significance of Busoni's use of the sostenuto pedal in Examples 76-90. He identifies as significant Example 84 (an excerpt of the first movement of Beethoven's Symphony No. 1) and Example 85 (a newly composed ending of Bach's Prelude in E-flat major BWV 552). He notices that the sostenuto pedal marking inserted in Example 85 does not appear in Busoni's transcription of this Prelude and Fugue, published by Breitkopf and Härtel in 1890. Hamilton concludes that Busoni used the sostenuto pedal to imitate the pedals of the organ, allowing the performer to prolong a pedal point while playing with

²¹ Ibid.

clarity the texture of a passage.²² Hamilton's remarks help explain a group of examples. As I shall discuss in Chapter Three, Busoni used the *sostenuto* pedal to imitate the pedals of the organ in Examples 79-83 and 85. However, my findings also show that Busoni experimented with other effects that Hamilton has not discussed. Examples 76-79 and 86-90 are newly composed excerpts, and Example 84 is an excerpt of Beethoven's Fourth Symphony. In the newly composed examples, Busoni used the *sostenuto* pedal to prolong chords and tones that generate distinct musical effects.

Similar to Hamilton, Joseph Banowetz mentions Busoni's use of the *sostenuto* pedal in an attempt to imitate the organ sonority on the piano. In his book *The Pianist's Guide to Pedalling* (1985), Banowetz points out that in Example 79, which is an excerpt of Bach's Prelude and Fugue in D major BWV 532, Busoni used the *sostenuto* pedal to prolong a pedal point that is originally played on the pedal board of the organ.²³

Although Banowetz briefly describes Example 79, and Hamilton offers a general description of Busoni's use of the *sostenuto* pedal, no scholar to date has examined Busoni's use of the *sostenuto* pedal in the entire set, Examples 76-90. For this reason, in Chapter Three of this dissertation, I offer a comprehensive examination of Busoni's uses of the *sostenuto* pedal in all fifteen examples of the first Appendix. My findings contribute to the literature on Busoni's use of the *sostenuto* pedal.

As I mentioned above, the "first Appendix" was one of the two major sources of Busoni's use of the *sostenuto* pedal. The second major source was an extension of the first one. Twenty-nine years after the publication of his edition of Bach's Well-Tempered Clavier, in November

²² Hamilton, *After the Golden Age*, 176.

²³ Banowetz, *The Pianist's Guide to Pedaling*, 133.

1923, Busoni devised the next stage of his use of the sostenuto pedal in *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)*.²⁴ This work is part of the ninth book of Busoni's *Klavierübung*, published in 1925. The *Klavierübung* consists of a wide variety of musical materials: technical exercises, excerpts from Busoni's music, excerpts from works by other composers edited by Busoni, pieces in their entirety by Busoni, and pieces in their entirety by other composers edited by Busoni. The five-volume first edition was published from 1917 to 1922. The ten-volume second edition was published posthumously in 1925 (see Appendix B). In volume nine of the second edition entitled *Sieben Kurze Stücke zur Pflege des Polyphonen Spiels* (Seven Short Pieces for the Cultivation of Polyphonic Playing), Busoni indicated his use of the sostenuto pedal only in *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)*.

Importantly, Busoni used German and English languages side by side in the bilingual title of *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)* to highlight the geographical and historical significance of the sostenuto pedal. Although the first prototype of the sostenuto pedal was built by Xavier Boisselot in France in 1844, the Steinway & Sons company in the U.S.A. designed and patented their own in 1874.²⁵ Soon after the American company filed their patents, they started making pianos with sostenuto pedal for the first time in both America and Europe.²⁶ European builders, however, including the Steinway manufacturing company in Hamburg, remained slow to adopt the sostenuto pedal. For instance, in a pamphlet

²⁴ Antony Beaumont, *Busoni the Composer* (Bloomington: Indiana University Press, 1985), 306.

²⁵ Rowland, *A History of Pianoforte*, 23-25.

²⁶ Albert Steinway, William Steinway's youngest brother, filed three different patents for the sostenuto pedal. A patent for a sostenuto pedal "applicable to all kind of piano-fortes" was issued in 1874. Two patents were issued the next year, a sostenuto pedal for the grand piano and a sostenuto pedal for the upright piano. See Albert Steinway, *Piano-Forte Attachments*, US Patent 156388, filed October 15, 1874, and issued October 27, 1874; Albert Steinway, *Piano Attachments*, US Patent 164052, filed May 15, 1875, and issued June 1, 1875; Albert Steinway, *Piano Attachments*, US Patent 164053, filed May 15, 1875, and issued June 1, 1875. The patents can be accessed at <https://patents.google.com/patent/US156388A/en?q=US156388>, <https://patents.google.com/patent/US164052A/en?q=US164052>, <https://patents.google.com/patent/US164053A/en?q=US164053>.

published in 1892, the English piano manufacturer John Broadwood & Sons stated their reluctance to embrace the sostenuto pedal. The German company Bösendorfer included the sostenuto pedal in their pianos much later, after WWII. Even the Hamburg Steinway branch began making pianos with sostenuto pedal only in the 1940s.²⁷ Scholar Edwin Good comments that ‘Europeans have not liked it [the sostenuto pedal] as Americans have; however, it has become relatively standard, and European composers have written music requiring it’ (see a list of composers that have used the sostenuto pedal in Appendix C).²⁸ When Busoni composed *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)* in 1923, he was well aware that the sostenuto pedal was scarcely available in Europe. Hence, the English subtitle of the work—*Steinway & Sons Sustaining-Pedal*—informs the performer specifically of the American origin of this pedal. The subtitle indicates that the piano equipped with a sostenuto piano began as an American, and not a European, instrument.

Scholar Anthony Beaumont explains another aspect of *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)*: its relationship with Busoni’s opera *Doktor Faust*. *Doktor Faust*, Busoni’s last opera, was composed from 1910 to his death in 1924.²⁹ Beaumont identifies a motif from *Doktor Faust* in mm. 14-15 of *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)*.³⁰ Furthermore, he shows that Busoni planned to use two sections of *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)* to end the last scene of *Doktor Faust*.³¹ Beaumont’s research is particularly useful to understand *Mit Anwendung des III. Pedals*

²⁷ Rowland, *A History of Pianoforte*, 25.

²⁸ Good, *Giraffes*, 24.

²⁹ Erinn E. Knyt, “Approaching the Essence of Music: Stylistic Heterogeneity in Ferruccio Busoni’s *Doktor Faust*,” *The Journal of Musicological Research* 35, no. 3 (June 2016): 179.

³⁰ Beaumont, *Busoni*, 306.

³¹ Antony Beaumont, “Busoni’s *Doctor Faust*: A Reconstruction and Its Problems,” *The Musical Times* 127 No. 1718 (Apr. 1986): 196-197.

(*Steinway & Sons Sustaining-Pedal*). As I shall discuss in Chapter Four, Busoni composed this piano work using the style and harmonic vocabulary of his opera *Doktor Faust*. Importantly, the use of the sostenuto pedal allowed him to form the polyphonic textures of the work.

Although *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)* represents a critical point in the development of Busoni's pedalling technique, scholars have largely overlooked his use of the sostenuto pedal in this work. Beaumont and Hamilton describe this work as a "study" for the sostenuto pedal.³² Virginia Englund observes that Busoni used innovative uses of the sostenuto pedal in this work, but she erroneously claims that he did it by using the three pedals of the piano simultaneously.³³ Larry Sitsky oversimplifies Busoni's use of the sostenuto pedal in *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)*, stating that his use of the sostenuto pedal prolongs pedal chords "while unrelated harmonies move above it without any blurring."³⁴ Although these scholarly studies point out different uses of the sostenuto pedal in this work, none of them offers a thorough examination of them. In response to this gap in the piano literature, I conduct a comprehensive examination of Busoni's use of the sostenuto pedal in *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)* in Chapter Four of this dissertation

In addition to using the sostenuto pedal in the examples of the first Appendix and *Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)*, Hamilton claims that Busoni employed the sostenuto pedal when performing the chorale section of Chopin's Scherzo Op. 39.³⁵ Although Hamilton does not provide a source for his claim, Example 1.4 shows how Busoni

³² Beaumont, *Busoni the Composer*, 306; Hamilton, *After the Golden Age*, 177.

³³ Virginia Englund, "Musical Idealism on Busoni's *Klavierübung*" (DMA diss., University of Alabama, 1991), 62.

³⁴ Sitsky, *Busoni and the Piano*, 171.

³⁵ Hamilton, *After the Golden Age*, 177.

might have used the sostenuto pedal to sustain the D-flat chord from the first beat of m. 159 to the first beat of m. 163. This use of the sostenuto pedal would allow the performer to prolong the D-flat chord while changing the damper pedal to play the descending D-flat broken chord figuration. The prolongation of the D-flat chord follows Chopin's pedal marking ("Ped *," which refers to the use of the damper pedal and not the sostenuto pedal) and enables the performer to enhance the clarity of the eight notes that outline the D-flat broken chords in the left hand and the more scalar figuration in the right hand.

Example 1.4. Frédéric Chopin, *Scherzo* Op. 39, mm. 155-170.



The literature review presented in this chapter shows that Busoni's use of the sostenuto pedal has not been examined fully and thus deserves scholarly investigation. To this end, I will contribute to the scholarly studies of piano playing by offering a thorough investigation of the different effects produced by the sostenuto pedal in Examples 76-90 of the first Appendix of Busoni's edition of Bach's *Well-Tempered Clavier* in Chapter Three and *Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)* in Chapter Four. To prepare for these two chapters, I contextualize Busoni's use of the sostenuto pedal in Chapter Two by analyzing Liszt's use of the sostenuto pedal in his letter to William Steinway. To demonstrate the impact of Busoni's

innovations, I add Chapter Five as the concluding chapter to this dissertation. In this final chapter, I discuss Busoni's pedalling techniques in a few twentieth-century piano compositions, shown in excerpts from Percy Grainger's *One More Day, My John* (1916), Luciano Berio's *Sequenza IV* (1966), and George Crumb's *Music of Shadows* (1972). Additionally, I am providing a list of piano works that explicitly employ the sostenuto pedal (see Appendix C). I do not claim that this list is comprehensive; rather, I compile this list to help further the research on the use of the sostenuto pedal in the piano repertoire.

1.2 Summary

Busoni's use of the sostenuto pedal, I argue, demonstrates an expansion of the pedalling technique of the piano that has not received sufficient scholarly attention. This dissertation presents for the first time a comprehensive examination of Busoni's use of the sostenuto pedal in the first Appendix of his edition of Bach's Well-Tempered Clavier (Examples 76-90) and *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)*. To show the unprecedented innovations in Busoni's pedalling techniques, I will analyze Liszt's use of the sostenuto pedal in his *Consolation* No. 3 and *Danse des Sylphes*. Furthermore, I will demonstrate that Busoni's use of the sostenuto pedal pre-dated similar pedalling techniques in the works of twentieth-century composers, including Percy Grainger, Luciano Berio, and George Crumb. My research employs Busoni's use of the sostenuto pedal as a case study to provide a contextualized understanding of his pedalling techniques and to acknowledge his contributions to the history of piano playing.

Chapter 2: Refining the Pedalling of a Three-Layered Texture: Franz Liszt's Use of the Sostenuto Pedal

Near the end of his career, in 1883, Franz Liszt (1811-1886) encountered the sostenuto pedal for the first time. The American company Steinway & Sons had sent him a model C grand piano at his residence in Weimar, Germany.³⁶ Soon after receiving the piano, Liszt sent a letter to William Steinway (1835-1896), business manager of the Steinway company, in which he praised the instrument and suggested the use of the sostenuto pedal in two works: *Consolation* No. 3 (1849) and his transcription of Berlioz's *Danse des Sylphes* (1861). To illustrate his ideas, Liszt attached to the letter two fragments, the opening of *Consolation* No. 3 (Example 2.1) and the main theme of his piano transcription of Berlioz's *Danse des Sylphes* (Example 2.2). In both fragments, he added a third stave to indicate the use of the sostenuto pedal. Although Victor Wolfram, Margaret Houck, David Roland, and Kenneth Hamilton have noted that these fragments marked the first time in the history of music when a major composer notated the use of the sostenuto pedal, no one has explained why Liszt selected those two works to demonstrate his pedalling technique.³⁷ This gap in the scholarly literature leads me to write this chapter, which, has three goals: 1) analyze Liszt's use of the sostenuto pedal in both fragments, 2) discuss the use of the sostenuto pedal in other passages of *Consolation* No. 3 and *Danse des Sylphes*, and 3) suggest its use in other Liszt's piano works. I argue that Liszt employed the sostenuto pedal to refine the pedalling of a three-layered texture. It is important to understand Liszt's use of the

³⁶ See Keeling, "Liszt and Steinway," 99.

³⁷ See Wolfram, *The Sostenuto Pedal*, 30; Houck, "The History and Development," 20; Rowland, *A History of Pianoforte*, 153; Hamilton, *After the Golden Age*, 174.

sostenuto pedal because it is the only documented antecedent to Busoni's first Appendix of Bach's Well-Tempered Clavier, published eleven years later.

Example 2.1. Franz Liszt, *Consolation No. 3*, mm. 1-7.³⁸

Lento placido

The musical score is for Franz Liszt's *Consolation No. 3*, measures 1-7. It is in E-flat major (three flats) and 3/4 time. The tempo/mood is **Lento placido**. The dynamic is *pp* (pianissimo). The score is written for piano, with a right-hand melody and a left-hand accompaniment of eighth notes. A 'Pedal' line is shown below the main staves, indicating a sustained pedal point in the left hand. The score ends with 'etc.'.

³⁸ I transcribed this excerpt based on a reproduction of Liszt's letter published by Franz Josef Hirt, *Meisterwerke des Klavierbaus: Geschichte der Saitenklaviere von 1440 bis 1880* (Olten: Urs Verle-Graf, 1955), 79.

Example 2.2. Franz Liszt, *Danse des Sylphes de la damnation de Faust* [Berlioz], mm 41-50.³⁹

Allegro

41

Pedal

46

³⁹ I transcribed this excerpt based on a reproduction of Liszt's letter published by Hirt, *Meisterwerke des Klavierbaus*, 80.

2.1 Liszt's Use of the Sostenuto Pedal Discussed in Scholarly Literature

Based on extant evidence, Liszt indicated his use of the sostenuto pedal only in the two unpublished excerpts shown above as Examples 2.1 and 2.2, as appendices to his letter to William Steinway. The American magazine *The Musical Courier* published a version of Liszt's letter in 1884.⁴⁰ Although Victor Wolfram questions the whereabouts of the original letter in his book *The Sostenuto Pedal* (1965), and Geraldine Keeling reports that it is in "private possession" in her chapter "Liszt and Steinway" (2001), Liszt's letter to Steinway is now preserved in the General Collection of Manuscript Letters at the Music Division of the Library of Congress of the U.S.A., with the call number ML.95 LCCN.229.⁴¹ If one compares the letter published in *The Musical Courier* to the one held in the Library of Congress, however, one would notice that the text in both letters is not identical. The letter published in *The Musical Courier* is a hand-written transcription of Liszt's German original, in which Liszt's wording was slightly changed by the transcriber (see Appendix D). The letter published in *The Musical Courier* was later reprinted in three books, Franz Joseph Hirt's *Meisterwerke des Klavierbaus: Geschichte der Saitenklaviere von 1440 bis 1880* (1955), Wolfram's *The Sostenuto Pedal* (1965), and Frances Clidat's chapter "The Transcendental Studies: A Lisztian Pianist's Impressions" (1997).⁴² The only transcription and translation to English of Liszt's original letter was published in Michael Short's book *Liszt Letters in the Library of Congress* (2002) (see Appendix E).⁴³

⁴⁰ Keeling, "Liszt and Steinway," 100.

⁴¹ Wolfram, *The Sostenuto Pedal*, 28; Keeling, "Liszt and Steinway," 100. Liszt's letter to Steinway is currently preserved in the General Collection of Manuscript Letters at Music Division of the Library of Congress, call number ML.95 LCCN.229.

⁴² Hirt, *Meisterwerke des Klavierbaus*, 79-80; Wolfram, *The Sostenuto Pedal*, 28-29; Clidat, "The Transcendental Studies," 316-317.

⁴³ Liszt, *Liszt Letters*, 236-237, 356.

Wolfram, Houck, Rowland, and Hamilton have discussed Liszt's use of the sostenuto pedal in their research. Houck, in her paper "The History and Development of the Sostenuto Pedal and its Use in Selected 20th-century Repertoire" (1982), claims that Liszt was the first composer who notated the use of the sostenuto pedal.⁴⁴ Indeed, scholarly sources such as Wolfram's *The Sostenuto Pedal* (1965), Rowland's *A History of Pianoforte Pedalling* (1993), and Hamilton's *After the Golden Age: Romantic Pianism and Modern Performance* (2008), identify *Consolation* No. 3 and *Danse des Sylphes* as the earliest notated examples of the use of the sostenuto pedal in the history of piano playing.⁴⁵ Additionally, Rowland speculates that if Liszt had access the sostenuto pedal earlier in his career, he "might have used it with some enthusiasm."⁴⁶ Rowland's point implies that Liszt in fact did not indicate the use of the sostenuto pedal in his subsequent piano works, such as *Valse Oubliée* No. 4 (1884), *Bagatelle sans tonalité* (1885), *Mephisto Waltz* No. 4 (1885), *La lugubre gondola* (1885), *Hungarian Rhapsody* No. 18 (1885), and *Hungarian Rhapsody* No. 19 (1885). As my analyses in this chapter demonstrate, Liszt employed the sostenuto pedal in *Consolation* No. 3 and *Danse des Sylphes* to refine the pedalling of a passage in which the performer prolongs a pedal point over harmonic changes in the upper layers of the texture. I argue that Liszt did not indicate the use of the sostenuto pedal because there is not a single passage with those characteristics in the pieces that he composed in 1884 and 1885, after getting acquainted with the sostenuto pedal in 1883. In other words, Liszt used the sostenuto pedal for one specific purpose, and never explored other uses in his compositions.

⁴⁴ Houck, "The History and Development," 20.

⁴⁵ See Wolfram, *The Sostenuto Pedal*, 30; Houck, "The History and Development," 20; Rowland, *A History of Pianoforte*, 153; Hamilton, *After the Golden Age*, 174.

⁴⁶ Rowland, *A History of Pianoforte*, 153.

Hamilton observes that Liszt originally wrote *Consolation* No. 3 (1849) and his transcription of Berlioz's *Danse des Sylphes* (1861) for a piano that did not have the sostenuto pedal.⁴⁷ Instead of composing new material to demonstrate how the sostenuto pedal could be used, Liszt selected two excerpts of his own works that show how they could benefit from such use. As observed by Victor Wolfram, the performer can fully prolong the pedal point—D-flat—in mm. 1-7 of *Consolation* No. 3 only if he uses the sostenuto pedal, and not the damper pedal.⁴⁸ Wolfram says that the performer cannot fully prolong the pedal point using the damper pedal for one reason: when he plays the G half-diminished chord in m. 4, the A-flat dominant seventh chord in m. 5, and the D-flat major chord in m. 6, he needs to change the damper pedal at some point (see Example 2.1). Wolfram's observation is crucial to understand Liszt's use of the sostenuto pedal in this excerpt: Liszt's pedalling serves a practical purpose. It prolongs a pedal point over harmonic changes, without accumulating too many harmonic resonances that would obscure this passage. As I will discuss in the following section of this chapter, Liszt selected this excerpt of his *Consolation* No. 3 because the use of the sostenuto pedal brings out the texture of this passage without negatively impacting any other musical elements. In both *Consolation* No. 3 and *Danse des Sylphes*, Liszt employed the sostenuto pedal to prolong the pedal point, allowing the performer to change the damper pedal as frequently as needed to optimize the clarity of each harmony of these passages.

Liszt's practical suggestion on the use of the sostenuto pedal may be applied to other piano works, even without his specifications. Wolfram is quick to suggest using the sostenuto pedal in works such as the *presto agitato* of his *Après une lecture de Dante, fantasia quasi*

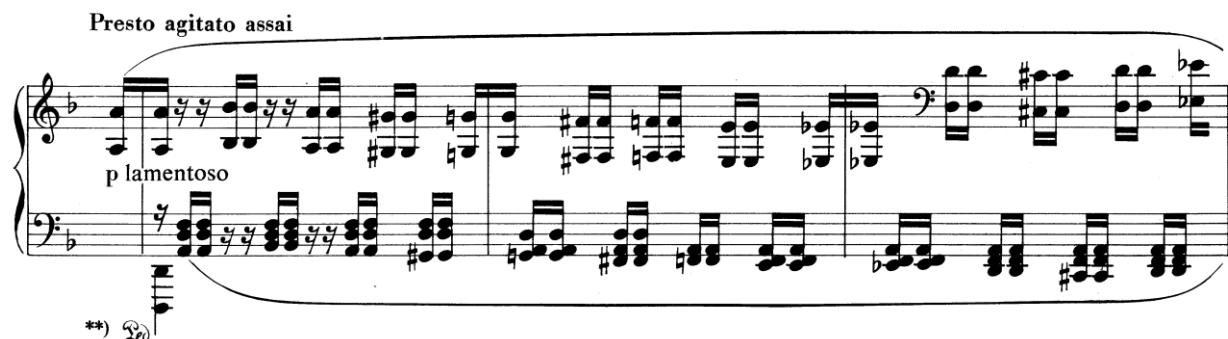
⁴⁷ Hamilton, *After the Golden Age*, 174.

⁴⁸ Wolfram, *The Sostenuto Pedal*, 28.

sonata (Example 2.3) and his B minor Sonata.⁴⁹ However, Liszt’s use of the *sostenuto* pedal in *Consolation* No. 3 and *Danse des Sylphes* indicates more specifically that a performer may use the *sostenuto* pedal only in passages with a three-layered texture formed by a pedal point, an accompaniment figuration, and a melody, in which one prolongs a pedal point over harmonic changes in the upper layers. Additionally, Liszt stated, in the postscript of his letter to Steinway, his preference for the use of the *sostenuto* pedal in “somewhat tranquil *piano* passages.”⁵⁰

Wolfram disagrees with Liszt, for the combination of these two criteria—a three-layered texture and tranquil passages—do not fit the *presto agitato* of the *Après une Lecture du Dante: Fantasia Quasi Sonata* or any passage of the B minor Sonata. In keeping with Liszt’s own usage, I suggest instead that performers may use the *sostenuto* pedal to prolong pedal points in some other passages of Liszt’s works, such as mm. 26-27 of his transcription of Mozart’s “Confutatis und Lacrymosa” from *Requiem* K.626 (Example 2.4) and mm. 46-59 of his transcription of Berlioz’s *Symphonie Fantastique* (Example 2.5).

Example 2.3. Franz Liszt, *Après une lecture de Dante, fantasia quasi sonata*, mm. 35-37.



⁴⁹ Wolfram does not specify where in the Liszt Sonata a performer should use the *sostenuto* pedal. Ibid.

⁵⁰ Ibid, 29.

Example 2.4. Franz Liszt, *Confutatis und Lacrymosa* aus dem *Requiem K. 626* von Mozart, mm. 22-28.

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The image displays a musical score for Franz Liszt's *Confutatis und Lacrymosa* from Mozart's *Requiem K. 626*. The score is written for piano and includes the following details:

- Measures 22-28:** The first system covers measures 22 to 28. The piano part features a melodic line in the right hand and a more active, rhythmic line in the left hand. The vocal line (soprano) enters in measure 22 with the lyrics "perdendo".
- Measures 26-28:** The second system covers measures 26 to 28. The piano part continues with a similar texture. The vocal line (soprano) enters in measure 26 with the lyrics "O - ro - sup - plex et ae - li".
- Performance Instructions:**
 - perdendo*: Written above the vocal line in measure 22.
 - pp*: Piano, written below the piano part in measure 26.
 - una corda sempre*: Written below the piano part in measure 26.
 - simile*: Written above the piano part in measure 26.
 - p*: Piano, written below the piano part in measure 26.
 - ten.*: Tension, written below the piano part in measure 26.
 - 4* and *5*: Fingering instructions for the piano part in measure 28.
- Notation:** The score uses standard musical notation, including treble and bass clefs, a key signature of one flat (B-flat), and various dynamic markings and performance instructions.

Example 2.5. Franz Liszt, *Épisode de la vie d'un artiste*, *Grande symphonie fantastique* par Hector Berlioz, mm. 43-51.

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The image displays two systems of musical notation. The first system, measures 43-51, is a piano reduction. It features a grand staff with piano and bass staves. The piano part has a complex texture with many chords and moving lines. Dynamic markings include *sf* (sforzando), *p* (piano), *pizz.* (pizzicato), and *pp* (pianissimo). The second system, measures 49-51, shows the orchestral parts. It includes staves for Violins (Vl. con sord.), Horns (Cor.), Flutes (Fl.), Clarinets (Cl.), and Cello/Double Bass (Vc. e Cb.). The notation includes various performance instructions such as *ten.* (tutti), *p* (piano), *ppp* (pianississimo), *mf cantando* (mezzo-forte cantando), and *Vc. e Cb. tenuti* (Cello and Double Bass sustained). There are also markings for *tr.* (trill) and *8va* (octave).

Although Wolfram and Hamilton address relevant questions regarding Liszt's use of the sostenuto pedal—why he used it and in what other ways performers may use it—they do not provide a detailed examination of Liszt's use of the sostenuto pedal. In fact, there is no published analysis of these two passages in the scholarly literature. For this reason, in the next section of this chapter, I will examine Liszt's pedalling in the opening of *Consolation* No. 3 and the main theme of *Danse des Sylphes*. Additionally, I will discuss the use of the sostenuto pedal in other passages of these two works.

2.2 Liszt's Use of the Sostenuto Pedal in *Consolation* No. 3

Liszt's use of the sostenuto pedal in *Consolation* No. 3 elucidates the way he conceived its opening theme: he neither intended to interrupt the pedal point in mm. 1-7, nor did he want to blur the harmonies of the upper layers in mm. 4 and 5 (see Example 2.1). A performer using only the damper pedal in these measures has limited options. He can employ only one of three pedalling techniques: 1) changing the damper pedal in mm. 4, 5, and 6 (as the pedalling markings in the score indicate, see Example 2.6); 2) replaying the D-flat bass in mm. 4, 5, 6, and 7, as suggested by Liszt's student Lina Ramann;⁵¹ or 3) partially changing the damper pedal in mm. 4, 5, and 6.⁵² However, none of these pedalling techniques can effectively bring out the three-layered texture notated by Liszt. Changing the damper pedal in mm. 4, 5, and 6 would end the bass prematurely; replaying the bass in mm. 4, 5, 6, and 7 would ignore the ties notated by Liszt; and partially changing the damper pedal would not prolong the pedal point until the end of this passage. Thus, Liszt must have thought carefully over how best to play this passage, using the instrument available to him. In this context, it is not fortuitous that Liszt suggested the use of the sostenuto pedal in *Consolation* No.3: to his mind, the use of the sostenuto pedal was an ideal solution to bring out its three-layered texture.

⁵¹ Lina Ramann, *Liszt-Pädagogium. Klavierkompositionen Franz Liszt's nebst noch unedirten Veränderungen, Zuzätzen und Kadenzen nach des Meisters Lehren pädagogisch glossiert* (Wiesbaden: Breitkopf and Härtel, 1986), 9.

⁵² Kenneth Hamilton calls this technique "half-pedalling." When the performer changes the damper pedal, he does not raise his foot from the pedal completely. Because the pedal does not move the dampers back to the strings, each partial change of the pedal prolongs some resonances of the previous chord. This technique helps to reduce the vibrations of the treble register while allowing the lower register of the piano to resonate. According to Hamilton, pianists used the half-pedalling technique throughout the nineteenth century. Hamilton, *After the Golden Age*, 170.

Example 2.6. Franz Liszt, *Consolation* No. 3, mm. 1-9.

The musical score for Franz Liszt's *Consolation* No. 3, measures 1-9, is presented in three systems. The key signature is E-flat major (three flats) and the time signature is common time. The tempo and mood are indicated as 'Lento placido *)'. The score is written for piano and voice. The piano part begins with a piano introduction marked 'ppp sempre legatissimo' and a sostenuto pedal point in the bass. The vocal part is marked 'cantando'. The piano introduction consists of a continuous eighth-note accompaniment in the left hand and a melodic line in the right hand. The vocal line is a simple melody. The piano introduction is divided into three systems of three measures each. The first system (mm. 1-3) shows the piano introduction with a sostenuto pedal point in the bass. The second system (mm. 4-6) shows the vocal line and the melodic line. The third system (mm. 7-9) shows the vocal line and the melodic line. The score includes performance instructions: 'Lento placido *)' at the top left, 'cantando' at the top right, 'ppp sempre legatissimo' above the piano introduction, and '12' above the eighth-note accompaniment. The score also includes various musical notations such as slurs, ties, and dynamic markings.

In addition to the passage of mm. 1-9, I suggest using the sostenuto pedal in two other similar three-layered passages of *Consolation* No. 3, namely, mm. 18-25 and mm. 26-32. In mm. 18-25, the performer would be able to prolong the pedal point of D-flat using the sostenuto pedal from the first beat of m. 18 to the third beat of m. 25 (see Example 2.7). While prolonging the pedal point with the use of the sostenuto pedal, the performer would be able to change the damper pedal when needed (i.e., mm. 20, 21, 22, and 23). The use of the sostenuto pedal in these measures would prolong two tones: the pedal point of D-flat (“D-flat”) and the upper D-flat (“d-flat²”) played by the right hand. Since the “d-flat²” fades away sooner than the pedal point and the performer is using the damper pedal in mm. 18-19, its prolongation due to the use of the

sostenuto pedal is almost imperceptible. Although the use of the sostenuto pedal keeps the dampers of both strings lifted throughout the passage, the fact that the upper note is the same tone, but three octaves higher than the lower one, ensures that the resonances produced by the sympathetic vibrations of d-flat² do not interfere with the clarity of each harmony in this passage.

Alternatively, the performer can also make clear Liszt's three-layered texture using both the damper pedal and the sostenuto pedal in mm. 26-32. Using both pedals simultaneously, he can prolong the pedal point in mm. 26-32 while changing the damper pedal when needed (i.e., mm. 28, 29, 30 and 31). When one presses the sostenuto pedal on the first beat of mm. 26, it prolongs the F pedal point and the F octave (i.e., f^2 and f^3) played by the right hand (see Example 2.8). As in mm. 18-25, the prolongation of the upper F tones and their overtones is barely noticeable. The use of the sostenuto pedal in mm. 18-25 and 26-32 prolongs the pedal point (as in the opening) and allows the performer to change the damper pedal when the harmonic changes occur. In this way, the simultaneous use of these two pedals clarifies the three-layered textures.

Example 2.7. Franz Liszt, *Consolation No. 3*, mm. 17-24.

17

pp

Sost. ped.

The musical score for Franz Liszt's *Consolation No. 3*, measures 17-24, is presented in three systems. The key signature is E-flat major (three flats) and the time signature is common time (C). The score is written for piano, with a piano (*pp*) dynamic marking at the beginning. A sostenuto pedal (Sost. ped.) instruction is present at the start of the first system. The first system (measures 17-18) features a melodic line in the Treble staff and a complex arpeggiated accompaniment in the Bass staff. The second system (measures 19-20) continues the arpeggiated accompaniment with a melodic line in the Treble staff. The third system (measures 21-22) shows a melodic line in the Treble staff and a complex arpeggiated accompaniment in the Bass staff. The fourth system (measures 23-24) shows a melodic line in the Treble staff and a complex arpeggiated accompaniment in the Bass staff. The score includes various musical notations such as notes, rests, slurs, and dynamic markings.

A musical score for piano, consisting of three staves. The top staff is in treble clef, the middle staff is in bass clef, and the bottom staff is also in bass clef. The key signature is three flats (B-flat, E-flat, A-flat). The time signature is 2/4. The music features a melody in the treble staff, a bass line in the middle staff, and a single bass note in the bottom staff. The melody is composed of eighth and sixteenth notes, with a long slur covering the first two measures. The bass line consists of eighth and sixteenth notes, with a long slur covering the first two measures. The bottom staff has a single bass note in the first measure, followed by a whole rest for the remainder of the piece.

Example 2.8. Franz Liszt, *Consolation No. 3*, mm. 26-31.

The image displays a musical score for Franz Liszt's *Consolation No. 3*, measures 26-31. The score is written for piano and includes a sostenuto pedal line. The key signature is three flats (B-flat, E-flat, A-flat) and the time signature is common time (C). The score is organized into three systems, each with three staves: a grand staff (treble and bass clefs) and a separate staff for the sostenuto pedal.

Measure 26: The grand staff begins with a half note chord in the treble and a half note chord in the bass. The sostenuto pedal line has a half note chord. The grand staff continues with a series of eighth notes in the bass, while the treble has a half note chord. The sostenuto pedal line has a half note chord.

Measure 27: The grand staff begins with a half note chord in the treble and a half note chord in the bass. The sostenuto pedal line has a half note chord. The grand staff continues with a series of eighth notes in the bass, while the treble has a half note chord. The sostenuto pedal line has a half note chord.

Measure 28: The grand staff begins with a half note chord in the treble and a half note chord in the bass. The sostenuto pedal line has a half note chord. The grand staff continues with a series of eighth notes in the bass, while the treble has a half note chord. The sostenuto pedal line has a half note chord.

Measure 29: The grand staff begins with a half note chord in the treble and a half note chord in the bass. The sostenuto pedal line has a half note chord. The grand staff continues with a series of eighth notes in the bass, while the treble has a half note chord. The sostenuto pedal line has a half note chord.

Measure 30: The grand staff begins with a half note chord in the treble and a half note chord in the bass. The sostenuto pedal line has a half note chord. The grand staff continues with a series of eighth notes in the bass, while the treble has a half note chord. The sostenuto pedal line has a half note chord.

Measure 31: The grand staff begins with a half note chord in the treble and a half note chord in the bass. The sostenuto pedal line has a half note chord. The grand staff continues with a series of eighth notes in the bass, while the treble has a half note chord. The sostenuto pedal line has a half note chord.

Dynamic markings include *mf* (mezzo-forte) and *espress.* (espressivo) in measure 27, and *dolcissimo* (dolcissimo) in measure 30.

A musical score for piano, consisting of three staves. The top staff is in treble clef, the middle staff is in bass clef, and the bottom staff is also in bass clef. The key signature is three flats (B-flat, E-flat, A-flat). The music is written in a 2/4 time signature. The top staff features a series of chords and single notes, with a long slur spanning across the first two measures. The middle staff features a series of eighth notes and quarter notes, with a long slur spanning across the first two measures. The bottom staff features a series of quarter notes and half notes, with a long slur spanning across the first two measures. The music concludes with a double bar line.

2.3 Liszt's Use of the Sostenuato Pedal in Berlioz's *Danse des Sylphes*

The use of the sostenuto pedal in Liszt's fragment of *Danse des Sylphes* serves the same purpose as it does in *Consolation* No. 3: it sustains a pedal point over the changing harmonies of the upper layers. In Berlioz's original version of *Danse des Sylphes*, which is part of his *Damnation de Faust* (1846), three cellos and four double basses prolong the pedal point throughout the whole piece without interruption. In his piano transcription of *Danse des Sylphes* (1861), Liszt transcribed the pedal point in a three-staves score format, adding a third stave to the typical two-staves score, complete with this remark: "the tonic D must be prolonged with the pedal, without holding down the note with the finger."⁵³ Yet, his remark does not appear to correspond with his transcription. The score indicates changes of the damper pedal that would interrupt the pedal point. In mm. 41-48, the score indicates changes of the damper pedal in m. 43, 44, 45, 46, 47, and 48 (see Example 2.9). How do we account for the discrepancy between his musical notation and his written instructions on the score? Clearly, in the excerpt attached to his letter to William Steinway, Liszt singled out this passage to work through a practical problem. He was thinking about a way to create a three-layered texture that could not be sustained by the damper pedal alone, and he solved this problem with the combined use of the damper pedal and the sostenuto pedal. The use of the sostenuto pedal allows the performer to prolong the pedal point without interruption, a kind of prolongation impossible to achieve with the exclusive use of the damper pedal.

⁵³ The score reads: "*le prolongement du son de la tonique ré doit s'effectuer par la Pedale, sans que la note soit tenue du doigt.*" Franz Liszt, *Danse des Sylphes* (Leipzig: J. Rietter-Biedermann, 1866), 4.

Example 2.9. Franz Liszt, *Danse des Sylphes de la damnation de Faust* [Berlioz], mm. 41-50.
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Importantly, the New Liszt Complete Critical Edition (NLE), the latest and definitive edition of Liszt's complete works, published a version of *Danse des Sylphes* in 2004 that includes sostenuto pedal markings.⁵⁴ Yet, in the preface of this edition, the editors Adrienne Kaczmarczyk and Imre Sulyok erroneously claim that Liszt used the sostenuto pedal in the original version of *Danse des Sylphes* (1861): "An unusual feature of the arrangement is the fact that in it Liszt prescribes the use of the so-called sustaining pedal between bars 41 and 156."⁵⁵ However, my research shows that when Liszt wrote *Danse des Sylphes* (1861), he did not yet know of the existence of Steinway's sostenuto pedal, which was patented thirteen years later, in

⁵⁴ Franz Liszt, *Free Arrangements and Transcriptions for Solo Piano*, New Edition of the Complete Works, Series 2 Volume 11 (Budapest: Editio Musica Budapest, 2004), 61-66.

⁵⁵ *Ibid*, xxii.

1874.⁵⁶ Additionally, Kaczmarczyk and Sulyok modify a performing indication in m. 41 that does not correspond to Liszt's original indication. In the autograph and the first edition of Liszt's *Danse des Sylphes*, Liszt added this instruction to m. 41: "The tonic D must be prolonged with the pedal, without holding down the note with the finger."⁵⁷ But the New Liszt Edition informs that "the tonic D should be prolonged by means of the *sustaining* pedal, without being held down with the finger."⁵⁸ Whereas the editors attributed this indication to Liszt, the copy of the autograph and the first edition show that Liszt wrote *pedal*, not *sustaining pedal*. I propose that the difference between the two instructions is critical. The performer should be aware that when Liszt wrote *Danse des Sylphes* in 1861 (and *Consolation* No. 3 in 1849), he did not use the sostenuto pedal. Liszt suggested the use of the sostenuto pedal in these two works much later, in his letter to William Steinway in the fall of 1883.⁵⁹

Based on the findings of this chapter, I suggest using a different pedalling than the one indicated in the New Liszt Edition: I propose using the sostenuto pedal from m. 33 to m. 141 to prolong the pedal point exclusively (see Example 2.10). The editors of the New Liszt Edition indicate using the sostenuto pedal from mm. 41 to m. 141. However, pushing down the sostenuto pedal on the first beat of m. 41 would imply that the performer prolongs both the pedal point and the f-sharp² played with his right hand. The use of the sostenuto pedal would then keep the damper of the f-sharp² raised throughout mm. 41-141, causing additional vibrations of

⁵⁶ Albert Steinway, *Piano-Forte Attachments*, US Patent 156388, filed October 15, 1874, and issued October 27, 1874.

⁵⁷ Franz Liszt, *Danse des Sylphes* (Leipzig: J. Rieter-Biedermann, 1866), 4. Liszt's autograph of the first page of *Danse des Sylphes* was published in Franz Liszt, *Free Arrangements*, xxix.

⁵⁸ Franz Liszt, *Free Arrangements*, xxix. 61. [emphasis added]

⁵⁹ Daniel Glover repeats the same erroneous claim stating that "a notable feature of the work [*Danse des Sylphes*] is the inclusion of the sostenuto (middle) pedal between bars 41 and 156. As the work dates from 1861, this must be one of the earliest known examples of its specific usage in a piano composition. Liszt also recommended its use even earlier in his popular *Consolation* No. 3 in D-flat major from 1849-1850." See Franz Liszt, *Danse Macabre and Other Piano Transcriptions: Arranged with an Introduction by Daniel Glover* (Mineola, NY: Dover Publications, Inc, 2013), i.

sympathetic partials. The result would be a prolonged haze of sound. Clearly, the editors of the New Liszt Edition based their indication of the use of the sostenuto pedal on the fragment of *Danse des Sylphes* written by Liszt in his letter to William Steinway. However, if the whole purpose of using the sostenuto pedal is to make audible a three-layered texture, as I argue in this chapter, then I propose using the sostenuto pedal from the first beat of m. 33, when the performer is only playing the pedal point of D. In mm. 33-40, the performer plays a tonic prolongation that connects the introduction to the main theme. Using the sostenuto pedal in mm. 33-141 would prolong exclusively the pedal point, optimizing the textural clarity of this passage.

In addition to mm. 33-141, I suggest using the sostenuto pedal in mm. 144-156. Although Liszt did not write this passage using three staves, it is a three-layered texture with a prolonged bass. If the performer presses the sostenuto pedal between the first beat of m. 144 and the first sixteenth-note of the second beat, it would sustain only the pedal point, and not the two notes—f-sharp and d¹—played by the right hand on the first beat, allowing the right hand to play the *staccato* octaves in mm. 146-150 crisply (see this passage rescored by me in Example 2.11).

Example 2.10. Franz Liszt, *Danse des Sylphes de la damnation de Faust* [Berlioz], mm. 33-40.

Example 2.10 shows measures 33-40 of the piece. The score is in 3/8 time and D major. It features three staves: a grand staff (treble and bass clef) and a separate bass staff. The grand staff has a melodic line in the treble clef and a bass line in the bass clef. The separate bass staff contains a continuous eighth-note accompaniment. The instruction *sempre pp e una corda* is written above the grand staff.

Example 2.11. Franz Liszt, *Danse des Sylphes de la damnation de Faust* [Berlioz], mm. 144-156.

Example 2.11 shows measures 144-156 of the piece. The score is in 3/8 time and D major. It features three staves: a grand staff (treble and bass clef) and a separate bass staff. The grand staff has a melodic line in the treble clef and a bass line in the bass clef. The separate bass staff contains a continuous eighth-note accompaniment. The instruction *ppp* is written above the grand staff. The instruction *Sost. ped.* is written to the left of the separate bass staff.

While using the damper pedal and the sostenuto pedal, Liszt also indicated the use of the soft pedal throughout mm. 34-141 (marked in m. 34 “*sempre pp ed una corda*,” see Example 2.10). Although he did not specify the use of the soft pedal in his letter to William Steinway, the addition of the use of the sostenuto pedal to the score of *Danse des Sylphes* would require the performer to use the three piano pedals simultaneously: one would need to press the soft pedal and the sostenuto pedal while changing the damper pedal when the harmonic changes require it. The only way to achieve this pedalling effect would be to push the sostenuto pedal and the soft pedal with the left foot, while using the right foot to press the damper pedal. The result would be the uninterrupted prolongation of the pedal point while maintaining the *una corda* timbre that Liszt originally employed in this passage.

2.4 Conclusion

To illustrate how Liszt used the sostenuto pedal during the fall of 1883, I examined in this chapter the fragments of *Consolation* No. 3 and *Danse des Sylphes* that Liszt provided in his letter to William Steinway. Although scholars acknowledge Liszt's use of the sostenuto pedal as a landmark in the pedalling technique, they have not explained how Liszt employed the sostenuto pedal. My explanation of Liszt's use of the sostenuto pedal in these works, therefore, clarifies the history and functions of pedalling in Liszt's piano works. As noted by Olivia Sham in her chapter "Transforming Virtuosity: Liszt and Nineteenth-Century Pianos" (2020), Liszt's idiomatic piano writing evolved due to the pianos he played throughout his career. Sham argues that Liszt, both as a composer and as a pianist, "no doubt wrote in a way to best suit the instrument at his disposal."⁶⁰ My research has led me to the conclusion that when Liszt used the sostenuto pedal, he realized that it can prolong a pedal point over harmonic changes in a three-layered texture. In these passages, the right hand plays a cantabile melody while the left hand plays an accompaniment figuration and a pedal point. Due to the length of the pedal point and the registral distance between the pedal point and the accompaniment figuration, the performer can prolong the pedal point only with the use of the damper pedal. However, as the damper pedal is unable to prolong the bass without blurring the changing harmonies of the accompaniment, Liszt invented a new pedalling technique: he used the sostenuto pedal to prolong the pedal point, enabling the damper pedal to elucidate harmonic changes in the upper layers. The purpose of Liszt's use of the sostenuto pedal in the fragments of *Consolation* No. 3 and *Danse des Sylphes*

⁶⁰ Olivia Sham, "Transforming Virtuosity: Liszt and Nineteenth-Century Pianos," in *Liszt and Virtuosity*, ed. Robert Doran (Rochester: University of Rochester Press, 2020), 100.

is to refine the pedalling of a three-layered texture. In the following chapter of this dissertation, I will discuss how Busoni continued Liszt's legacy. He expanded the pedalling technique by generating distinct effects using the sostenuto pedal.

Chapter 3: Transcription and Innovation: Ferruccio Busoni and the Sostenuto Pedal

In Chapter Two, I discuss how Liszt used the sostenuto pedal in 1883. Based on my analyses of the opening of *Consolation* No. 3 and the main theme of *Danse des Sylphes*, I conclude that Liszt employed the sostenuto pedal to prolong a pedal point over harmonic changes in a three-layered texture. Liszt, in other words, used the sostenuto pedal to refine the pedalling of multilayered passages. In this chapter, I examine how Ferruccio Busoni (1866-1924) used the sostenuto pedal in the first Appendix of his edition of Bach's Well-Tempered Clavier, published in 1894. I claim that Busoni significantly expanded Liszt's use of this pedal. In Busoni's works, the sostenuto pedal became a device that allows the performer to alter the traditional three-step sequence of sound production in the piano: 1) attack, 2) sustain, and 3) release of tones. As scholars Edwin Ripin and Stewart Pollens write in *Grove Music Online*, one of the features that distinguishes the piano from its predecessors, the harpsichord and the clavichord, is its capability to control the release of tones through the piano pedals.⁶¹ In this chapter, I show that Busoni expanded the capability of the piano by inventing new ways to prolong and release tones using the sostenuto pedal.

Busoni started using the sostenuto pedal soon after encountering a piano equipped with it. He had access to such an instrument when he moved to Boston in the fall of 1891 to teach piano at the New England Conservatory, a position he held until June 1892.⁶² Busoni remained in the

⁶¹ See Edwin Ripin and Stewart Pollens, "Pianoforte," *Grove Music Online*, *Oxford Music Online*, Oxford University Press, accessed May 21, 2020, <http://www.oxfordmusiconline.com>.

⁶² Hamilton, *After the Golden Age*, 175.

United States giving concerts and composing until he returned to Europe in April 1894.⁶³ Before his departure, he edited the first book of Bach's Well-Tempered Clavier, which was published by Schirmer in January 1894.⁶⁴ In what he calls the "first Appendix" of this volume, entitled "On the Transcription of Bach's Organ Works for the Pianoforte," Busoni provided a guide to transcribing Bach's organ works for the piano. As noted by scholars Tamara Levitz and Erinn Knyt, Busoni considered that transcribing is a pedagogical tool. He suggested to his composition students to write piano transcriptions to widen their musical knowledge.⁶⁵ Indeed, Busoni proposed in the "first Appendix" that performing Bach's organ works on the piano was "essential to a complete pianistic study of Bach."⁶⁶

In the fourth section of the Appendix, "Use of the Piano-pedals," Busoni discussed the use of the three piano pedals in piano transcriptions of Bach's organ works. He included the use of the sostenuto pedal in this section because, according to him, "real organ-effects can be obtained only by the combined action of the three pedals."⁶⁷ His remarks have historical significance because, by the time Busoni published his edition of Bach's Well-Tempered Edition, only two treatises discussed the use of the sostenuto pedal. Hans Schmitt, in his book *The Pedals of the Piano-forte and their Relation to Piano-forte Playing and the Teaching of Composition and Acoustics* (1893), mentioned that the use of the sostenuto pedal prolongs only the notes that are played when the performer presses this pedal. Schmitt noted that once the

⁶³ Erinn Knyt, "Ferruccio Busoni and the New England Conservatory: Piano Pedagogue in the Making," *American Music* 31 No. 3 (Fall 2013): 281-284.

⁶⁴ Johann Sebastian Bach, *Well-Tempered Clavier*, ed. Ferruccio Busoni (New York: Schirmer, 1894). Breitkopf and Härtel also published a German edition of the work in the same year: Johann Sebastian Bach, *Das wohltemperierte Klavier*, Klavierwerke: Busoni-Ausgabe, Band 1 Volume 4 (Leipzig: Breitkopf and Härtel, 1894). A reprint of this edition was issued by Breitkopf and Härtel in 1983: Johann Sebastian Bach, *Das wohltemperierte Klavier*, Klavierwerke: Busoni-Ausgabe, Band 1 Volume 4 (Wiesbaden: Breitkopf and Härtel, 1983).

⁶⁵ Tamara Levitz, "Teaching New Classicality: Busoni's Master Class in Composition, 1921-1924" (PhD diss., University of Rochester, Eastman School of Music, 1994), 171; Knyt, *Ferruccio Busoni*, 13.

⁶⁶ Bach, *Well-Tempered Clavier*, 154.

⁶⁷ *Ibid*, 178.

performer uses the sostenuto pedal to prolong those notes, he does not need to hold down those keys with his fingers anymore.⁶⁸ Albert Venino, in his book *A Pedal Method for the Piano* (1893), described in detail the use of the sostenuto pedal and provided three excerpts in which the use of the sostenuto pedal prolongs a pedal point: mm. 128-135 of Schumann's Romance Op. 28 No. 3, mm. 65-72 of Chopin's Prelude Op. 28 No. 17, the opening of Saint-Saens's Piano Concerto Op. 22. Venino attached the score of each of these excerpts with indications of his use of the sostenuto pedal. He also gave instructions on how to use the sostenuto pedal in Liszt's transcription of Bach's Prelude and Fugue in A minor BWV 543: he suggested prolonging the pedal point of m.10 (see Example 3.12) by silently pressing the note A—which serves as a pedal point—before the beginning of the prelude while using the sostenuto pedal to keep the damper of that note raised.⁶⁹ Venino argued that the performer should use the sostenuto pedal when he needs to “sustain a single tone or a chord exclusively.”⁷⁰ He added that “the tone sustained by this third pedal enables the performer to change the damper pedal as often as necessary, or dispense with it altogether, without affecting the sustained tone.”⁷¹ In his “first Appendix,” as I will describe below, Busoni used the sostenuto pedal by further developing the characteristics described by Venino in four ways: 1) he prolonged exclusively a single tone or a chord within multi-layered textures; 2) he used the sostenuto pedal while changing the damper pedal; 3) he used the sostenuto pedal without using the damper pedal at all; and 4) he silently pressed a chord without making any attack while pushing down the sostenuto pedal before playing an excerpt (see Examples 2.2 and 2.3).

⁶⁸ Hans Schmitt and Frederic S. Law, *The Pedals of the Piano-forte and their Relation to Piano-forte Playing and the Teaching of Composition and Acoustics: Four Lectures Delivered at the Conservatory of Music in Vienna* (Philadelphia: T. Presser, 1893), 82.

⁶⁹ Albert Venino, *A Pedal Method for the Piano* (New York: Schubert, 1893), 45-47.

⁷⁰ *Ibid.*, 45.

⁷¹ *Ibid.*

In this chapter, I argue that it is necessary to understand Busoni's use of the *sostenuto* pedal in terms of transcription and innovation. As Malcolm Boyd writes in *Grove Music Online*, the term "transcription" means "the reworking of a musical composition for a different medium from that of the original."⁷² However, as noted by Erinn Knyt, Busoni used original elements that typically belong to the narrowly defined "composition" in his transcriptions.⁷³ In some of his transcriptions, he rewrote entire passages of the original work as if he were a co-composer of these works. For example, he reorganized Bach's Goldberg Variations BWV 988 into three large movements, omitting some variations and adding a Coda. Conversely, Busoni often borrowed materials from other composers for his own works. For example, he quoted Bach's Chorale *Wie wohl ist mir, o Freund der Seelen* BWV 517 in mm. 358-397 of his Violin Sonata No. 2 op. 36a. These two examples—Busoni's transcription of Bach's Goldberg Variations and mm. 358-397 of his Violin Sonata No. 2 op. 36a—show that Busoni considered the originality of the transcription comparable to "the novelty" of the original work.⁷⁴ For this reason, it is necessary to take Busoni's transcriptions seriously by treating them as works that may include original and significant compositional thinking.

For the "first Appendix," Busoni composed fifteen excerpts, what he called Examples 76-90 (each "example" is a short excerpt no longer than seven measures), to demonstrate his uses of the *sostenuto* pedal (see a list of all the examples in Appendix F). He illustrated his uses of the *sostenuto* pedal in his transcriptions of Bach's organ works in six of these examples, Examples 79-83 and 85 (according to Busoni's numbering system). Strikingly, in Example 84, he discussed

⁷² See Malcolm Boyd, "Arrangement," *Grove Music Online*, *Oxford Music Online*, Oxford University Press, accessed March 10, 2020, <http://www.oxfordmusiconline.com>.

⁷³ Erinn Knyt, "From Bach–Busoni to Bach–Grainger: Adaptation as Composition," *Musicology Australia* 39 no. 1 (2017): 38.

⁷⁴ Erinn Knyt, "How I Compose: Ferruccio Busoni's Views about Invention, Quotation, and the Compositional Process," *The Journal of Musicology* 27 No. 2 (2010): 238.

an example by a composer other than J. S. Bach: he used the sostenuto pedal in a transcription of the opening of the first movement of Beethoven's Fourth Symphony. Furthermore, he included eight excerpts—Examples 76-78 and 86-90—in which he used the sostenuto pedal in his newly composed materials.⁷⁵ Busoni did not explain the reason for including them in the Appendix. Importantly, these newly composed examples are not “transcriptions;” rather, they are Busoni's “innovations.”

Scholars have seldom discussed Busoni's uses of the sostenuto pedal in the fifteen examples of the “first Appendix.” In his book *The Pianist's Guide to Pedalling* (1985), Joseph Banowetz comments that in one of the examples where Busoni transcribed a Bach composition, Prelude and Fugue in D major BWV 532 (Example 79), he used the sostenuto pedal to prolong a pedal point that was originally played on the pedal board of the organ.⁷⁶ Kenneth Hamilton, in his book *After the Golden Age: Romantic Pianism and Modern Performance* (2008), states more generally that Busoni uses the sostenuto pedal to imitate the sonority of the organ. Hamilton observes that Busoni's use of the sostenuto pedal allows the performer to sustain a pedal point without muddling the polyphonic texture of a passage.⁷⁷ Although Banowetz briefly describes Example 79, and Hamilton offers a general description of Busoni's use of the sostenuto pedal in his transcriptions of Bach's organ works, neither offers a thorough explanation for Busoni's use of the sostenuto pedal in Examples 76-90. In fact, no scholar to date has examined the newly composed excerpts—namely, Examples 76-78 and 86-90. For these reasons, I offer in this chapter a comprehensive examination of Busoni's uses of the sostenuto pedal, and the effects produced by what he called “the combined action of the three pedals,” in all these fifteen

⁷⁵ Bach, *Well-Tempered Clavier*, 190.

⁷⁶ Banowetz, *The Pianist's Guide to Pedaling*, 133.

⁷⁷ Hamilton, *After the Golden Age*, 176.

examples.⁷⁸ In what follows, I show that in addition to prolonging a pedal point, Busoni used the *sostenuto* pedal in two other ways: 1) to alter the typical three-step sequence of sound production in the piano, namely, attack, sustaining, and release, as mentioned above; and 2) to make audible nuanced gradations of contrasting articulations and dynamics in multi-layered textures. By explaining how Busoni used the *sostenuto* pedal in all fifteen examples—Examples 76-90—of the first Appendix of his edition of Bach’s *Well-Tempered Clavier*, I argue that his pedalling techniques substantially expanded upon Liszt’s use of the *sostenuto* pedal, discussed in Chapter Two, which was limited to the sustaining of a pedal point.

In the following sections of this chapter, I analyze Busoni’s use of the *sostenuto* pedal in all fifteen examples of the first Appendix of his edition of Bach’s *Well-Tempered Clavier*. I organize these fifteen examples into three groups. In the first group of three excerpts, Examples 76-78, which are newly composed materials, Busoni devised two novel pedalling techniques. In Example 76, the use of the *sostenuto* pedal prolongs a chord consisting of four tones that overlap some tones of an arpeggio. The prolongation of the chord modifies the sustaining and resonance of the overlapped tones of the arpeggio, making the seemingly even arpeggio uneven during performance. In Example 77 and 78, the use of the *sostenuto* pedal keeps the dampers of a silently depressed chord raised—a technique that in Example 77 produces a chord with no attack, and in Example 78 enhances the articulation of a multi-layered texture. Hamilton describes Busoni’s use of the *sostenuto* pedal over a silently depressed chord as “proto-Grainger.”⁷⁹ What he means is that Australian pianist Percy Grainger employed Busoni’s pedalling technique in several of his piano works such as *One More Day My John* (1915), *Eastern Intermezzo* (1922),

⁷⁸ Bach, *Well-Tempered Clavier*, 178.

⁷⁹ Hamilton, *After the Golden Age*, 176

Grainger's free setting of Brahms' *Wiegenlied* Op. 49 No. 4 (1923), *Jutish Medley* (1928), and Grainger's transcription of *Der Rosenkavalier-Fantasie über das Schluss-Duett* by Richard Strauss (1937). Scholar Glenn Carruthers also notes that in these works, Grainger used Busoni's pedalling technique, silently depressing chords while using the sostenuto pedal, to allow the vibration of sympathetic partials.⁸⁰

The second group consists of seven excerpts, Examples 79-85. In these examples, which are transcriptions of Bach's organ works and a transcription of the opening of the first movement of Beethoven's Fourth Symphony, Busoni used the sostenuto pedal to prolong pedal points. Scholar Peter Williams notes that Busoni brought out the cantabile sound of the modern piano in his piano transcriptions of Bach's organ works.⁸¹ In Examples 79-85, Busoni uses the sostenuto pedal to prolong the pedal points, which, together with the skill of the pianist to play "cantabile melodies" on the piano—or gradate the volume of each voice of the texture—maximizes the textural clarity of the transcriptions.

The third group consists of five excerpts, Examples 86-90, which were all newly composed. In these excerpts, Busoni used the sostenuto pedal to prolong chords over multi-layered textures.

⁸⁰ Glenn Carruthers, "The Piano Music of Percy Grainger: A Pianist's Perspective on Pedalling," *Canadian University Music Review* 21 no. 2 (2001): 87.

⁸¹ See Peter Williams, *Bach: A Musical Biography* (Cambridge: Cambridge University Press, 2016), 643-644.

3.1 First Group of Excerpts, Examples 76-78

This section of the chapter presents my analysis of the first group of examples, Examples 76-78. In these excerpts, which were Busoni's newly composed excerpts for the "first Appendix," I argue that Busoni expanded Liszt's use of the *sostenuto* pedal.

In Example 76, Busoni used the *sostenuto* pedal to prolong a C major chord that consists of the notes "c, g, c¹, and e¹," while modifying the sustaining of some tones of the C major arpeggio: e¹ on the third beat of the second measure and the fourth beat of the third measure; c¹ on the third and fourth beats of the second measure, and on the third and fourth beats of the third measure; g on the fourth beat of the second measure, and on the third beat of the third measure; c on the first and second beats of the third measure (see Example 3.1).⁸² Although at first sight, this example seems uncomplicated, as the performer plays a chord and prolongs it using the *sostenuto* pedal while playing an arpeggio, playing it following Busoni's instructions immediately reveals its intricacy. The use of the *sostenuto* pedal makes this passage unconventional starting from the third beat of m. 2 when the right hand plays six notes of the C major arpeggio on the third and fourth beats that overlap two notes of the C major chord, e¹ and c¹. The overlap prolongs these six notes beyond their notated value and makes them resonate more strongly than the other notes of the arpeggio. The uneven duration between the tones sustained by the *sostenuto* pedal and those that are not sustained by it is easily noticeable. Importantly, the performer is not using the damper pedal: Busoni wrote the performance direction "*senza pedale*" (without pedal) above m. 1, meaning that the performer should not use

⁸² The octave designation uses the following system: C¹, C, c, c¹, c², c³, c⁴. Middle C is indicated as c¹.

the damper pedal and that he should use the sostenuto pedal exclusively in this excerpt. The arpeggio overlaps the chord until the first beat of the third measure (except the note “g¹” on the third beat of the second measure, which is above the chord, and the note “e” of the third sixteenth note on the last beat of m.2. Although “e” is a chord tone, this note in this register is not articulated in the chord). The tones G, E, and G of the first and second beats of the third measure are below the C major chord. The remaining tones of the arpeggio overlap the C major chord (except “e” on the second and third beats of the third measure and “g¹” on the fourth beat of the third measure). Thus, the use of the sostenuto pedal serves a double function in this excerpt: it prolongs the C major chord while prolonging four specific notes—c, g, c¹, and e¹—of the C major arpeggio, notes that overlap those of the C major chord. In her analysis of Luciano Berio’s *Sequenza IV*, Zoe Doll observes a similar use of the sostenuto pedal in passages of *Sequenza IV* where a chord sustained by the sostenuto pedal overlaps some of the tones of the subsequent materials. Doll calls the sostenuto pedal an “acoustic envelop generator” because its use adds “decay time to the already released chords.”⁸³

While the use of the sostenuto pedal prolongs the overlapped tones, it also causes unevenness of volume and resonance due to the varying durations of vibrating sympathetic partials. When one plays Example 76 following Busoni’s pedalling instructions, the overtones of the overlapped tones vibrate with a distinct resonance that makes them stand out from the rest of the arpeggio. The sympathetic vibrations produced by the C major chord are also audible when playing the other tones of the arpeggio: they cause a slight prolongation of the tones of the arpeggio above the C major chord. Conversely, the four tones of the arpeggio below the C major

⁸³ Zoe Doll, “Phantom Rhythms, Hidden Harmonies: The Use of the Sostenuto Pedal in Berio’s *Sequenza IV* for Piano, Leaf and Sonata,” in *Berio’s Sequenzas: Essays on Performance, Composition and Analysis*, ed. Janet Halfyard (Hampshire, England: Ashgate Publishing Limited, 2007), 56-58.

chord—G, E, and G of the first and second beats of the third measure—generate overtones that amplify the resonance of the C major chord. Therefore, rather than merely sustaining the C major chord in its entirety, as the damper pedal typically does, using the sostenuto pedal helps to create a textured effect by generating an unevenness of length, dynamic, and reverberation in an apparently uniform texture.

Busoni's indication of *senza pedale* (without pedal) is crucial because the performer generates the textured effect of Example 76 by using the sostenuto pedal, without employing the damper pedal at all. If the performer were to use the damper pedal in this excerpt, he would prolong the C major chord and all the tones of the arpeggio played by the right hand indiscriminately. In that case, using the sostenuto pedal would not make a difference. Therefore, the uneven length, volume, and reverberation of the tones of the right-hand arpeggio depend entirely upon both the use of the sostenuto pedal and the disuse of the damper pedal, which Busoni meticulously indicated.

Example 3.1. Ferruccio Busoni, "Example No. 76" from the First Appendix of Bach's Well-Tempered Clavier, mm. 1-3.

Example 76.

The image shows a musical score for a piano piece. The right hand (treble clef) plays a rapid arpeggio of the C major chord (C-E-G) in the first three measures. The left hand (bass clef) plays a sustained C major chord (C-E-G) in the first three measures. The score is marked "senza Pedale" and "Sust.-ped.".

In the next excerpt of the Appendix, Example 77, Busoni used the *sostenuto* pedal to prolong a diminished seventh chord that does not have a simultaneous attack of its tones. As shown in Example 3.2, Busoni instructed the performer in m. 1 to “strike silently, take sust. [*sostenuto*]-pedal, then lift hand.” In other words, the performer should first depress the keys of a diminished seventh chord without producing any sound. Once he is holding down the chord with his fingers, he uses the *sostenuto* pedal to keep the dampers of the four tones of the chord raised. That is, the performer presses the keys without producing any “attack,” which is the first step of a typical three-step sequence (i.e., attack-sustain-release) of sound production on a piano. When the performer plays the chromatic scale in m. 2, the use of the *sostenuto* pedal prolongs only the tones of the silently depressed chord: c, e-flat (enharmonically spelt in the chromatic scales as d-sharp), f-sharp, and a, all played by the left hand. The accumulation of those tones results in a diminished seventh chord which Busoni called “effect,” notated above the middle stave on the second beat of the second measure. In this example, Busoni used the *sostenuto* pedal ingeniously to alter the conventional three-step sequence of sound production on the piano: 1) the attack of a tone, 2) the sustaining of the same tone, and 3) the release of it. Following Busoni’s directions, the performer uses the *sostenuto* pedal to make audible a diminished seventh chord that lacks a simultaneous attack of its tones. Thus, Busoni came up with an innovative way to separate the attack of a tone from the sustaining of the same tone by using the *sostenuto* pedal.

Busoni wrote in Example 77 the instruction “*senza pedale*” (without pedal) above the first and third staves in m. 2 to ask the performer to refrain from using the damper pedal. This performance direction indicates that the performer should prolong only the notes that form the diminished seventh chord beyond their notated sixteenth duration. Using the damper pedal while playing the chromatic scales would delay the release of all the sixteenth notes of the scales and

would therefore obscure the formation of the diminished seventh chord. Following Busoni's instructions, then, the performer would play the chromatic scales while using the sostenuto pedal to prolong only the tones of the diminished seventh chord. Busoni thus used the sostenuto pedal, while deliberately avoiding using the damper pedal, so that the performer can exert a high degree of control over the precise release of the sixteenth notes of the chromatic scales.

Example 3.2. Ferruccio Busoni, "Example No. 77" from the First Appendix of Bach's Well-Tempered Clavier, mm. 1-4.

Example 77.

The musical score for Example 77 is presented in two systems. The first system is marked *senza Pedale* and begins with a piano (*p*) dynamic. It features a treble and bass staff with chromatic scales. A bracket labeled *(effect)* spans the first two measures. The second system is marked *f* (forte) and also features chromatic scales in both staves. The score includes performance instructions: "strike silently, take sust.-pedal, then lift hand." and "p senza Pedale".

In Example 78, Busoni used the sostenuto pedal to keep the dampers of a D major chord raised in m. 1, a chord that the performer has depressed without making any attack, and to make what he called an "effect" when the performer rearticulates the same chord on the third beat of the third measure (see Example 3.3). In the first measure, Busoni indicated "as above," an indication that refers to the technique he shows in Example 77, which is that the performer should "strike silently, take sust.-pedal, then lift hand." In the case of Example 78, the performer silently depresses the first inversion of a D major chord (i.e., F-sharp, A, d) while pressing the sostenuto pedal. The performer then plays a harmonic sequence formed by the following series of diminished seventh and dominant seventh broken chords in m. 2 through the first half of m. 3: A^{o7} (beats one and two of m.2), Bb^{o7} (beat three of m.2), B^{o7} (beat four of m.2), C^7 (beat one of

m.3), and C \sharp ^{o7} (beat two of m.3). Although the performer plays three chord tones—d¹ a, d²—in five occasions in m. 2, using the sostenuto pedal does not produce a clearly audible effect over them: none of the notes of m. 2 and the first half of m. 3 rearticulate the notes of the D major chord (i.e., F-sharp, A, d) that have been silently depressed. Embedded in the broken chords played by the right hand, there is a chromatic inner voice ascending from a¹, on the first beat of m. 2, to its peak, d², on the third beat of the third measure, where the sequence coincides with a D major chord in the first inversion. At this point, where Busoni wrote “effect,” the performer plays with his left hand the three tones that he has silently depressed at the beginning of the excerpt, (i.e., F-sharp, A, d). The performer prolongs only those three tones: Busoni’s use of the sostenuto pedal does not prolong the tone of the arpeggio that the performer plays together with the D major chord on the third beat of the third measure, d². If the performer were to press the sostenuto pedal on the third beat of the third measure—without silently depressing it beforehand—it would incidentally prolong d², adding it to the three-note D major chord that the performer prolongs on beats 3 and 4 of the third measure and the entire fourth measure. Joseph Banowetz suggests using this pedalling technique, silently depressing a chord while using the sostenuto pedal “when the player wishes to catch a note with the middle [sostenuto] pedal but cannot do so because of other notes being played at the same time.”⁸⁴

Once the performer prolongs the D major chord using the sostenuto pedal in m. 3, his left hand can move away from the chord without shortening its duration. Although in this excerpt the performer can prolong the D major chord by merely holding it down with his left hand, Busoni used the sostenuto pedal to free the left hand from sustaining it. This technique allows the performer to move up his left hand to play some tones of the D major arpeggio in m. 4—a¹ and

⁸⁴ See Banowetz, *The Pianist’s Guide*, 99-100.

d² on the first beat and f-sharp¹ and a¹ on the third beat. Thus, Busoni used the sostenuto pedal to facilitate the performance of what could be a technically demanding passage if the D major arpeggio were to be played by the right hand alone.

To control the release of the sixteenth notes, Busoni wrote *senza pedale* (without pedal) in the second measure, meaning that the performer should not use the damper pedal in this excerpt. Without that indication, the performer might use the damper pedal throughout the excerpt, blending the sixteenth notes that form each of the harmonies. Thus, Busoni's indication *senza pedale* tasks the performer to control the release of each note played in this excerpt. In her dissertation, "The Development of Techniques for Teaching the Various Uses of the Pedals of the Contemporary Grand Piano" (1989), Mary Johnson discusses the use of the sostenuto pedal over silently depressed chords. She notices that this technique prevents the prolongation of "unwanted tones."⁸⁵ In Busoni's Example 78, when the performer prolongs the D major chord using the sostenuto pedal on the third beat of the third measure, he plays the upper sixteenth notes legato—including d² on the third beat of the third measure—without changing their length. The purpose of Busoni's pedalling technique, indicated as "strike silently, take sust. Pedal, then lift hand," is to control the length of the upper sixteenth notes throughout this four-measure excerpt.

⁸⁵ Johnson, "The Development of Techniques," 211.

Example 3.3. Ferruccio Busoni, “Example No. 78” from the First Appendix of Bach’s Well-Tempered Clavier, mm. 1-4.



To sum up, although Busoni presented the Appendix of his edition of Bach’s Well-Tempered Clavier as a guide to transcribing Bach’s organ works for the piano, he began the section devoted to the use of the sostenuto pedal with three newly composed excerpts that are not transcriptions. In the first group of excerpts, Examples 76-78, Busoni notated uses of the sostenuto pedal that have no precedent in the piano repertoire. In Example 76, Busoni used the sostenuto pedal to prolong a chord that partially overlaps an arpeggio. Busoni’s technique creates an unexpected disparity of sustaining, volume, and reverberation within a uniform texture. In Example 77, the performer silently depresses a diminished chord while pushing down the sostenuto pedal, which is a pedalling technique that Joseph Banowetz refers to as “anticipatory use of the sostenuto pedal” in his book *The Pianist’s Guide to Pedalling* (1985). Although Banowetz does not name any composers who used this technique, he argues that “when the performer wishes to catch a note with the middle pedal but cannot do so because of other notes being played at the same time, it may be possible to catch the note silently with the sostenuto pedal before it is actually to be sounded.”⁸⁶ In the case of Example 77, the performer uses the sostenuto pedal to keep the dampers of a diminished chord raised in m. 1. The performance of a

⁸⁶ Banowetz, *The Pianist’s Guide*, 99-101.

chromatic scale in m. 2 and m. 3 activates the vibrations of the strings of a diminished seventh chord. The result is the sustaining of a chord that does not have a simultaneous attack. Using the same technique, silently depressing a chord at the beginning of the excerpt, in Example 78, the performer uses the sostenuto pedal to prolong a chord—in this case with a simultaneous attack—on the third beat of the third measure. Thus, Busoni's use of the sostenuto pedal in Example 78 predated Banowetz's "anticipatory use of the sostenuto pedal," described in his book in 1985: it allows the performer to prolong a chord while controlling the length of the sixteenth notes of the upper layer. Examples 76-78 reveal that in Busoni's hands, the sostenuto pedal became a device capable of expanding the piano pedalling technique. Instead of using the sostenuto pedal to simply prolong a pedal point, as Liszt did, Busoni employed new pedalling techniques that sustain and release tones, and thus control the duration and the combination of resonances.

3.2 Second Group of Excerpts, Examples 79-85

The second group of examples are six transcriptions of Bach's organ works and a transcription of mm. 1-5 of Beethoven's first movement of his Fourth Symphony. In these excerpts, which Busoni calls "Examples 79-85," Busoni used the sostenuto pedal to prolong pedal points originally played on the pedal board of the organ—except Beethoven's Fourth Symphony, where the performer prolongs an inverted pedal point originally played by the woodwinds. Unlike Liszt's pedalling in *Danse des Sylphes*, discussed in Chapter Two, where the use of the sostenuto pedal prolongs a pedal point—D—and the first note of the melody—f#²—throughout mm. 41-141, Busoni asked the performer to press the sostenuto pedal when exclusively playing the pedal point.⁸⁷ Thus, Busoni's use of the sostenuto pedal in Examples 79-85 prolongs only the pedal point. In doing so, Busoni avoided prolonging tones of the upper layers that would obfuscate the polyphonic textures.

In Example 79, Busoni used the sostenuto pedal to prolong a tripled pedal point (i.e., to prolong the pedal point A by sustaining the notes a, A, and A¹ simultaneously), imitating the sustaining of the pedal played on the pedal board of the organ and allowing the pianist to perform each voice of the texture clearly (see Example 3.4). This example is an excerpt of Busoni's transcription of Bach's Prelude and Fugue in D major BWV 532. In the original organ score, Bach's three-voice texture consists of a pedal point—A¹—underneath two upper voices

⁸⁷ Anne Kuhny identifies the same pedalling issue in a passage of Busoni's *Variations on a Theme by Chopin*. Although Busoni did not indicate the use of the sostenuto pedal in that work, she discusses its use to enable the performer to play legato the right-hand chords in Variation No. 1. She concludes that the performer should not use the sostenuto pedal in this specific Variation because it "would have the undesired effect of also sustaining the eight-note pedal point." See Anne Marie Kuhny, "A Comparison of Two Sets of Variations on Chopin's Variations on a Theme of Chopin, Op. 22" (DMA diss., University of Illinois at Urbana-Champaign, 2018), 104.

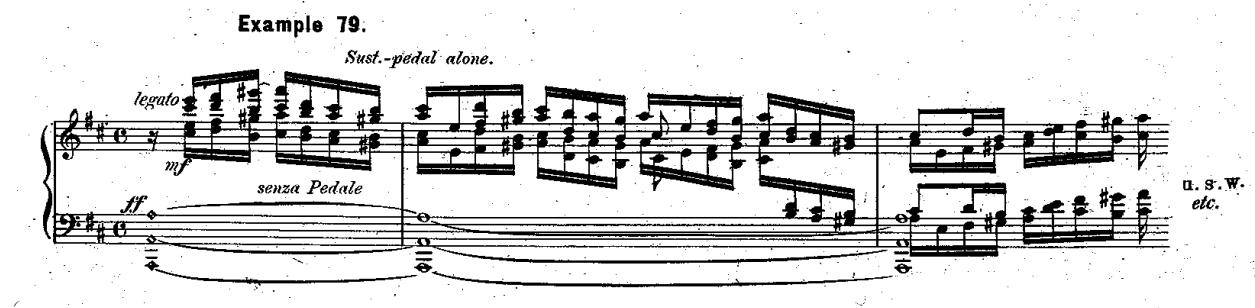
that lead to a half cadence in D major in m. 9. The organist plays the pedal point—A¹—on the pedal board (see Example 3.5). In his piano transcription, Busoni thickened Bach’s texture triplicating the pedal point and duplicating each of the two upper voices. The pianist plays the tripled pedal point, prolongs it with the sostenuto pedal, and then plays the upper sixteenth chords with both hands. If the performer were to prolong the pedal point using the damper pedal, he would immediately blur the sixteenth chords of the upper voices since many of these chords move by step. One may argue that half-peddalling would be an alternative to decrease the blurring of the upper voices, but the constant changes of the damper pedal would inevitably shorten the pedal point. A pianist, therefore, must come up with a new way to retain the pedal point while playing the upper voices simultaneously. To this end, Busoni suggests using the sostenuto pedal. In this excerpt, the use of the sostenuto pedal enables the performer to play the upper layers clearly while prolonging the full length of the pedal point. This type of sustaining would be impossible without using the sostenuto pedal. In doing so, Busoni’s pedalling effectively imitates the texture of Bach’s organ work on the piano.

Busoni avoided using the damper pedal in this excerpt to increase the clarity of the upper chords. Although he stated in the “first Appendix” that using the damper pedal is “absolutely essential” while playing piano transcriptions of Bach’s organ works, he nevertheless wrote *senza pedale* in the first measure of Example 79, meaning that the performer should not use the damper pedal in this excerpt.⁸⁸ This indication means that Busoni intended to play with a clear legato line the upper sixteenth chords, employing only his fingers. If the performer were to use the damper pedal while playing the upper chords, he would immediately muddle them. For that reason, Busoni also recommends to pianists that, when playing polyphonic legato lines, “wherever

⁸⁸ Bach, *The Well-Tempered Clavier*, 176.

possible, sustain the tones with the hands rather than with the pedal.”⁸⁹ Busoni’s pedalling imitates Bach’s texture and increases the degree of articulatory precision in the performance of this multi-layered passage.

Example 3.4. Ferruccio Busoni, “Example No. 79” from the First Appendix of Bach’s Well-Tempered Clavier, mm. 1-3.



Example 3.5. Johann Sebastian Bach, Prelude and Fugue in D major BWV 532, mm. 5-9.



In Example 80, Busoni used the sostenuto pedal to prolong a doubled dominant pedal point of F-sharp (i.e., F# and F#1), allowing the performer to mark the gradual thickening of the texture (see Example 3.6). This example is an excerpt of Busoni’s transcription of Bach’s

⁸⁹ Ibid.

Prelude and Fugue in D major BWV 532. In the original organ score, Bach began this excerpt with a pedal point that supports two imitative voices in the upper parts in mm. 10–11. He added a fourth voice to this initial three-voice setting on the second beat of m. 12 and a fifth one in m. 14. The polyphonic texture in mm. 10–12 turns into homophonic texture in m. 14, leading to a half cadence in B minor in m. 15 (see Example 3.7).

In his piano transcription, Busoni doubled the pedal point (i.e., he used F-sharp and F-sharp¹ instead of F-sharp alone) and used the sostenuto pedal to prolong it throughout the entire excerpt. He again specified how to use two pedals. In m. 1, he wrote three instructions for the performer: 1) above the top stave, he wrote “sust.-ped. and loud Pedal,” asking the performer to use the sostenuto pedal and the damper pedal together; 2) he added the indication “sust.-pedal continuously held with left foot,” which means that the performer keeps the sostenuto pedal down when he rearticulates the F-sharp pedal point in mm. 2, 3, and 5; and 3) he also added the instruction of “III. Ped,” which instructs the performer to push down the sostenuto pedal in the downbeat of the first measure. The dashed line underneath the bottom stave in m. 3 through the end of m. 6 indicates that the performer presses down the sostenuto pedal throughout these four measures while using the damper pedal simultaneously. The solid line next to the indication “Ped.” (which refers to the use of the damper pedal) underneath the dashed line indicates that the performer must hold down the damper pedal from m. 3 to the second beat of m. 5. The dashed line and the solid line together tell the performer how to use the damper and sostenuto pedal together. This is the first excerpt of the Appendix where Busoni employs two pedals at the same time.

As shown in the first measures of Example 3.6, the performer uses the sostenuto pedal to prolong the doubled pedal point (i.e., F-sharp and F-sharp¹) and will continue pressing the

sostenuto pedal throughout the excerpt. He starts using the damper pedal on the first beat of m. 3, where Busoni indicated “Ped,” to sustain an E-sharp diminished seventh chord. Furthermore, in the third measure, the texture of Busoni’s transcription thickens: he doubled two of the upper voices, the one that consists of a tremolo and another with a dotted rhythm. The ideas of the tremolo and the dotted rhythm were Bach’s (compared m. 3 of Example 3.6 with m. 12 of Example 3.7), but the idea of doubling these voices was Busoni’s. Busoni prolonged the F-sharp pedal point using the sostenuto pedal while sustaining all the upper voices using the damper pedal from the first beat of the third measure. On the third beat of the fourth measure, the C-sharp played by the left hand turns the E-sharp diminished seventh chord into a C-sharp dominant ninth chord, which follows Bach’s harmony in m. 13 of Example 3.7. The performer should keep the damper pedal down until the fifth measure, where the score indicates changing it on the second, third, and fourth beats when the performer plays the F-sharp chords. Busoni followed Bach’s original by adding passing chords—E-sharp diminished chord, G-sharp diminished chord, and another E-sharp diminished chord—between articulations of the F-sharp chords. The releases of the damper pedal in m. 5, while keeping the sostenuto pedal down, allow the performer to prolong the F-sharp pedal point while playing the alternations between the F-sharp chord and passing chords clearly. The use of the sostenuto pedal allows the performer to fully prolong the pedal point, which has been rearticulated in m. 5, while changing the damper pedal. Without the use of the sostenuto pedal, the changes of the damper pedal in the fifth measure would discontinue the pedal point and thus interrupt the gradual thickening of the texture throughout the passage. Thus, Busoni used the sostenuto pedal and the damper pedal to make clear Bach’s original texture.

Example 3.6. Ferruccio Busoni, “Example No. 80” from the First Appendix of Bach’s Well-Tempered Clavier, mm. 1-6 (with harmonic analysis).⁹⁰

Example 80.

Adagio. Sust.-ped. and loud Pedal.

V⁷ 9 i ii^o/V vii^{o7}/V V⁹/V

F-sharp pedal point

V

⁹⁰ In his discussion of this work, Peter Williams analyzes this passage in the key of B minor. He comments that in this section of Bach’s Prelude “the rhetoric is startlingly accomplished, especially in the stormy B minor passage [mm. 1-6 of Busoni’s Example 80] into and from which the listener is thrust without warning.” Peter Williams, *The Organ Music of J. S. Bach* (Cambridge: Cambridge University Press, 2003), 41.

Example 3.7. Johann Sebastian Bach, Prelude and Fugue in D major BWV 532, mm. 10-16.



In Example 81, an excerpt from Bach's Organ Toccata in F major BWV 540, Busoni used the sostenuto pedal to add a quadrupled pedal point of C (i.e., c^2 , c^1 , c , C), increasing the dynamic and energy levels of the passage (see Example 3.8). Busoni wrote three performing instructions on the uses of the pedals: 1) "III. Ped." (which refers to the use of the sostenuto pedal) followed by a solid line throughout this excerpt; 2) "sust.-ped." between the top two staves which clarifies that the sostenuto pedal will prolong the double octaves of those staves; and 3) the standard "Ped. *" below the bottom stave, which refers to the use of the damper pedal. Clearly, Busoni asked the performer to use the sostenuto pedal to prolong the quadrupled pedal point of C, but unlike Examples 79 and 80, its use does not prolong a pedal point originally played on the pedal board of the organ. This passage of Bach's Toccata, does not use a sustained pedal point; rather, the organist plays a dominant prolongation on C that implies a pedal point, using the pedal board to play the bass notes of C and c which last for two eight beats from mm. 417-424 (see Example 3.9). In Busoni's transcription of these seven measures, the pianist doubles these bass notes with his left hand, playing alternations between the octaves c - C and C - C^1 . At the same time, he uses the sostenuto pedal to prolong a *fortissimo* quadrupled C

throughout this dominant prolongation. Notably, neither the dynamic marking nor the quadrupled C appears on Bach's score. Busoni also wrote the Italian word *energicamente* (which means "energetically, vigorously") next to the *fortissimo* marking in mm. 1–2, suggesting that this passage should make an energizing, invigorating effect. The use of the sostenuto pedal prolongs the resonance of the double octave supporting the *fortissimo* sonority. Busoni added a double octave and prolonged it using the sostenuto pedal to bring out the *energicamente* character of this passage, which was not indicated in Bach's original passage. In so doing, Busoni's transcription enriches Bach's original, while applying new pedalling techniques to an instrument that did not exist in Bach's time. Looking to Bach's music for content while exploring expressive possibilities with the new piano equipped with the sostenuto pedal, Busoni proposed ways to adapt Bach's organ music for the piano.

While using the sostenuto pedal to prolong the quadrupled pedal point, Busoni also used the damper pedal to enrich the resonance of the bass notes and the chords in the upper register of the piano. In the section of the "first Appendix" where he discussed the use of the damper pedal in piano transcriptions of Bach's organ works, he recommended that "in passages intended to imitate the magnificent 'full-organ' effects, the [damper] pedal is indispensable. The raised dampers produced no ill effect with passing and changing notes."⁹¹ Therefore, Busoni used the damper pedal to raise all the dampers of the piano, increasing the vibration of overtones that enrich the sonority of this passage. Busoni indicated changing the damper pedal on the first beat of every measure to avoid an excessive accumulation of resonances, a technique that he used in m. 5 of Example 80. When the performer changes the damper pedal on the first beat of each measure, the use of the sostenuto pedal prolongs the quadrupled pedal point, maintaining the

⁹¹ Bach, *Well-Tempered Clavier*, 176.

consistency of the thickness and the dynamic level of this pedal point. The articulations of the octave in each measure also reinforce the resonances of the prolonged pedal point. Therefore, Busoni used the damper pedal together with the sostenuto pedal to replicate the “magnificent” sonorities of Bach’s organs.

Example 3.8. Ferruccio Busoni, “Example No. 81” from the First Appendix of Bach’s Well-Tempered Clavier, mm. 1-7.

Example 81.

The musical score for Example 81 is presented in a grand staff format. The right hand (treble clef) features a constant octave pedal point, indicated by a series of 'Ped.' markings with asterisks below the staff. The left hand (bass clef) plays a melodic line marked with 'ff' and 'energicamente'. The score is labeled 'III. Sust.-ped.' and 'ff'.

Example 3.9. Johann Sebastian Bach, Toccata in F major BWV 540, mm. 414-424.



In Example 82, an excerpt from Bach's Prelude and Fugue in A minor BWV 543, Busoni re-arranged Bach's original passage to prolong only the doubled tonic pedal point of A (i.e., A and A¹) by using the sostenuto pedal (see Example 3.10). In Bach's original passage, the organist plays the tonic pedal point on the pedal board from m. 10 to m. 24 while outlining harmonic changes in the sextuplets above (see Example 3.11). In his transcription, Busoni modified Bach's passage to prolong only the pedal point, and not any of the upper sextuplets. On Bach's organ score, a sextuplet is written above the pedal point on the downbeat of the second measure of this excerpt (see Example 3.11, m. 10, first beat). Instead of following Bach's musical idea of using a continuous stream of sextuplets, Busoni inserted a sixteenth rest above the pedal point in m. 2 of Example 3.10, precisely when he asked the performer to press "the sostenuto pedal with right foot." The addition of this short and critical rest allows the performer to prolong only the pedal point. If the pianist were to push down the sostenuto pedal while playing the doubled pedal point and the first sextuplet in m. 2, he would inevitably prolong both layers, modifying the two-voice setting of that measure. Thus, Busoni made an informed and practical suggestion to modify this

passage, exclusively prolonging the tonic pedal point while retaining Bach's texture and the crux of his musical ideas.

Joseph Banowetz suggests an alternative use of the sostenuto pedal in this excerpt. He proposes employing Busoni's pedalling technique of Example 78, silently depressing the pedal point of A while using the sostenuto pedal to keep the damper of that key raised before playing the first measure of the Prelude.⁹² Since the pianist does not play that note in mm. 1-9, the use of the sostenuto pedal prolongs only the pedal point of A in m. 10. In this way, Banowetz's use of the sostenuto pedal effectively imitates Bach's original passage because he prolongs the pedal point while playing all the sextuplets in m. 10. Thus, in Example 82, Busoni suggested another solution to a passage such as this excerpt, where the performer needs to prolong a pedal point while playing notes in the other layers: modifying the score to exclusively prolong the pedal point.

In Example 82, Busoni used the soft pedal while playing both the pedal point and the upper voices to create a distinct timbre. This is the first excerpt of the Appendix in which the performer uses the soft pedal (marked "una corda" in m. 1) and the sostenuto pedal simultaneously. Busoni wrote the instruction "sust-ped. and soft pedal" above the top stave in m. 2, and another instruction "sus.-ped. with right foot" between the staves in m. 2, an instruction that I discuss above. He also wrote the instruction "III. Ped." (which refers to the use of the sostenuto pedal) next to the doubled pedal point of A below the bottom stave in m. 2. These instructions show that Busoni systematically and expansively explored various uses of the sostenuto pedal in a sequential, methodical, and additive process. In the section of the first

⁹² Banowetz, *The Pianist's Guide*, 100.

Appendix where he discussed the use of the soft pedal, Busoni clarified that he did not use the soft pedal to produce a “soft” sound or to decrease the dynamic level of a passage but to obtain a “peculiar quality of tone.”⁹³ That is, he distinguished dynamic from timbre. In this excerpt, he wrote *una corda* at the end of the first measure to produce on both the pedal point and the upper voices a “peculiar quality of tone.” Note that he specified the dynamic level of *mezzo forte* (*mf*) at the beginning of m. 2, indicating that the “peculiar” timbre he referred to should be produced with a moderately loud dynamic level, and not a “soft” dynamic. Busoni also specified that the performer must use the sostenuto pedal with the right foot and the soft pedal with the left foot. This instruction precludes the use of the damper pedal. Although he did not write *senza pedale* as he did in Examples 76-79, it would be physically impossible for the performer to use the damper pedal with his right foot while pushing down the sostenuto pedal simultaneously, for he would need to constantly change the damper pedal. In this example, Busoni showed how to combine the soft pedal and the sostenuto pedal to prolong the pedal point and obtain a distinctive, “peculiar” timbre that is moderately loud. In other words, Busoni rethought the basics of dynamic and timbre in his exploration of uses of the sostenuto pedal combined with the other two pedals and made pianistic effects more nuanced than before.

In addition to the pedalling indications, in Example 82, Busoni wrote “(Liszt)” below the bottom stave of the last measure to indicate that he based this excerpt on Liszt’s piano transcription of Bach’s Prelude and Fugue in A minor BWV 543. Importantly, Liszt composed his transcription in 1869, when he had not yet used the Steinway’s sostenuto pedal yet.⁹⁴ As shown in Example 3.12, Busoni modified Liszt’s transcription. Liszt transcribed all Bach’s

⁹³ Bach, *The Well-Tempered Clavier*, 177.

⁹⁴ See Maria Eckhardt and Rena Charnin Mueller, “Liszt, Franz,” *Grove Music Online*, Oxford Music Online, Oxford University Press, accessed February 21, 2021, <http://www.oxfordmusiconline.com>.

sextuplets in m. 10, while Busoni, as discussed above, inserted a critical sixteenth rest to this passage. Busoni also doubled Liszt's pedal point; instead of following Liszt's single pedal point—A¹— in mm. 10-15, Busoni wrote octaves (i.e., A¹ and A) in mm. 2-6 of Example 82. Additionally, Busoni tied the pedal points throughout mm. 2-5 while Liszt wrote three ties that connect three segments of the pedal points in mm. 10-11, 12-13, and 14-15. Evidently, the use of the sostenuto pedal enabled Busoni to extend the duration of the pedal point in a way that Liszt could not achieve using only the damper pedal. Since the use of the sostenuto pedal does not muddle the articulation of the upper sextuplets, the performer who follows Busoni's instructions can fully prolong the pedal point throughout mm. 2-5.

Example 3.10. Ferruccio Busoni, "Example No. 82" from the First Appendix of Bach's Well-Tempered Clavier, mm. 1-6.

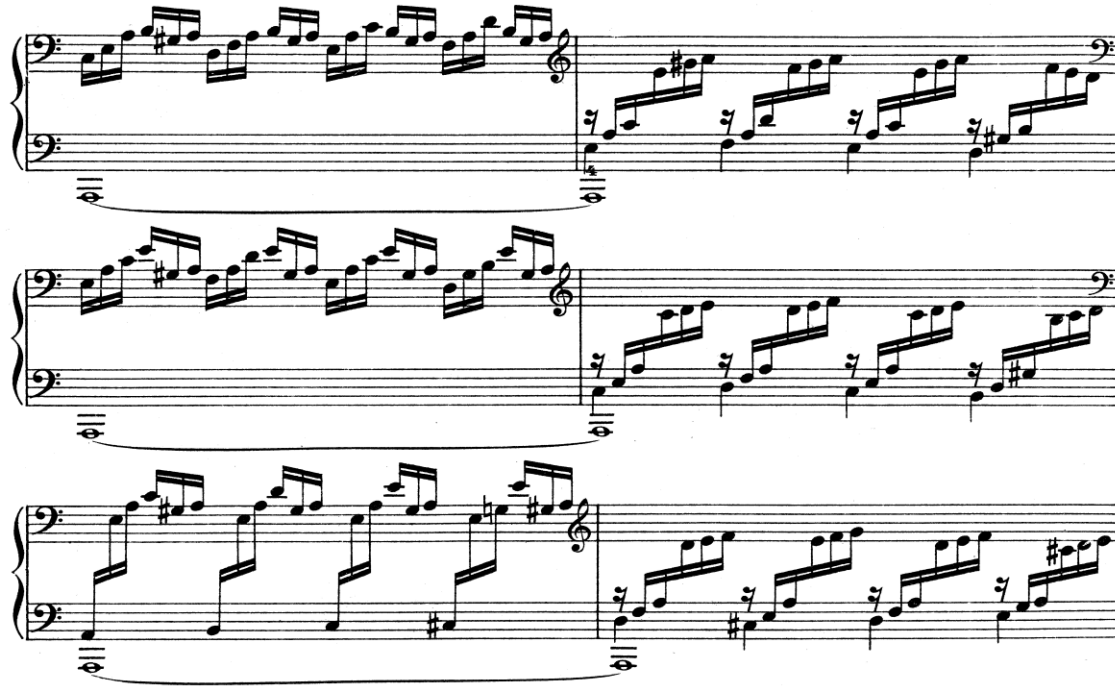
Example 82.

p *una corda* *mf* *III. And.* *Sust.-ped. and soft pedal.* *Sust.-ped. with right foot.* *u. s. w. etc.* *(Liszt)*

Example 3.11. Johann Sebastian Bach, Prelude and Fugue in A minor BWV 543, mm. 9-26.

The image displays a musical score for the Prelude and Fugue in A minor, BWV 543, by Johann Sebastian Bach, specifically measures 9 through 26. The score is written for a grand piano, with a treble and bass staff for each hand. The key signature is A minor (no sharps or flats). The time signature is common time (C). The score is divided into six systems, each containing two staves. The first system (measures 9-11) shows the right hand playing a series of eighth notes and the left hand playing a series of eighth notes. The second system (measures 12-14) continues the eighth-note pattern in the right hand, while the left hand plays a series of eighth notes. The third system (measures 15-17) shows the right hand playing a series of eighth notes and the left hand playing a series of eighth notes. The fourth system (measures 18-20) continues the eighth-note pattern in the right hand, while the left hand plays a series of eighth notes. The fifth system (measures 21-22) shows the right hand playing a series of eighth notes and the left hand playing a series of eighth notes. The sixth system (measures 23-26) shows the right hand playing a series of eighth notes and the left hand playing a series of eighth notes. The score is written in a clear, legible font, with measure numbers 9, 12, 15, 18, 21, and 23 indicated at the beginning of each system.

Example 3.12. Franz Liszt, Piano Transcription of Bach's Prelude and Fugue in A minor BWV 543, mm. 10-15.



In Example 83, an excerpt of Bach's Fantasy and Fugue in G minor BWV 542, Busoni arranged Bach's original passage with the purpose of using the sostenuto pedal to prolong only the dominant pedal point of D (see Example 3.13). In the corresponding measure on Bach's organ score, m. 18, there is a tie that connects the note c^2 —the seventh of the D dominant seventh chord—from the last eighth note of m. 17 to the first sixteenth note on the second beat of m. 18 (see Example 3.14). Instead of using a tie, Busoni inserted a sixteenth rest (see Example 3.13, first measure, second beat). As with the previous example, Busoni added the sixteenth rest so that the performer has enough time to press the sostenuto pedal. By adding the sixteenth rest, the performer prolongs only the pedal point and not other notes that would create a cluttered

texture. This technique increases the degree of precision in his playing. In this example, Busoni employed the *sostenuto* pedal to imitate the sustaining of the organ pedal: he prolonged the pedal point without affecting the clarity of tone in the upper layers.

In addition to using the *sostenuto* pedal to prolong the pedal point, Busoni used the soft pedal, marked “u.c.,” which means “una corda,” underneath the instruction “II. Ped.,” which also refers to the use of the soft pedal, to bring out what he calls a “peculiar” timbre when playing the chords of the middle layer. This is the only excerpt of the fifteen examples of the “first Appendix” in which Busoni added the instruction “II. Ped.” to indicate the use of the soft pedal. In Examples 82, 84, 85, 86, and 87 he wrote “una corda” to indicate the use of the soft pedal. Moreover, he wrote “III. Ped.” to indicate the use of the *sostenuto* pedal in Examples 80, 81, 82, 84, 86, and 87.

In Example 83, Busoni used specific notational markings on the score. He drew a dotted vertical line on the second beat to indicate the exact point when the performer should press the *sostenuto* pedal. He used these dotted vertical lines again to ask the performer to use the soft pedal to bring out the chords that form a middle layer, which should be played by the left hand on the third and fourth beats of m. 1 and the first and second beats of m. 2. Thus, the performer plays those chords with a “peculiar” timbre that distinguishes them from the top line and the pedal point prolonged by the *sostenuto* pedal. The combined use of the soft pedal and the *sostenuto* pedal in this example demonstrates that Busoni thought expansively about the pedalling techniques, exploring new pedal combinations and inventing new pedalling techniques that widen the dynamic range and timbral clarity of the performance.

As in Example 82, Busoni wrote “(Liszt)” at the end of the excerpt (Example 3.13) to inform the performer that his transcription is based on Liszt’s piano transcription of Bach’s

Fantasia et Fuga in G minor BWV 542 (Example 3.15). A comparison between Example 3.13 and Example 3.15 shows that Busoni modified Liszt's transcription in several ways. First, he inserted a sixteenth rest on the second beat of m. 1. The sixteenth rest, as discussed above, allows the performer to use the sostenuto pedal to prolong the pedal point exclusively. Additionally, Busoni doubled Liszt's pedal point to make it an octave (i.e., D¹ and D). The use of the sostenuto pedal enables Busoni to reinforce the pedal point in Example 83: it allows the performer to fully prolong a doubled pedal point of D in the lowest register of the piano while still obtaining a high degree of textural clarity in the middle and top layers.

Example 3.13. Ferruccio Busoni, "Example No. 83" from the First Appendix of Bach's Well-Tempered Clavier, mm. 1-2.

Example 83.
espress.

Grave.
p

mf

p

II. Ped. u. c. * *p*

II. Ped. u. c. *

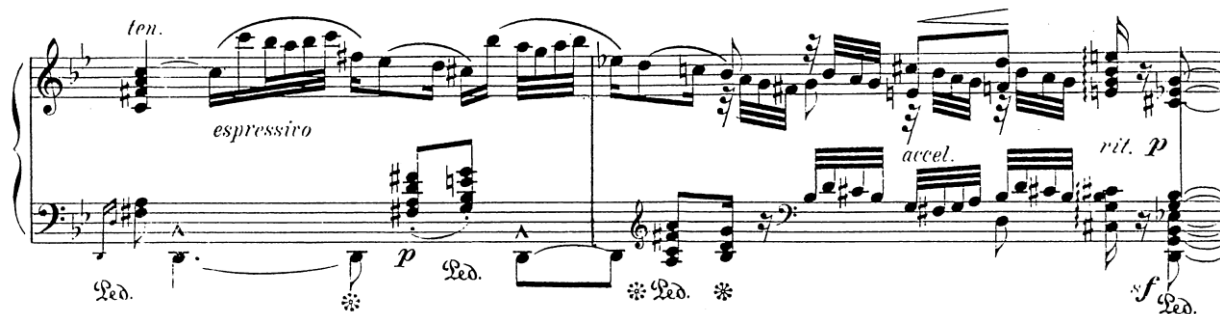
(Liszt)

Example 84.
Sust.-ped. (r. foot)

Example 3.14. Johann Sebastian Bach, Fantasia et Fuga in G minor BWV 542, mm. 16-18.



Example 3.15. Franz Liszt, Piano Transcription of Bach's Fantasy and Fugue in G minor BWV 542, mm. 18-19.



Example 84 is special among these fifteen examples, as Busoni used it as the only excerpt in the “first Appendix” to transcribe an orchestral excerpt. Example 84 is a transcription of mm. 1-5 of the first movement of Beethoven's Fourth Symphony Op. 60 in B-flat major (see Example 3.16). In this excerpt, Busoni used the sostenuto pedal to prolong a quadrupled inverted tonic pedal point of B-flat (i.e., b-flat², b-flat¹, b-flat, B-flat), while playing the opening phrase. Beethoven's score shows a flute, two clarinets, two bassoons, and two French horns that sustain the tonic pedal while the strings play the B-flat minor opening (see Example 3.17). Thus, Beethoven wrote two layers of music: the inverted pedal point and the melodic line.

In Busoni's transcription, the use of the sostenuto pedal allows the performer to prolong the inverted pedal point without affecting the clarity of the melodic line. Following Beethoven's

score, Busoni quadrupled the pedal point and tripled the melodic line. The resulting texture shows an interlocked pattern: the highest voice of the inverted pedal point remains on top (i.e., b-flat²), followed by the second highest inverted pedal point (i.e., b-flat¹), followed by the top voice of the melody (i.e., g-flat¹), then another pedal point below this melody (i.e., b-flat), yet another melody underneath this pedal point (i.e., g-flat), then the lowest pedal point (i.e., B-flat) and, at the bottom, the lowest voice of the melody (G-flat). In Example 84, the performer plays the top two notes of the pedal point (i.e., b-flat² and b-flat¹) above the melodic line. Due to the interlocking layers in the texture, a performance of this excerpt using only the damper pedal would inevitably muddle the melody by the third measure, when the resonance of the melodic notes in m. 2 (G-flat and E-flat) would mix with that of the melodic notes in m. 3 (F and D-flat). Since the performer prolongs the higher notes of the pedal point above the melodic line, using half-pedalling technique would interrupt the pedal point rather than prolonging it (although this technique can clear up some resonances accumulated throughout this excerpt). Using the sostenuto pedal provides a solution to articulate Beethoven's orchestral texture. The way Busoni used it (marked "sust.-pedal" and "III. Ped." in m. 1) sustains only the quadrupled pedal point, which makes replicating Beethoven's texture on the piano possible. Additionally, the performer uses the soft pedal (marked "una corda" in m. 2) only when playing the tripled melody, notated on the bottom two staves of the four-stave system. The performer plays the original, unmuted sound (*tre corde*) of the inverted pedal point originally prolonged by the woodwinds, and the muted sound (*una corda*) of the opening phrase played by the strings. By using both pedals simultaneously, the performer prolongs the inverted pedal point and echoes the timbral contrast between woodwinds and strings in Beethoven's orchestration.

It is important to clarify that in the entire set of fifteen examples of the “first Appendix,” the diamond-shaped notes are the notes to be prolonged by the sostenuto pedal.⁹⁵ Importantly, only in Examples 77 and 78 the performer silently depresses those tones, as Busoni meticulously indicated. In the rest of excerpts, including Example 84, the performer plays those notes while prolonging them using the sostenuto pedal.

Example 3.16. Ferruccio Busoni, “Example No. 84” from the First Appendix of Bach’s Well-Tempered Clavier, mm. 1-5.

Example 84.

Adagio.

The image shows a musical score for Example 84, which is a transcription of a section from Bach's Well-Tempered Clavier. The score is written for piano and cello/bass. The piano part is in the upper staves, and the cello/bass part is in the lower staves. The tempo is marked 'Adagio.' and the dynamics are 'p' (piano) and 'pp' (pianissimo). The piano part features diamond-shaped notes, which are indicated to be sustained by the sostenuto pedal. The cello/bass part includes a 'una corda' marking, indicating a change in timbre. The score is divided into five measures, with the first measure containing a 'Sust. ped.' marking and a 'p III.' marking.

⁹⁵ Busoni wrote: “notes for the sustaining-pedal are square.” See Bach, *The Well-Tempered Clavier* 178.

Example 3.17. Ludwig van Beethoven, Symphony No. 4 in B-flat, mm. 1-8.

Adagio. ♩ – 66.

Flauto. *pp*

Oboi.

Clarineti in B. *pp*

Fagotti. *pp* *sempre pp*

Adagio. ♩ – 66.

Corni in B. *pp*

Trombe in B.

Timpani in B. F.

Adagio. ♩ – 66.

Violino I. *pizz.* *arco.* *pp* *sempre pp*

Violino II. *pizz.* *arco.* *pp* *pp*

Viola. *pizz.* *arco.* *pp* *pp*

Violoncello e Basso. *pizz.* *Basso. arco.* *pp* *Vel. arco.*

In Example 85, Busoni used the sostenuto pedal to create continuity between two musical numbers: he used it to prolong a dominant pedal point in E-flat minor, B-flat, which serves as a pivot between the Prelude and the following Fugue, linking these two parts of a single

composition without any interruption (see Example 3.18). Although Busoni himself indicated that this example is an excerpt of Bach's Prelude and Fugue in E-flat major BWV 552, mm. 201-206 of Bach's Prelude show a completely different ending, which means that Busoni recomposed it (see Example 3.19).⁹⁶ In this new ending, mm. 1-5 belongs to the Prelude, and the last two measures of this excerpt, mm. 6-7, belong to the Fugue (marked "Fuga" in m. 6). Busoni employed the sostenuto pedal to prolong the doubled pedal point of B-flat (i.e., B-flat¹ and B-flat²) in mm. 1-5, making the Prelude end with a half cadence in E-flat minor. The lack of tonal closure in the Prelude generates a link for the note b-flat in mm. 3-5, one that is tied to the first note of the fugue subject in m.6, which is the first measure of the Fugue. Thus, Busoni used the sostenuto pedal to create musical continuity between two musical numbers.

Additionally, the use of the sostenuto pedal enables the performer to achieve a gradual and controlled release of the concluding B-flat chord. This is an important point because Busoni used the sostenuto pedal in all the excerpts I have discussed in this chapter so far, to prevent the accumulation of unnecessary resonance and thus to differentiate musical layers and timbres in multi-layered textures. But Example 85 shows that Busoni used the sostenuto pedal to control the gradual thinning of texture as effectively as he used it to control the gradual textural thickening. As shown in Example 3.18, Busoni asked the performer to use all three pedals in this excerpt. In mm. 1-5, the performer prolongs the pedal point using the sostenuto pedal (marked "sust.-ped. ____" in m. 1). He also uses the damper pedal in mm. 1-3 (marked "Ped.*") to connect and enrich the resonances of the chords of the upper staves. The process of the gradual release of the B-flat chord begins in m. 4. It consists of three phases. In the first phase, the performer releases

⁹⁶ According to Kenneth Hamilton, since Busoni did not publish his recomposed ending of this Prelude in his own published piano transcription of Bach's Prelude and Fugue BWV 552, performers are rarely aware of it. See Hamilton, *After the Golden Age*, 177.

the third and the fifth of the chord (f, d¹, f¹, and d²) in m. 4 while lifting the damper pedal, thus effectively thinning out the chord and decreasing the resonance of the remaining tone and thus the dynamic level from mm. 3–5. In the following measure, m. 5, the right hand releases the B-flat octave (i.e., b-flat¹, and b-flat²) after holding it for one measure in m. 4. At this point, the performer is sustaining the note b-flat with his left hand while prolonging the pedal point of B-flat (i.e., the notes B-flat¹ and B-flat²) using the sostenuto pedal. In m. 6, which is the beginning of the fugue, the performer releases the sostenuto pedal and presses the soft pedal (marked *una corda*). The only note—b-flat—sustained by the left hand, tied across mm.5–6, becomes the first note of the fugue subject. This note is sounded without additional attack at the beginning of m.6. Thus, Busoni used the sostenuto pedal to mark an important structural elision of this composition: he used both the damper and the sostenuto pedals in a highly controlled manner to reduce the B-flat major chord in m. 3 to the tone of b-flat in m. 4, marking the end of the Prelude in m. 5 and linking this note smoothly to the subsequent Fugue.

Example 3.18. Ferruccio Busoni, “Example No. 85” from the First Appendix of Bach’s Well-Tempered Clavier, mm. 1-7.

Example 85.

3 Pedale. *len.*

ff *Ped.* *ten.* *Fuga.*

una corda *p*

Sust. - ped. *Also see Ex. 91.*

Example 3.19. Johann Sebastian Bach, Prelude and Fugue in E-flat major BWV 552, mm. 201-205 of the Prelude and mm. 1-2 of the Fugue.

Here is the summary of Busoni's treatment of the sostenuto pedal in the second group of excerpts, Examples 79-85. In these excerpts, Busoni used the sostenuto pedal to prolong pedal points. Hamilton states that Busoni used the sostenuto pedal to prolong a pedal point originally played on the pedal board of the organ. He remarks that Busoni's use of the sostenuto pedal "tend[s] to act as a limited substitute for the organ pedal board, which, like the sostenuto pedal, can hold certain notes down in the bass without affecting the clarity of the rest of the texture."⁹⁷ In my analysis, I show that Busoni also used the sostenuto pedal to imitate orchestral timbres. In Example 84, a transcription of Beethoven's Fourth Symphony, Busoni used the sostenuto pedal to prolong an inverted pedal point originally played by the woodwinds. Furthermore, I explain how Busoni modified Bach's original passages in Examples 81, 82, 83, and 85. The nature of Busoni's modifications, I argue, comes from a set of technical and compositional considerations and it demonstrates Busoni's in-depth understanding of the capabilities of the three pedals, used separately and in various combinations. In Example 81, Busoni added a pedal point to his transcription of mm. 417-423 of Bach's Toccata in F major BWV 540. He used the sostenuto pedal to prolong the pedal point, increasing the dynamic level of the excerpt. In Examples 82 and 83, he slightly modified Bach's organ pieces, inserting rests to prolong the sostenuto pedal exclusively and, consequently, elucidate Bach's multi-layered texture. In Example 85, Busoni replaced Bach's ending of the Prelude BWV 552 with a newly composed passage in which he used the sostenuto pedal to reduce the final B-flat chord to a single B-flat tone, which serves as a pivot that connects Prelude and the Fugue. Thus, in addition to prolonging pedal points in the second group of examples, Busoni's use of the sostenuto pedal adds an additional layer to Bach's

⁹⁷ Hamilton, *After the Golden Age*, 176.

texture in Example 81. He used it to re-arrange Bach's excerpts in Examples 82, and 83, and to rewrite an entire passage of Bach's Prelude BWV 552 in Example 85.

3.3 Third Group of Excerpts, Examples 86-90

The following section of this chapter shows my analysis of the third group of excerpts, Examples 86-90. These examples are newly composed materials. They are all related to Bach by featuring a melody formed by four notes—B-flat, A, C, and B-natural—that represents the spelling of Bach’s name in German (i.e., the note B-flat represents the letter “B” and the note B-natural represents the letter “H” in German nomenclature). Thus, this four-note motif represents Bach’s last name musically. Although Examples 86-90 are not piano transcriptions of any of Bach’s organ works, Busoni’s use of the B-A-C-H motif explains why these newly composed excerpts appear in his edition of Bach’s Well-Tempered Clavier.

Busoni placed the melody B-flat, A, C, and B-natural (B-A-C-H) in the highest notes of the four chords of each excerpt. Bach himself employed this motif in works such as *The Art of Fugue* BWV 1080. Moreover, numerous composers have used the B-A-C-H motif in their works, including Carl Philipp Emanuel Bach’s *Symphony in C major* H. 659 (1773), Robert Schumann’s *Sechs Fuguen über den Namen Bach*, Op. 60 (1845), Schumann’s *Symphony No. 2* (1847), Brahms’s cadenza for Beethoven’s *Piano Concerto No. 4* Op. 58 (1861), Franz Liszt’s *Fantasie und Fugue über das Thema Bach* (1871), Nikolai Rimsky-Korsakov’s *Six Variations on the Theme BACH*, Op. 10 (1878), Alexander Borodin’s *Paraphrases* (1879), Edward Elgar’s *Variations on an Original Theme (Enigma)* (1899), Béla Bartók’s *String Quartet No. 1* Op. 7 (1909), Francis Poulenc’s *Valse-Improvisation sur le nom de Bach* (1932), Anton Webern’s *String Quartet* Op. 28 (1938), Alberto Ginastera’s *Toccata, Villancico y Fuga* Op. 18 (1947), Jean Coulthard’s *Variations* (1951), and Alfred Schnittke’s *Piano Quintet* (1976). Importantly,

Busoni also employs this motif in one of his major piano works, his *Fantasia Contrappuntistica* (1910).⁹⁸

In Examples 86-90, Busoni used the sostenuto pedal to prolong chords over multi-layered textures, consistently placing the four chords on the first beat of each measure, when there are no notes in the remaining layers of the texture. Since these chords do not overlap with any other tones of the neighbouring layers, the use of the sostenuto pedal prolongs only the chords. In Busoni's Examples 86-90, the purpose of the use of the sostenuto pedal is to prolong chords while allowing the performer to play the other layers with their articulations. Additionally, the use of the sostenuto pedal also allows Busoni to gradate dynamic nuances.

In Example 86, Busoni used the sostenuto pedal (marked "III. Ped. And "sust.-ped" between the top two staves) to prolong the chords of the two upper staves while allowing the performer to play the two bottom lines notated on the bottom staves. (see Example 3.20). The chords of the top two staves are the same, but they are an octave apart. The top notes of these chords form the B-A-C-H melodic line (i.e., B-flat, A, C, and B-natural). Although the material of the bottom two staves fills out the harmonies of the upper staves—E-flat minor chord, F major chord, C minor chord and G major chord—the staccato articulation and the stepwise bass line discourage the performer from using the damper pedal: if the performer does use the damper pedal to prolong the upper chords, the bottom line will be completely blurred. Therefore, the purpose of using the sostenuto pedal is to prolong the chords played in the middle register of the

⁹⁸ See Marshall Portnoy, "The Answer to Elgar's 'Enigma,'" *The Music Quarterly* Vol. 71 No. 2 (1985): 208; Malcolm Boyd, "BACH," in *J.S. Bach*, ed. Malcolm Boyd and John Butt (Oxford: Oxford University Press, 1999), 50-55; Christoph Wolff, *Johann Sebastian Bach: The Learned Musician* (New York: W.W. Norton, 2000), 436; Douglass Seaton, "Back from B-A-C-H: Schumann's Symphony No. 2 in C Major," in *About Bach*, ed. Gregory Butler, George Stauffer, and Mary Greer (Urbana: University of Illinois Press, 2008), 191.; László Somfai, "With Or without the B-A-C-H Motive? Bartók's Hesitation in Writing His First String Quartet," *Studia Musicologica* 60 (2019): 16.

piano and allow the performer to play the sixteenth notes of the third stave with *legato* articulation while he plays the eight notes of the bottom stave with *staccato* articulation. Thus, the performer uses the sostenuto pedal to make clear three distinct layers of the texture: prolonged chords, *legato* sixteenth notes, and *staccato* eight notes.

While using the sostenuto pedal to prolong the upper chords, Busoni used the soft pedal (marked “*una corda*” on the fourth beat of m.1) only when playing the two bottom lines to incorporate timbral variety in this excerpt. He placed the indication of “*una corda*” between the third and fourth staves, meaning that the performer must use the soft pedal only when playing the bottom lines. If he intended to use the soft pedal in the upper staves, he would have written “*una corda*” between the first and second staves, as we shall see in Example 87. This use of the soft pedal allows the performer to differentiate the timbres of the texture.

Example 3.20. Ferruccio Busoni, “Example No. 86” from the First Appendix of Bach’s Well-Tempered Clavier, mm. 1-5.

Example 86.

The musical score for Example 86 consists of four staves. The top two staves are for the right hand, and the bottom two are for the left hand. The tempo is marked 'Andante sostenuto.' and the dynamics are 'p dolce'. The score includes various musical notations such as notes, rests, and pedal markings. A 'una corda' marking is present between the third and fourth staves.

In the following excerpt, Example 87, the performer prolongs the chords that harmonize the B-A-C-H melody of the second and third staves, which form the middle layer of a three-layered texture, while he plays a doubled countermelody in the outer staves (see Example 3.21).

The performer thus uses the sostenuto pedal to prolong the chords of E-flat minor in m. 1, F major in m. 2, C minor in m. 3, and G major in m. 4. The B-A-C-H motif appears on the top notes of those chords. The countermelody of the outer layers is based on the harmonies of the middle layer in mm. 1-2. In m. 3, it defines the half cadence in C minor, when the chromatic tones A-flat and F-sharp, on beats 3 and 4, turn the C minor chord into an A-flat augmented sixth chord that leads to a dominant G major chord in m. 4. Although the key of C minor is never firmly established, the use of the sostenuto pedal in this excerpt allows the performer to play the countermelody as a line subordinate to the B-A-C-H motif, forming a two-line contrapuntal texture that leads to the half cadence in C minor in mm. 3-4.

While Busoni used the sostenuto pedal primarily to elucidate textural contrasts, he also used the soft pedal to bring forth timbral nuances. Between the first and second staves and between the third and fourth staves, Busoni writes *una corda* to indicate that the performer must use the soft pedal to play all the lines of the texture throughout the excerpt. The use of the soft pedal produces a distinct timbre in each of the lines that helps the performer to follow Busoni's indications: *dolce* in the middle chords and *dolcissimo* in the melodic lines. Since the performer plays all the lines of the texture using the soft pedal, he holds it down for the entire passage while changing the sostenuto pedal with his right foot at the beginning of mm. 2, 3, and 4 to prolong each of the chords in the middle layer. The performer uses both the sostenuto pedal and the soft pedal to maximize the clarity of the melodic lines while playing the entire texture with two levels of sweet (*dolce, dolcissimo*) timbre.

Example 3.21. Ferruccio Busoni, “Example No. 87” from the First Appendix of Bach’s Well-Tempered Clavier, mm. 1-5.

The image shows a musical score for Example 87 by Ferruccio Busoni. It consists of four staves. The top staff is marked 'Andante' and 'dolcissimo'. The second staff is marked 'dolce una corda'. The third and fourth staves are marked 'una corda'. The score includes various musical notations such as notes, rests, and pedal markings ('Sust. ped.'). The notation is spread across the four staves, with some notes appearing on the second and fourth staves.

In Example 88, Busoni used the sostenuto pedal to prolong chords on the first and third staves which spread above, between, and below the B-A-C-H motif of the second and fourth staves (see Example 3.22). Unlike Examples 86 and 87, where he prolonged chords that are either above or between the B-A-C-H melodies, Busoni condensed the spacing of the four staves in Example 88. Although the score shows that the thirds and sixths of the second stave are between the double octaves of the first and third staves, a performance of this passage reveals the ambiguous boundaries between lines. The registral distribution of musical materials does not follow the spacing of the four-stave system. In mm. 1-4, the lowest tones are not notated on the fourth and lowest stave but on the bottom notes of the third stave. Any assumption that the lowest stave presents the lowest register is therefore misleading. Similarly, the top stave does not always present the highest note. The registral peak of this example—the c^3 of m. 3 and m. 4—is notated first on the top stave in m. 3, and then on the second highest stave in m. 4, when c^3 overreaches the b^2 of the top stave. The condensed spacing of this example recalls the interlocking layers in Example 84.

Harmonically speaking, the material of the second and fourth staves is derived from the B-A-C-H melody played in double octaves. The musical content of each measure emphasizes one triad that includes a letter of Bach's name. The note B-flat of m.1 is part of the B-flat minor triad; the note A of m. 2 is part of the D minor triad; the note C of m. 3 is part of C minor triad; and the note B-natural of mm. 4–5 is part of E minor triad, which leads to the E major triad in the final measure. These four triads do not give rise to a harmonic progression around a tonal centre. Busoni used the sostenuto pedal to prolong the accented octaves, distinguishing them from the materials of the other lines to highlight the quadrupled B-A-C-H melodic line. Thus, the purpose of this excerpt is not to demonstrate a tonally grounded harmonic progression, but to present four chords showing the widely recognized melodic motif that suggest Bach's musical signature.

Strikingly, Busoni did not indicate the use of the sostenuto pedal in Example 88, which he marked on Examples 76-87 with the indication "III. Ped." and "sust.-ped." There is enough evidence in Examples 86-87, however, to suggest that he intended to use the sostenuto pedal to prolong the four chords that consist of double octaves B-flat, A, C, and B-natural (again, as mentioned above, the motif that spells the word B-A-C-H in the German nomenclature) of the first and third staves. Regarding the use of the other piano pedals, Busoni provided no indications: he did not write "Ped." "*una corda*" or "*senza pedale*" to indicate any use of the damper pedal or the soft pedal. Although it is not clear if he used the damper pedal in this excerpt, his meticulous pedalling instructions on the previous examples and his lack of instruction in this one, suggest that the performer should not use the damper pedal. In keeping with this interpretation and grounded in Busoni's pedalling instructions in other examples of this set, a performer may play the second and fourth staves *legato*, indicated by the slurs in every measure, using only his fingers. The excessive use of the damper pedal would blur the sixths and

thirds of these staves. Using the sostenuto pedal to prolong the double octaves in this example while restricting the use of the damper pedal aims for textural clarity.

Example 3.22. Ferruccio Busoni, “Example No. 88” from the First Appendix of Bach’s Well-Tempered Clavier, mm. 1-6.

Example 88.

In the following excerpt, Example 89, Busoni used the sostenuto pedal to prolong the four chords that contain the B-A-C-H melodic line on the outer staves (see Example 3.23). The B-A-C-H motif appears on the higher notes of the parallel thirds that the performer plays two octaves apart (i.e., b-flat² and B-flat, and so on). This spacing is the reverse of that in Example 87: instead of presenting the B-A-C-H motif in the middle staves, this example shows the motif in the top and the lowest staves. Like Example 88, Busoni did not specify the use of the sostenuto pedal, although the performer could speculate a similar usage, based on Examples 86 and 87. Importantly, this is the only excerpt in the Appendix where the performer prolongs chords on the outer registers of the keyboard while playing supplementary material in the middle two staves. The use of the sostenuto pedal in Example 89 is particularly helpful while performing the articulation pattern of the middle staves: two *legato* sixteenth chords followed by six *staccato*

eight chords, to be played without the use of the damper pedal (marked “*senza ped.*” in m.1).

Additionally, the use of the sostenuto pedal allows the performer to control the dynamic contrast between the top layer (*mezzoforte*) and the inner layers (*piano*). Only by using the sostenuto pedal can a performer bring out the contrasting articulations and dynamics in this passage.

Example 3.23. Ferruccio Busoni, “Example No. 89” from the First Appendix of Bach’s Well-Tempered Clavier, mm. 1-4.

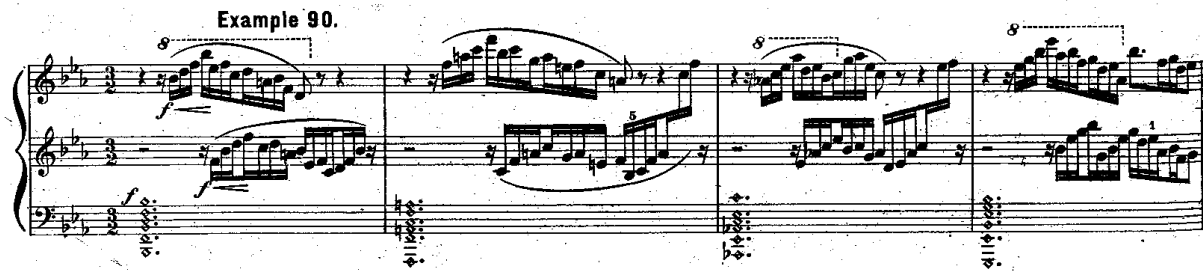


In Example 90, Busoni used a more conventional spacing, using the sostenuto pedal to prolong chords on the bottom stave (see Example 3.22). The highest notes of these chords form a variant of the B-A-C-H motif, with the fourth note being B-flat rather than B-natural. When the performer prolongs these chords, two lines unfold above them. The left-hand part, which is notated on the middle stave, imitates the figuration of the top line. Both upper lines outline the harmonies formed by the variant of the B-A-C-H motif—B-flat major chord, F major chord, A-flat major chord, and E-flat major chord—but these upper lines include some non-harmonic tones (e.g., eb^2 , c^2 , and a^1 in m. 1; $b\text{-flat}^2$, g^2 , and $e\text{-natural}^2$ in m.2; d^3 , $b\text{-flat}^2$, g^2 , and f^2 in m.3; and a^3 , f^3 , d^3 , $a\text{-flat}^2$, and f^2 in m.4). While it is true that all these notes fall on unaccented beats, the performer still needs to think about how best to bring out the B-A-C-B motif. If the performer uses the damper pedal to prolong the bottom chords, the prolongation of the non-chord

tones will generate a low degree of blurred resonances. The hazy sonority is amplified by the imitative counterpoint formed by the upper two lines, as the lower line imitates the upper line a perfect 11th below. Thus, Busoni used the sostenuto pedal to prolong the chords while asking the performer to bring out the imitative counterpoint formed by the upper lines using finger *legato* rather than using the damper pedal.

An important point is that Busoni did not write any pedalling instructions in this excerpt. Although he clearly intended to use the sostenuto pedal to prolong the bottom chords, for the same reason I presented above, the use of the damper pedal in this example is unjustifiable. Once the performer uses the sostenuto pedal to prolong the bottom chords and to bring out the imitation between the upper lines, there is no reason to use the damper pedal. If the performer were to use it while playing the upper lines, it would provoke an accumulation of dissonances, obscuring the imitation between the upper lines. If the whole point of this excerpt is to use the sostenuto pedal to present a multi-layered texture, the use of the damper pedal is unnecessary. Busoni's use of the sostenuto pedal alone, I propose, would be sufficient for the performer to prolong the full length of the bottom chords.

Example 3.24. Ferruccio Busoni, “Example No. 90” from the First Appendix of Bach’s Well-Tempered Clavier, mm. 1-4.



In this group of newly composed excerpts, Examples 86-90, Busoni used the sostenuto pedal to prolong chords over multi-layered textures. Tellingly, each example displays a different type of spacing. In Example 86, the performer prolongs the chords of the upper staves while playing two lines on a lower register. In Example 87, the performer prolongs the chords of the inner staves while playing two lines in the outer registers of the keyboard. In Example 88, the layers of musical materials partly overlap. In Example 89, the performer prolongs the chords of the outer layers while playing supplementary material between them. In Example 90, Busoni placed the prolonged chords on the bottom stave while placing two imitative lines in a higher register. The use of the sostenuto pedal in all of these examples highlights the B-A-C-H (B-flat, A, C, B-natural) motif or its variant, B-A-C-B (B-flat, A, C, B-flat). The explicitly stated or implied pedalling techniques allow the performer to elucidate each of the lines of the multi-layered textures with its own articulation and dynamic specificity, thus maximizing textural clarity.

3.4 Conclusion

Although Busoni wrote the first Appendix of his edition of Bach's Well-Tempered Clavier as a guide for pianists to transcribe Bach's organ works for the piano, he supplemented a wide-ranging application of the sostenuto pedal that goes beyond the narrowly defined "transcription" of Bach's organ works. Busoni's use of the sostenuto pedal reveals an innovative phase in his development as a pianist and a piano pedagogue. The depth and breadth of his innovation are evident when one compares Examples 76-90 with their antecedents: Liszt's *Consolation* No. 3 and Liszt's *Danse des Sylphes*. As I discussed in Chapter Two, in his letter to William Steinway (1883), Liszt used the sostenuto pedal to prolong a pedal point that underlies a three-layered texture.

Scholars have observed some of the innovations that Busoni introduced in the Appendix. Banowetz, for example, identifies that in Example 79 (i.e., Busoni's transcription of mm. 5-9 of Bach's Prelude and Fugue in D major BWV532), Busoni used the sostenuto pedal "to sustain a pedal point that on the organ would be held by the feet."⁹⁹ Likewise, Hamilton asserts that Busoni's use of the sostenuto pedal "tend[s] to act as a limited substitute for the organ pedal board, which, like the sostenuto pedal, can hold certain notes down in the bass without affecting the clarity of the rest of the texture."¹⁰⁰ However, no scholar has investigated all of the fifteen examples of this Appendix. In this chapter, I further the scholarly observations that have been made by examining the entire set of examples.

⁹⁹ Banowetz, *The Pianist's Guide*, 133.

¹⁰⁰ Hamilton, *After the Golden Age*, 176.

In the first group of excerpts, Examples 76-78, Busoni devised advanced pedalling techniques with an unprecedented degree of sophistication in the history of piano playing. In Example 76, he used the *sostenuto* pedal to prolong a chord while an arpeggio partially overlaps it. The use of the *sostenuto* pedal causes an uneven degree of duration, volume, and reverberation in what appears to be a uniformly textured figure. In Example 77 and 78, Busoni introduced a pedalling technique in which the performer silently holds down a chord before playing the excerpts. Once the keys are held down without making any attack, the performer pushes down the *sostenuto* pedal to keep the dampers of those strings up throughout the passage. In Example 77, the performance of chromatic scales provides the tones that allow a diminished chord to emerge without any simultaneous attack. The effect of emergence is formed by the use of the *sostenuto* pedal without needing to play the chord with a simultaneous attack. In Example 78, using the *sostenuto* pedal allows the performer to prolong a D major chord without altering the length of the tones of the upper layer.

My findings show that in the second group of excerpts, Examples 79-85, Busoni went beyond Bach's thinking by recomposing Bach's music in Examples 82 and 83, so that he could better demonstrate uses of the *sostenuto* pedal. Thus, Busoni did not simply *transcribe* Bach's music by putting Bach's ideas into another format for the piano, but he *recomposed* parts of it, by fully utilizing the expressive capabilities that the *sostenuto* pedal afforded him. He recomposed Bach's music in other excerpts of this group of examples as well. In Example 81, he added a pedal point to Bach's passage to increase its dynamic level. In Example 85, he substituted the ending of Bach's Prelude BWV 552 with a passage in which the performer gradually releases the notes of the final B-flat chord to a single B-flat tone, which serves as a structural pivot that smoothly connects the Prelude to the subsequent Fugue. Thus, in addition to

using the sostenuto pedal to prolong the pedal points originally played on the pedal board of the organ, its use allowed Busoni to add a musical layer to Bach's texture in Example 81. Busoni used the expressive potential of the sostenuto pedal to re-arrange Bach's excerpts in Examples 82, and 83, and to rewrite an entire passage of Bach's Prelude BWV 552 in Example 85.

In the third group of excerpts, Examples 86-90, Busoni used the sostenuto pedal to prolong chords over multi-layered textures, a technique that allows the performer to play nuanced gradations of contrasting articulations and dynamics. Each of these examples in this group explores a different type of spacing, which indicates that Busoni used each example to make a practical point about the use of the sostenuto pedal.

All in all, Busoni's fifteen Examples of the first Appendix of his edition of Bach's Well Tempered-Clavier expanded the use of the sostenuto pedal in two major ways, from merely prolonging a pedal point—as Liszt did—to 1) altering the customary three-step sequence of sound production of the piano: attack, sustaining, and release (Examples 76 and 77); and 2) performing contrasting articulations and dynamics in multi-layered textures (Examples 86-90).

Chapter 4: *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)*:

Using the Sostenuto Pedal to Bring Out “Polyphonic Harmony”

As mentioned in the previous chapter, Busoni first notated his use of the sostenuto pedal at the end of his American stay, in his edition of Bach’s Well-Tempered Clavier (1894). In the first Appendix of that volume, he used the sostenuto pedal to 1) manipulate the typical sequence of sound production of the piano—attack, sustain, and release of tones—, 2) to prolong pedal points in multi-layered textures, and 3) to play distinct articulations and dynamics simultaneously in multi-layered textures. Nineteen years after the publication of the Appendix, in November 1923, Busoni employed the sostenuto pedal once again in a piano work, *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)* [hereafter *Mit Anwendung*].¹⁰¹ Scholars Anthony Beaumont, Virginia Englund, Kenneth Hamilton, and Larry Sitsky have briefly mentioned Busoni’s use of the sostenuto pedal in *Mit Anwendung*. Beaumont and Hamilton merely call the work a “study” for the sostenuto pedal.¹⁰² Englund asserts that Busoni demanded a fresh approach to pedalling but erroneously claims that he used the three pedals of the piano simultaneously.¹⁰³ Larry Sitsky oversimplifies the effect of Busoni’s pedalling techniques, describing it as a prolongation of pedal chords “while unrelated harmonies move above it without any blurring.”¹⁰⁴ No one, however, has analyzed in detail Busoni’s pedalling in this work. For this reason, I conduct in this chapter for the first time a comprehensive examination of Busoni’s use of the sostenuto pedal in *Mit Anwendung*. Additionally, I discuss its

¹⁰¹ Beaumont, *Busoni the Composer*, 306.

¹⁰² Beaumont, *Busoni the Composer*, 306; Hamilton, *After the Golden Age*, 177

¹⁰³ Englund, “Musical Idealism,” 61-62

¹⁰⁴ Sitsky, *Busoni and the Piano*, 171.

connection with the first Appendix of his edition of Bach's Well-Tempered Clavier. I argue that Busoni used the sostenuto pedal in *Mit Anwendung* to implement what he called "polyphonic harmony" (*polyphoner Harmonik*) in a letter to Hugo Leichtentritt dated February 25, 1914.¹⁰⁵ Specifically, my analysis will show that in *Mit Anwendung*, Busoni used melodic lines that move "independently" throughout the entire work. As I will discuss in this chapter, the interplay of polyphonic lines within the texture of *Mit Anwendung* generates tonal instability and polychords. It is the use of the sostenuto pedal in this work, I argue, that allows the performer to bring out these polyphonic and harmonic features.

¹⁰⁵ Ferruccio Busoni, *Ferruccio Busoni: Selected Letters*, trans. and ed. Antony Beaumont (New York: Columbia University Press, 1987), 176.

4.1 Meaning of *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)*

To begin with, one should note that Busoni used two languages—German and English—in the title of *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)* to clarify that this work needs to be played with the three pedals of the piano: the damper pedal, the soft pedal, and the sostenuto pedal (i.e., the “sustaining-pedal” designed by the American company Steinway). The English translation of the title *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)* is “with the use of the third pedal (Steinway & Sons Sustaining-Pedal).” As I discussed in Chapter Three, Busoni played the Steinway piano equipped with a sostenuto pedal for the first time in the U.S., in 1891, when he taught at the New England Conservatory in Boston. By the time he wrote *Mit Anwendung*, European piano makers had not added the sostenuto pedal to their pianos. As pointed by David Rowland, European piano makers such as Bösendorfer started making pianos with the sostenuto pedal only after WWII.¹⁰⁶ Therefore, the only piano with a sostenuto pedal that Busoni used when he composed *Mit Anwendung* was the one built by Steinway. Busoni’s title of this work alone informs the performer of the geographical and historical significance of the sostenuto pedal, which, at the time he wrote this piece, was an American product and was scarcely available in Europe.

¹⁰⁶ Rowland, *A History of Pianoforte*, 25.

4.2 Busoni's *Klavierübung*

Mit Anwendung is the last piece of *Sieben kurze Stücke zur Pflege des polyphonen Spiels* (Seven Short Pieces for the Cultivation of Polyphonic Playing), which appears in the ninth volume of the second edition of Busoni's *Klavierübung*, published posthumously in 1925, a year after Busoni's death. Busoni had published an earlier version of this collection titled *Fünf kurze Stücke zur Pflege des polyphonen Spiels* (Five Short Pieces for the Cultivation of Polyphonic Playing) in March 1923, a few months before he began to compose *Mit Anwendung*. He published *Mit Anwendung* together with a *Preludietto* and *Fünf kurze Stücke zur Pflege des polyphonen Spiels* in the ninth volume of his *Klavierübung*.

4.3 Busoni's *Doktor Faust*

As noted by scholar Anthony Beaumont, *Mit Anwendung* is a “satellite” work of Busoni’s unfinished opera *Doktor Faust*, an opera that he composed from 1910 to his death in 1924.¹⁰⁷ The term “satellite,” coined by Beaumont, refers to the works that Busoni had previously composed and subsequently used in *Doktor Faust*. Beaumont explains that “the entire score of *Doktor Faust* was assembled from a number of ‘satellite’ works—piano pieces, orchestral and vocal music—all composed in Busoni’s self-styled Faustian idiom.”¹⁰⁸ The list of “satellite” works for *Doktor Faust* includes works such as *Sonatina Seconda* (1912), *Nocturne Symphonique* (1914), *Sarabande und Cortège* (subtitled “Zwei Studien zu Doktor Faust,” published in 1920), and *Mit Anwendung* (1923). In his essay, “The Score of Doktor Faust” (1921), Busoni called his *Nocturne Symphonique* and his *Sonatina Seconda* “musical studies for Faust” (*musikalische Fauststudien*). Busoni explained that “before writing the libretto, I had consciously made *musical studies* for *Faust* in my *Nocturne Symphonique* and my *Sonatina Seconda*. The themes and style of these pieces were used in the score and happily fulfilled the task prepared for them with regard to stimulation, compass, and atmosphere.”¹⁰⁹ In the case of *Mit Anwendung*, Busoni used one of the motifs from *Doktor Faust*, which Beaumont calls the “death motif,” in mm. 14-27, 52-56, and 66-71.¹¹⁰

In addition to using the “death motif” in *Mit Anwendung*, Busoni planned to use two sections of this work in the final scene of *Doktor Faust*. In a document dated in April 1924, three

¹⁰⁷ Knyt, “Approaching the Essence,” 179.

¹⁰⁸ Beaumont, “Busoni’s Doctor Faust,” 196-199.

¹⁰⁹ Ferruccio Busoni, *The Essence of Music and Other Papers*, trans. Rosamond Ley (New York: Dover, 1957), 72–73. [emphasis added]

¹¹⁰ Beaumont, *Busoni the Composer*, 306.

months before his death, Busoni listed the works that he planned to use in the final scene of *Doktor Faust*, and that list included two sections of *Mit Anwendung*.¹¹¹ He died a few months later, in July 1924, leaving *Doktor Faust* unfinished. Sixty years later, Antony Beaumont completed in 1984 a version of *Doktor Faust* using Busoni's list of works as a reference. He arranged the second (mm. 14-27), the fifth (mm. 58-79), and the sixth sections (mm. 80-86) of *Mit Anwendung* and included them into the final scene of the opera (see a formal diagram of *Mit Anwendung* in Appendix G). Thus, Busoni used the sostenuto pedal to adapt the polyphonic textures that he had envisioned for the last scene of his opera for the piano.

¹¹¹ The complete list of works consists of two sections of *Mit Anwendung des III. Pedals* (Steinway & Sons *Sustaining-Pedal*), the second piano piece of *Fünf kurze Stücke zur Pflege des polyphonen Spiels*, an étude from the second edition of the *Klavierübung*, *Zigeunerlied* Op. 55 No. 2 for baritone and orchestra, *Sarabande und Cortège* Op. 51 for orchestra, the third piano piece of *Fünf kurze Stücke zur Pflege des polyphonen Spiels*, *Vorspiel 1* of *Doktor Faust*, and *Schlechter Trost* for baritone and orchestra. See Beaumont, "Busoni's Doctor Faust," 196-197.

4.4 “Polyphonic Harmony”

For us to understand Busoni’s use of the sostenuto pedal in *Mit Anwendung*, we need to understand a key concept in Busoni’s writings: “polyphonic harmony.” In the article “The New Harmony” (1911), Busoni wrote that “keeping the voices independent of each other in polyphonic compositions” would lead to a “new harmonic system.”¹¹² In a letter to Hugo Leichtentritt in 1914, he coined the term “polyphonic harmony” (*polyphoner Harmonik*) to describe the formation of chords by the interplay of independent melodic lines.¹¹³ In his essay “The Score of Doktor Faust” (1922), Busoni explained the meaning of “polyphonic harmony” in his opera *Doktor Faust*: “I have adhered almost throughout to these polyphonic lines [pure melodic lines which cross and support each other and move independently] and restricted the harmony formation, the graphic picture of the notes being more horizontal than vertical.”¹¹⁴ Thus, Busoni’s “polyphonic harmony” refers to the chords formed by interweaving independent melodic lines.

¹¹² Busoni, *Essence*, 24.

¹¹³ Busoni, *Ferruccio Busoni: Selected Letters*, 176.

¹¹⁴ Busoni, *Essence*, 74.

4.5 Using the Sostenuto Pedal to Prolong Chords

Using Busoni's concept of "polyphonic harmony," I will explain two uses of Busoni's pedalling: the prolongation of chords and the prolongation of pedal points. In this section of this chapter, I explain how Busoni used the sostenuto pedal to prolong chords in four segments of *Mit Anwendung*, mm. 1-13 in the first section, mm. 28-31 and 36-39 in the third section, and mm. 80-86 in the sixth section. In the following section of this chapter, I explain how he employed the sostenuto pedal in three segments to prolong pedal points: mm. 14-27 in the second section, mm. 43-51 in the fourth section, and mm. 58-73 in the fifth section (for a structural overview of this composition, see Appendix G).

Mit Anwendung is a polyphonic composition in which the performer uses the sostenuto pedal to prolong the notes of the two bottom staves, the *Liegende Töne*. (*durch das III. Pedal zu halten*), which translates into English as "held notes. (by pushing down the third [sostenuto] pedal)," while performing the top two staves, what Busoni called *Haupt-Stimme* (the principal voice). Thus, the *Liegende Töne* forms an independent layer within the polyphonic texture throughout the entire work (see Example 4.1).

The first section of *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)*, mm. 1-13, is an example of "polyphonic harmony." The performer uses the sostenuto pedal to prolong the F major chord in mm. 1-9 and the F minor chord in mm. 10-13 while playing two melodic lines that form the *Haupt-Stimme* (see Example 4.1). Busoni indicated in m. 1 that the right foot (marked "rechter Fuß") controls the sostenuto pedal while the left foot presses the soft pedal (marked "sord. Mit dem. l. Fuß," which means "the left foot" controls the "mute"). The upper line of the *Haupt-Stimme* (i.e., the top staff) consists of a melodic sequence. In m. 2 and

the first two beats of m. 3, the right hand plays a motif (which I call the “a” motif) that consists of a broken chord in m. 2 (i.e., a-c¹-a¹-e¹) followed by descending thirds in m. 2-3 (i.e., f¹-a¹-e¹-g¹-d¹-f¹-c¹-e¹, see Example 4.2). The “a” motif outlines, in the tonal context of F major, the chords of A minor (iii of F major), F major (I of F major), E minor (vii of F major), D minor (vi of F major), and C major (V of F major).

To understand “polyphonic harmony,” one must begin with Busoni’s harmonic treatment of his melodic materials. He developed what I call the “a” motif throughout the section (see Example 4.2). He transposed it a minor second higher in mm. 3-5 (which begins on B-flat), and in the last two beats of m. 5, he presented a shortened version of the “a” motif a major second higher (which starts on C). In mm. 6-9, Busoni expanded the “a” motif using the chord progression of the first statement—A minor (iii of F major), F major (I of F major), E minor (vii of F major), D minor (vi of F major), C major (V of F major). This expanded “a” motif is followed by an extended progression: B diminished (vii/V of F major), A minor (iii of F major), G major (II of F major), F major (I of F major).

Retaining the tonal center of F, in the following passage, mm. 10-13, the *Liegende Töne* chord modulates from F major to F minor. Accordingly, the “a” motif is presented in the key of F minor. In mm. 10-11, this motif outlines the chords of C minor (v of F minor), A-flat major (III of F minor), G minor (ii of F minor), F minor (I of F minor), and E-flat major (VII of F minor). In mm. 11-13, Busoni transposed the “a” motif a minor second upwards. Although the *Haupt-Stimme* is now clearly in D-flat major, in the tonal context of F minor sustained by the *Liegende Töne*, the melody outlines the chords of D-flat major (VI of F minor), B-flat minor (iv of F minor), A-flat major (III of F minor), G-flat major (bII of F minor), F minor (i of F minor), E-flat

minor (bvii of F minor), and D-flat major (VI of F minor). In m. 13, a shortened “a” motif reminiscent of that in m. 5 outlines the chord of E-flat major (bVII of F minor).

The polyphony formed by the two voices of *Haupt-Stimme* emphasizes what Busoni would call the “horizontal” feature of this passage. The lower line of the *Haupt-Stimme*, played by the left hand, begins by imitating the “a” motif two beats later, in m. 2. The first two statements of the motif “a” in mm. 2-5 of the lower line of the *Haupt-Stimme* are identical to the ones in the upper line: both lines form a canon. In mm. 6-9, the left hand plays a new motif (which I will call the “b” motif) in C major (i.e., V of F major, see Example 4.3). When the *Liegende Töne* changes to F minor in m. 10, the lower line of the *Haupt-Stimme* plays in a register an octave higher than that of the line of the top stave. The left hand reaches over the right hand, creating a hand-crossing moment. In mm. 10-13, it imitates the “a” motif of the top stave played two beats earlier.

Thus the combination of the imitative two-voice *Haupt-Stimme* and the two prolonged chords of the *Liegende Töne* forms what Busoni called “polyphonic harmony.” The overlap of the F major and F minor chords and the two *Haupt-Stimme* voices result in harmonic combinations that cannot be explained easily by principles of functional harmony. In this section of the work, there is not even a single cadence, but the tonal center of F—sustained by F major and minor chords—is clearly established. As noted by Colin Davis, the tonal center in Busoni’s late works that do not follow common-practice harmonic progressions is determined by other factors, such as the placement of what he calls “tertian sonorities,” a term that refers to the “chords” formed by intervals stacked in thirds.¹¹⁵ In the case of the first section of *Mit*

¹¹⁵ Colin Davis, “Polyphonic Harmony in Three of Ferruccio Busoni’s Orchestral Elegies” (PhD diss., University of North Texas, 2015), 46.

Anwendung, the tonal center is firmly established by the prolongation of the F major and F minor chords, which the performer sustains throughout the section using the sostenuto pedal. Thus, Busoni used the sostenuto pedal in a practical way: he used it to build a polyphonic texture, with two imitative voices outlining harmonic progressions over the prolonged tonal center, sustained by the F major chord in mm. 1-9 and the F minor chord in mm. 10-13.

Example 4.1. Ferruccio Busoni, *Mit Anwendung des III. Pedals* (Steinway & Sons Sustaining-Pedal), mm. 1-15.

Andantino tranquillo.

Haupt-Stimme. *sord. mit dem l. Fuß p legato*

Liegende Töne. (durch das III. Pedal zu halten) *rechter Fuß*

The musical score consists of three systems of music. Each system has two staves. The top staff of each system is for the 'Haupt-Stimme' (Main Voice), and the bottom staff is for 'Liegende Töne' (Lying Notes). The tempo is marked 'Andantino tranquillo.' The first system shows the initial entry of the main voice and the sustained chords. The second system continues the polyphonic texture. The third system shows the progression of the main voice and the sustained chords.

Example 4.2. The “a” motif of the higher line of the *Haupt-Stimme* in mm. 1-13.

Example 4.2. The “a” motif of the higher line of the *Haupt-Stimme* in mm. 1-13.

Chord symbols above the staff:

Measures 1-5: F: iii I vii vi V IV ii I bVII vi v IV V

Measures 6-9: iii I vii vi V vii/V iii II I

Measures 10-13: Fm: v III ii I bVII VI iv III bII I bvii VI bVII

Motif variations labeled:

- “a” motif
- Transposed “a”
- Shortened “a”
- Extended “a”
- Modified “a”
- Modified and extended
- Shortened “a”

Example 4.3 The “b” motif of lower line of the *Haupt-Stimme* in m. 6.

Example 4.3. The “b” motif of lower line of the *Haupt-Stimme* in m. 6.

In addition to prolonging the F major and F minor chords, Busoni’s use of the sostenuto pedal modifies the sustaining of some tones of the upper staves in mm. 2-10. The *Liegende Töne* overlaps some of the chord tones in the *Haupt-Stimme*: a^1 and c in the second measure, c in the third measure, a^1 in the fourth measure, F , c , a^1 , and f^2 in the sixth measure, f^2 in the seventh measure, and a^1 in the eighth and ninth measures. In m. 10-13, where the left hand crosses over the right hand to play in a higher register, the right hand of the *Haupt-Stimme* plays the note c^1 on the first beat of m. 10, which overlaps the same note of the *Liegende Töne* (notated on the

third staff). Busoni's use of the sostenuto pedal (marked "rechter Fuß," meaning "right foot" in m. 1) prolongs these overlapped tones beyond their notated duration. This acoustic effect resembles Busoni's Example 76 of the first Appendix of his edition of Bach's Well-Tempered Clavier, discussed in Chapter Three, where some tones of a C major arpeggio overlap the four tones of a C major chord. As in Example 76 of the Appendix, the vibration of sympathetic partials in mm. 2-9 of *Mit Anwendung* increases the reverberation of each overlapped tone, making each tone sound more resonant, or even "louder" than the notes that do not resonate strongly with the sustained chord. Of course, other chord tones in the *Haupt-Stimme* that do not overlap exactly with the chord played in the *Liegende Töne* also create lesser degrees of resonance. For example, the notes A, a, and c¹ create resonance in m. 2, although the resonance is not as strong as the notes a¹ and c. The use of the sostenuto pedal, therefore, causes unevenness of length, volume, and reverberation in what appears to be two uniformly notated eight-note melodic lines in the *Haupt-Stimme*. Since the performer is not using the damper pedal, he makes the audibly uneven effect in a highly controlled and sophisticated way.

It is worth mentioning that Busoni paid special attention to the practical uses of not just the sostenuto pedal, but all three pedals in *Mit Anwendung*. Although Virginia Englund claims in her dissertation "Musical Idealism on Busoni's Klavierübung" that Busoni indicates the use of the three pedals simultaneously, the score of *Mit Anwendung* does not show any indication of the combined uses of these pedals.¹¹⁶ In the first section, mm. 1-13, Busoni did not indicate the use of the damper pedal. Moreover, his instructions of the use of the other pedals make the use of the damper pedal impractical: he indicated using the sostenuto pedal with the right foot from m. 1 to m. 28 (marked "rechter Fuß" in m. 1), and the soft pedal with the left foot from m. 1 to m. 28

¹¹⁶ Englund, "Musical Idealism," 62.

(marked “sord. Mit dem l. Fuß” in m. 1, see Example 4.1). If the performer were to use the damper pedal, he would need to employ a pedalling technique in which he would push down the sostenuto pedal with his right foot throughout mm. 1-9 and 10-13, while constantly changing the damper pedal. Busoni did not notate such a pedalling technique in any of the examples of the first Appendix or any section of *Mit Anwendung*. Therefore, I infer that Busoni deliberately avoided using the damper pedal in this section.

Busoni employed the sostenuto pedal to form polychords in two passages of the third section (i.e., mm. 28–42) of *Mit Anwendung*, mm. 28-31 and mm. 36-39. In m. 28, the performer uses the sostenuto pedal (to be pressed by the left foot, marked “linker Fuß” in m. 28) to prolong the second inversion of the A minor chord. Compared with the passage of mm.1–13, which is discussed above, the four-measure passage in mm. 28–31 displays a different spacing. Busoni placed the *Liegende Töne* between the two lines of the *Haupt-Stimme* in mm. 28-31, which together form the outer layers (i.e., top and bottom) of a multi-layered texture (see Example 4.4). Above the chord of the middle layer, the right hand plays a melody— $a^2-g^2-a^2-b-flat^2-a^2-g^2-b-flat^2-b-flat^2$ —notated as the uppermost line of the three-lined *Haupt-Stimme* from the second beat of m. 28 to the first beat of m. 30 in the key of F major. This melody is transposed up a minor third in mm. 30–31 (i.e., $c^3-b-flat^2-c^3-d-flat^3-c^3-b-flat^2-c^3$). Busoni wrote this melody based on the “b” motif (see Example 4.3). The right hand also plays a tremolo-like accompaniment figuration underneath the melody but, unlike the melody in F major, the accompaniment figuration forms chords that do not belong to F major. Below the A minor chord in the middle layer, the left hand plays the bottom layer using the same tremolo-like figuration as the one played by the right hand. Although the prolongation of the chord indicates that A minor is the tonal center of this excerpt, and although the upmost melody is in F major, the tremolo-like

figuration in the two outer layers harmonizes the melody using chords that belong to other keys, such as the E-flat major chord on the third beat of mm. 28 and 29, the B-flat minor chord on the first beat of mm. 29 and 30, the C minor chord on the second beat of mm. 30 and 31 and fourth beat of mm. 30 and 31, the D major chord on the first beat of m. 31, and the G-flat major chord on the third beat of m. 31 (see Example 4.4). Most of these chords support the notes of the melody, except the D major chord of m. 31, which creates a dissonant interval with the note D-flat in the melody. Thus, the chord progression of the outer layers destabilizes the tonal center of this segment—A minor—which is prolonged using the sostenuto pedal. Additionally, the juxtaposition of the A minor chord and the chords of the outer layers results in a series of polychords, which are two superimposed chords that cannot be explained by one tonality (see Figure 4.1).¹¹⁷ The performer uses the sostenuto pedal in this excerpt to bring out those polychords.

¹¹⁷ Although there is not an entry of “polychord” in the Grove Music Online, Arnold Whittall defines “bitonality” as “the simultaneous, superimposed presence of two distinct tonalities.” See Arnold Whittall “Bitonality,” *Grove Music Online*, *Oxford Music Online*, Oxford University Press, accessed May 10, 2021, <http://www.oxfordmusiconline.com>.

Example 4.4. Ferruccio Busoni, *Mit Anwendung des III. Pedals* (Steinway & Sons Sustaining-Pedal), mm. 25-31.

The musical score for Example 4.4 shows measures 25-31 of 'Mit Anwendung des III. Pedals' by Ferruccio Busoni. The score is in 3/4 time and features a piano accompaniment with a prominent left-foot pedal (linker Fuß) in the bass register. The tempo is marked 'Tranquillo.' and the instruction 'senza sord.' is present. The score includes a table of chords for measures 28-31.

Figure 4.1. Table of chords in mm. 28-31 of *Mit Anwendung des III. Pedals* (Steinway & Sons Sustaining-Pedal).

	m. 28, beat 2	m. 28, beat 3	m. 28, beat 4	m. 29, beat 1	m. 29, beat 2	m. 29, beat 3	m. 29, beat 4	m. 30, beat 1	m. 30, beat 2
Haupt-Stimme	A minor (i)	E-flat major (bV)	A minor (i)	B-flat minor (bii)	A minor (i)	E-flat major (bV)	C dominant seventh V ⁷ /VI	B-flat minor (bii)	C minor (iii)
Liegende Töne	A minor (i ⁶ ₄)	A minor (i ⁶ ₄)	A minor (i ⁶ ₄)	A minor (i ⁶ ₄)	A minor (i ⁶ ₄)	A minor (i ⁶ ₄)	A minor (i ⁶ ₄)	A minor (i ⁶ ₄)	A minor (i ⁶ ₄)

	m. 30, beat 3	m. 30, beat 4	m. 31, beat 1	m. 31, beat 2	m. 31, beat 3	m. 31, beat 4
Haupt-Stimme	G-flat major (bVII)	C minor (iii)	D major (IV)	C minor (iii)	G-flat major (bVII)	C minor (iii)
Liegende Töne	A minor (i ⁶ ₄)	A minor (i ⁶ ₄)	A minor (i ⁶ ₄)	A minor (i ⁶ ₄)	A minor (i ⁶ ₄)	A minor (i ⁶ ₄)

Using a different spacing than that of mm. 28-31, Busoni used the *sostenuto* pedal in mm. 36-39 to prolong the B-flat major chord underneath the *Haupt-Stimme*. He instructed the performer to use the right foot (marked “rechter Fuß” in m. 36) to press the *sostenuto* pedal, rather than the left foot, as in mm. 28–31. Unlike mm. 28–31, which should be played without using the soft pedal (marked “senza sord,” which means “without mute,” in m. 28), he asked the performer to use the left foot to press the soft pedal, marked “sord.” (an abbreviation form of “sordino,” which means “mute”). In mm. 36-39, Busoni placed the *Liegende Töne* below the *Haupt-Stimme*, which consists of a melody on the top part and two layers of a tremolo-like accompaniment figuration (see Example 4.5).

These four measures, mm. 36-39, are derived from mm. 28-31, which means that Busoni transposed the melody and the tremolo-like figuration of mm. 28-31 up a perfect fourth. The performer plays both lines while prolonging the B-flat major chord in the *Liegende Töne*. The melody on the top line outlines the key of B-flat major, instead of F major in mm. 28-31, except for the note g-flat³ of m. 39, which suggests B-flat minor. Busoni harmonized this melody using the chords of D minor, A-flat major, E-flat minor, F minor, C-flat major, and F minor. Of these chords, only the D minor chord belongs to the key of B-flat major (i.e., the D minor chord is the mediant of B-flat major). The other chords cannot easily be explained in relation to this key. If one were to do so, then one might spell out these chords as iii-bVII-iv-v-bII-v, a chromatic progression that defies the logic of tonal harmony (see Figure 4.2). Its harmonic trajectory demands theoretical investigation beyond the scope of this dissertation. Therefore, although the melody and the *Liegende Töne* strongly indicate B-flat major, the chords that “support” each of the melodic notes divert from this key, creating tonal destabilization rather than tonal consolidation.

While Busoni transposed the melody and the tremolo-like figuration from mm. 28-31 up a perfect fourth in mm. 36-39, he transposed the *Liegende Töne* differently, moving the A minor chord up a half step to B-flat major chord. Since Busoni transposed the *Liegende Töne* and the *Haupt-Stimme* using different intervals, the multiple transpositions result in two vertical layers of chords that give rise to a sequence of polychords different from those of mm. 28–31: (m. 36)

$\frac{iii}{I}, \frac{bVII}{I}, \frac{iii}{I}$, (m. 37) $\frac{iv}{I}, \frac{iii}{I}, \frac{bVII}{I}, \frac{iii}{I}$, (m. 38) $\frac{iv}{I}, \frac{v}{I}, \frac{bII}{I}, \frac{v}{I}$, (m. 39) $\frac{VI}{I}, \frac{v}{I}, \frac{bII}{I}$, and $\frac{v}{I}$ (see Figure 4.2)

The use of the sostenuto pedal allows the performer to create another sequence of polychords.

Example 4.5, Ferruccio Busoni. *Mit Anwendung des III. Pedals* (Steinway & Sons Sustaining-Pedal), mm. 35-39.

Figure 4.2. Table of chords in mm. 36-39 of *Mit Anwendung des III. Pedals* (Steinway & Sons Sustaining-Pedal)

	m. 36, beat 2	m. 36, beat 3	m. 36, beat 4	m. 37, beat 1	m. 37, beat 2	m.37, beat 3	m. 37, beat 4	m. 38, beat 1	m. 38, beat 2
Haupt-Stimme	D minor (iii)	A-flat major (bVII)	D minor (iii)	E-flat minor (iv)	D minor (iii)	A-flat major (bVII)	D minor (iii)	E-flat minor (iv)	F minor (v)
Liegende Töne	B-flat major (I)	B-flat major (I)	B-flat major (I)	B-flat major (I)	B-flat major (I)	B-flat major (I)	B-flat major (I)	B-flat major (I)	B-flat major (I)

	m. 38, beat 3	m. 38, beat 4	m. 39, beat 1	m. 39, beat 2	m. 39, beat 3	m. 39, beat 4
Haupt-Stimme	C-flat major (bII)	F minor (v)	G major (VI)	F minor (v)	C-flat major (bII)	F minor (v)
Liegende Töne	B-flat major (I)	B-flat major (I)	B-flat major (I)	B-flat major (I)	B-flat major (I)	B-flat major (I)

In the last section of the piece, mm. 80-86, Busoni used the sostenuto pedal to prolong the final F major chord, a chord that re-establishes F as the tonic of the piece. He indicated the use of soft pedal in m. 80 (marked “sord.”), which should be controlled by the left foot, implying that the performer should use the right foot to press the sostenuto pedal from mm. 80–86. While prolonging the F major chord, the performer plays polychords in mm. 81 and 83 (see Example 4.6). On the first beat of m. 81, the performer plays a chord that consists of the pitches E-flat, A, D, and G. The note A is the continuation of the chromatic scale that starts in m. 80. Although this note—A—appears on the first beat of m.81, it serves as an accented passing note, moving to B-flat on the following beat, and it is held for two quarter beats until the end of the third beat. Thus, the chord consists of the notes Eb, G, Bb, and D, or bVII⁷ in the key of F major. The polychord on the second and third beat of m. 81 becomes $\frac{\text{bVII}^7}{\text{I}}$. The chromatic scale reaches its peak on the fourth beat of that measure when the performer skips the note B-natural to play c¹ together with

a¹, which are the upper two tones of the F major chord prolonged by the sostenuto pedal from m. 80. Busoni thoughtfully ended the polychord before the fourth beat, allowing c¹ and a¹ to rearticulate the tones of the F major chord of the *Liegende Töne*, reinforcing F major as the tonal center.

In mm. 82-83, Busoni varied the passage of mm. 80-81. On the first beat of m. 82, the performer plays with his left hand a chromatic scale starting on f while repeating with his right hand the tones c¹ and a¹ on the first beat. On the first beat of m. 83, the chord of the upper staves consists of the pitches E, A, D, and G. The pitches A, B-flat, B-natural, and C form a middle voice that continues the ascending chromatic scale that begins in m. 82. If one considers the note A on the first beat of m. 83 as an accented passing note, as in m. 81, then the polychord in the second beat would be $\frac{vii\phi^7}{I}$ in F major. As in m.81, the polychord in m. 83 ends on beat three, allowing the notes c¹ and a¹ to overlap the tones of the F major chord of the *Liegende Töne*. Using the sostenuto pedal allows the performer to sustain the F major chord while playing the chromatic scales, followed by the chords bVII⁷ in m. 81 and vii ϕ ⁷ in m. 83. Again, the performer uses the sostenuto pedal to bring out polychords.

In this section of the work, mm. 80-86, the overlap of tones between the *Liegende Töne* and the *Haupt-Stimme* reinforces the prolongation of the F major chord by the use of the sostenuto pedal. The overlapped tones occur on the first beat of mm. 80 and 82, when the performer plays F, the first note of the ascending chromatic scales, and when he plays with his right hand the minor sixth interval formed by the notes c¹ and a¹ on the fourth beat of mm. 81 and 83 and on the first beat of mm. 82 and 84. The overlapping of chord tones sustains the F major chord, the tonic chord of this piece, as the tonal focus through the last measure. Additionally, using the sostenuto pedal enables the performer to play *staccato* the F major chords

in the first inversion in the *Haupt-Stimme* in mm. 84-86, which further reinforces F major as the tonal center and serves as a short coda for this piece. The use of the sostenuto pedal in mm. 80-86, at the end of this piece, reasserts F major as the tonal center of the entire work.

Example 4.6. Ferruccio Busoni, *Mit Anwendung des III. Pedals* (Steinway & Sons Sustaining-Pedal), mm. 78-86.

The image shows a musical score for Example 4.6, consisting of two systems of staves. The first system starts at measure 78 and the second system starts at measure 82. The score is written for piano and features a sostenuto pedal (sord.) and a diminuendo (dimin.) marking. The right-hand part includes a piano (ppp) marking. The score is in F major and 3/4 time. The first system shows measures 78-81, and the second system shows measures 82-86. The score is divided into two systems, with measure numbers 78 and 82 indicated. The first system shows measures 78-81, and the second system shows measures 82-86. The score is divided into two systems, with measure numbers 78 and 82 indicated.

In the passages of *Mit Anwendung des III. Pedals* (Steinway & Sons Sustaining-Pedal) discussed in this section of the chapter, mm. 1-13, 28-31, 36-39, and 80-86, Busoni used the sostenuto pedal to prolong the chords of the *Liegende Töne*, which resonate in various ways and degrees with tones of the *Haupt-Stimme*. In the first section of the work, Busoni prolonged the F major chord in mm. 1-9 and the F minor chord in mm. 10-13 over two imitative lines. Busoni's use of the sostenuto pedal enables the performer to prolong the tonic chord, F major, followed by

the minor tonic, F minor, while playing the melodic lines of the *Haupt-Stimme*. The superimposition of the *Haupt-Stimme* and the *Liegende Töne* forms polychords. In mm. 28-31, the performer prolongs an A minor chord in an inner layer while playing a melody on the upper line and two layers of an accompaniment figuration above and below the A minor chord. Busoni's use of the sostenuto pedal prolongs the mediant chord, A minor, over the chord progression of the outer layers, forming multiple polychords. In mm. 36-39, the performer prolongs the subdominant chord, B-flat major, underneath a melody and two layers of an accompaniment figuration. The chord progression of the *Haupt-Stimme* above the B-flat chord generates the following series of polychords: $\frac{\text{iii}}{\text{I}}$, $\frac{\text{bVII}}{\text{I}}$, $\frac{\text{iii}}{\text{I}}$, $\frac{\text{iv}}{\text{I}}$, $\frac{\text{iii}}{\text{I}}$, $\frac{\text{bVII}}{\text{I}}$, $\frac{\text{iii}}{\text{I}}$, $\frac{\text{iv}}{\text{I}}$, $\frac{\text{v}}{\text{I}}$, $\frac{\text{bII}}{\text{I}}$, $\frac{\text{v}}{\text{I}}$, $\frac{\text{VI}}{\text{I}}$, $\frac{\text{v}}{\text{I}}$, $\frac{\text{bII}}{\text{I}}$, and $\frac{\text{v}}{\text{I}}$. In the last section of the work, the performer prolongs the F major chord in mm. 80-86, reinforcing F major as the tonal center of the entire piece. Busoni's use of the sostenuto pedal allows the performer to form the polychords $\frac{\text{bVII}^7}{\text{I}}$ in m. 81 and $\frac{\text{vii}^{\flat 7}}{\text{I}}$ in m. 83. Thus, in all these sections, Busoni's use of the sostenuto pedal enables the performer to play polychords. Additionally, Busoni used the sostenuto pedal to establish the tonal center of the work. He prolonged the tonic—F major—in the first section, mm. 1-9, and the last section, mm. 80-86. In the middle of the piece, he used the sostenuto pedal to prolong the primary chords central to F major: the minor tonic—F minor—in the first section, mm. 10-13; the mediant chord—A minor—in the third section, mm. 28-31; and the subdominant chord—B-flat major—also in the third section, mm. 36-39. Busoni, therefore, used the sostenuto pedal in *Mit Anwendung* to assert a firm large-scale tonal framework, within which polychords offer chromatic complexities on the local level.

4.6 Using the Sostenuto Pedal to Prolong Pedal Points

In this section of this chapter, I discuss the three passages of *Mit Anwendung* in which Busoni used the sostenuto pedal to prolong pedal points, mm. 14-27 (the second section), mm. 43-51 (the fourth section), and mm. 58-73 (the fifth section). Busoni had previously used the sostenuto pedal to prolong pedal points in Examples 79-85 of the first Appendix of his edition of Bach's Well-Tempered Clavier (1894), discussed in Chapter Three. In those examples, Busoni transcribed excerpts of Bach's organ works (Examples 79-83 and 85) and an excerpt of the first movement of Beethoven's Fourth Symphony (Example 84). Busoni's use of the sostenuto pedal to prolong pedal points in *Mit Anwendung* is important to my argument because this work was originally composed for piano. The examples in the Appendix are all transcriptions of organ and orchestral works. A comparison between the prolongation of pedal points in *Mit Anwendung* and the examples in the Appendix helps me explain Busoni's uses of the sostenuto pedal. More importantly, no scholar has analyzed the use of the sostenuto pedal in these three segments. My analysis below will therefore contribute to the understanding of Busoni's pedalling.

Busoni used the sostenuto pedal to prolong pedal points in the second section of this composition, mm. 14-27, where the "death" motif of *Doktor Faust* (which I will refer as the "c" motif), first appears in the upper staff in mm. 14-15 (see Example 4.7).¹¹⁸ The highest line of the three-layered texture consists of a sequence where Busoni transposed the "c" motif a major second downwards (i.e., from c³ to b-flat²) in mm. 16-17, a minor second downwards (i.e., from b-flat² to a²) in mm. 20-21, and a semitone downwards (i.e., from a² to a-flat²) in mm. 22-23. He transposed the "c" motif a minor tenth downwards in mm. 24-25, from a-flat² to f¹. The

¹¹⁸ See Beaumont, *Busoni the Composer*, 306.

transposition of the “c” motif in mm. 24-25 forms the middle part of a three-part texture in the *Haupt-Stimme*. These transpositions are not exact. The intervals in the second measure of this two-measure segment vary in each transposition. For example, the perfect fifth interval formed by c³ and f² in m. 15 becomes a diminished fifth, formed by b-flat² and e-natural² in m. 17. Meanwhile, the pedal point, which is written in the *Liegende Töne*, begins with the tone of A-flat in mm. 14-19 and outlines the broken chord of D minor, beginning with D in mm. 20-21, F in mm. 22-23, and A in mm. 24-29. The middle line of the *Haupt-Stimme*, which is notated in the second-highest staff, fills in the chords with an accompaniment figuration. Together, these lines form an extremely chromatic harmonic passage that suggests various tonal centers without firmly establishing any of them: A-flat major suggested in mm. 14-15 over the pedal point of A-flat; G-flat major suggested in mm. 16-17, also over the pedal point of A-flat; D major suggested in mm. 20-21 over the pedal point of D; F minor suggested in mm. 22-23 over the pedal point of F; and F major chord suggested in mm. 24-25 over the pedal point of A. Mm. 26-27 consists of chromatic chords that serve as a harmonically unstable transition, which makes the A minor chord in m. 28 at the beginning of section three tonally gratifying.

Thus, in mm. 14-27, Busoni used the sostenuto pedal to make clear the multiple layers of the musical texture. While using the sostenuto pedal to prolong the full length of the pedal points, the performer plays the middle layer and the upper melodic line without employing the damper pedal. Importantly, Busoni did not indicate the use of the damper pedal in mm. 14-27. When the performer plays mm. 14-27, as discussed in the first section above, Busoni indicated pressing the sostenuto pedal with the right foot (marked “rechter Fuß” in m. 1), and the soft pedal with the left foot (marked “sord. Mit dem l. Fuß” in m. 1, see Example 4.1). This pedalling indication makes the use of the damper pedal impracticable because the performer would not be

physically able to use the sostenuto pedal with his right foot while at the same time constantly changing the damper pedal. Therefore, Busoni's use of the sostenuto pedal allows the performer to prolong the pedal points, A-flat in mm. 14-19, D in mm. 20-21, F in mm. 22-23, and A in mm. 24-29, while playing the middle layer without introducing unnecessary resonances that would make the resulting lines unclear. In short, Busoni used the sostenuto pedal to maximize the clarity of each line within the multi-layered texture.

In mm. 20 and 24, Busoni's use of the sostenuto pedal prolongs additional tones in the upper layers. Mm. 20 and 24 pose a technical challenge to the performer because the score indicates using the sostenuto pedal to prolong the pedal point of D in m. 20 and of A in m. 24, but when he pushes down the sostenuto pedal on the first beat of each measure, he prolongs the pedal point together with two notes of the middle layer. The pedal points on both measures, 20 and 24, are notated on the bottom staff, the *Liegende Töne*, which means that the performer uses the sostenuto pedal to prolong those tones. The score in m. 20 indicates prolonging only the pedal point of D, which is played crossing the right hand above the left hand (marked "m.d." which means *mano destra*, right hand in Italian). When the performer presses the sostenuto pedal on the first beat of that measure, however, he plays three tones, the pedal point and a chord of the middle staff, c¹ and g^{#1}, followed by e¹ (see Example 4.7). The performer would inevitably prolong those three tones—D-c¹-g¹—if he pushes down the sostenuto pedal immediately after playing the pedal point, or he would prolong two tones—D and e¹—if he waits for half a beat to push down the sostenuto pedal. Although the performer prolongs these tones of the middle layer, the pedal point of D, played by the right hand with an accent, would have a stronger resonance than c¹ and g^{#1}, which are played very softly (marked *pianissimo*). This situation does not happen in m. 22, because the pedal point is the only note on the first beat. M. 24, however,

resembles m. 20: the performer prolongs the pedal point—A—together with two notes of the middle layer, c¹ and f, forming an F major chord.

These two measures, m. 20 and m. 24, are the only passages in *Mit Anwendung* and the “first Appendix” of his edition of Bach’s Well-Tempered Clavier in which Busoni notated the prolongation of a pedal point while his use of the sostenuto pedal also prolongs tones in other layers of the texture. To increase the degree of precision of the multi-layered textures in mm. 20 and 24, I suggest applying a pedalling technique devised by Busoni in Example 83 of the “first Appendix.” I suggest pressing the sostenuto pedal between the first and second beats of measures 20 and 24 after the performer releases the note e¹ in m. 20 and the chord f-c¹ in m. 24. I consider this intervention necessary because the prolongation of the chords obscures the clarity of the middle line—especially in m. 24—and the score indicates prolonging only the pedal point, and not the other tones. This slight delay is, in fact, the pedalling technique that Busoni himself employed in Example 83 of the Appendix, where he inserted a sixteenth rest to prolong the pedal point exclusively. I suggest applying this pedalling technique to that of m. 20 and m. 24 of *Mit Anwendung*, making a slight break between the statements of the “c” motif to prolong only the pedal point (see Example 4.8). This performance suggestion is consistent with Busoni’s musical thinking, I emphasize, as he wrote *ritenuto* on m. 20 (marked “riten.”) to ask performers to slow down on the first beat, which marks the end of the previous phrase, before playing the original tempo (marked *a tempo*) on the second beat. I propose that this type of break is necessary for making clear the distinct lines of these multi-layered textures, and it should therefore be a criterion for a performer to develop a set of principles devising pedalling techniques.

Example 4.7. Ferruccio Busoni, *Mit Anwendung des III. Pedals* (Steinway & Sons Sustaining-Pedal), mm. 11-28.

The musical score is divided into four systems, each with a treble and bass staff. Measure numbers 11, 16, 20, and 25 are indicated at the start of their respective systems.

- System 1 (Measures 11-15):** The right hand plays a series of eighth-note chords. The left hand has a sustained bass line with a pedal point on G.
- System 2 (Measures 16-19):** The right hand continues with eighth-note chords. The left hand has a sustained bass line with a pedal point on G. A *poco* marking appears at the end of measure 19.
- System 3 (Measures 20-24):** The right hand plays a series of eighth-note chords. The left hand has a sustained bass line with a pedal point on G. A *riten.* marking appears at the start of measure 20, and a *pp* marking appears at the start of measure 21. A *m.d.* marking appears at the start of measure 25.
- System 4 (Measures 25-28):** The right hand plays a series of eighth-note chords. The left hand has a sustained bass line with a pedal point on G. A *Tranquillo.* marking appears at the start of measure 25, and a *senza sord.* marking appears at the start of measure 26. A *linker Fuß* marking appears at the start of measure 28.

Example 4.8. Ferruccio Busoni, *Mit Anwendung des III. Pedals* (*Steinway & Sons Sustaining-Pedal*), mm. 20-24 [performance indications in m.20 and m.24 are mine].

Busoni once again used the sostenuto pedal to prolong a pedal point in mm. 43-51 (see Example 4.9). This excerpt, which belongs to the fourth section of *Mit Anwendung*, is a transposed restatement of the opening, mm 1-9 (see Example 4.1). Busoni, however, modified every part of the texture. In mm. 43-51, the *Liegende Töne* consists of a quadrupled C (i.e., C, c, c², c³) instead of a full F major chord. The *Haupt-Stimme* consists of a descending sequence of the “a” motif. The first statement of the “a” motif in the higher line of the *Haupt-Stimme* starts in m. 43, on the tone of E-flat, which begins a diminished fifth higher than the “a” motif originally presented in m. 2 (see Example 4.10). Instead of moving up a half step on the third beat of m. 45 (i.e., from A to B-flat), as is the case on beat 3 of m. 3, Busoni transposed the second statement of the “a” motif a major second downwards from E-flat to D-flat. Contrary to the upwards trajectory in mm. 2–5, the downwards trajectory is established in mm. 43–47. A fragment of the “a” motif moves downwards from D-flat to C, outlining the C minor chord on the third beat of m. 47. On the first beat of the next measure, m. 48, the following statement of the “a” motif

begins with the note F, a major second above the E-flat in m. 43. This statement of the “a” motif makes this excerpt different from that of mm. 1–9, where the “a” motif in m. 6 begins with the same note—A—as in m. 2.

The lower line of the *Haupt-Stimme* imitates the “a” motif two beats after the one in the higher line in m. 43. As in mm. 6-9, the lower line of the *Haupt-Stimme* in mm. 48-51 states motif “b,” this time using the scale of A-flat major. Unlike mm. 1-9, though, the use of the sostenuto pedal does not result in polychords, for the simple reason that the performer uses the sostenuto pedal to sustain a note (i.e., C), and not a chord (i.e., the F major chord). The sustained quadrupled C note adds a third layer—a pedal point—to the texture.

Furthermore, Busoni overlapped three C notes (i.e., C, c, and c²) of the quadrupled pedal point with those in the *Haupt-Simme* throughout this passage, such as c² in m. 44 and mm. 46-49, and C and c in mm. 48-51. The use of the sostenuto pedal modifies the length, resonance, and volume of each of the overlapped Cs of the melodic lines. Busoni’s use of the sostenuto pedal in mm. 43-51 serves two interrelated functions: it prolongs the pedal point and, by extension, makes what seems to be an even stream of eight notes sound uneven. These functions recall similar effects in the opening measures of the work.

Example 4.9. Ferruccio Busoni, *Mit Anwendung des III. Pedals* (Steinway & Sons Sustaining-Pedal), mm. 43-51.

43 *dolce legato*

48

Example 4.10. “A” motif in higher line of the *Haupt-Stimme* in mm. 43-51.

F major:

43 bVII v iv i⁶ ii i bVII VI iv i⁶ bII i

“a” motif Transposed “a”

47 bvii VI v i VI v iv i⁶ ii

Shortened “a” Transposed “a”

50 i bVII VI

Busoni used the sostenuto pedal to prolong a pedal point a third time in a long passage of the fifth section of the work, mm. 58-73. In this passage, he reused thematic materials from previous sections: the “a” motif in mm. 58-65, a variation of the “b” motif in mm. 59-60, and the “c” motif in m. 66-71 (see Example 4.11). Busoni indicated in the score how to use the sostenuto pedal: in m. 57, the note F¹ is to be sustained by the sostenuto pedal. The performer pushes it down with his right foot (marked “rechter Fuß”) while his left foot presses down the soft pedal (marked “sord.” which means with mute). Using the sostenuto pedal from the last beat of m. 57 throughout the excerpt emphasizes F as the tonal center of this section. Moreover, there is no indication of any use of the damper pedal, which enables the fingers to bring out the clarity of the lines of the *Haupt-Stimme*. Since the pedal point is in a lower register, there is no register overlap between the *Haupt-Stimme* and the *Liegende Töne*. Exceptions are in mm. 62, 66, and 68, where Busoni wanted the performer to rearticulate the pedal point on the first beat of those measures to reinforce an audible tonic throughout the whole section.

Example 4.11. Ferruccio Busoni, *Mit Anwendung des III. Pedals* (Steinway & Sons Sustaining-Pedal), mm. 55-71.

The musical score for Example 4.11, Ferruccio Busoni's *Mit Anwendung des III. Pedals*, measures 55-71, is presented in G major, 3/4 time. The score is written for piano and features a complex pedal point exercise. The right hand plays a melodic line with various ornaments and dynamics, while the left hand plays a steady eighth-note accompaniment. The score includes markings for 'sord.', 'soave', and 'rechter Fuß'.

Measures 55-57: The right hand plays a melodic line with various ornaments and dynamics, while the left hand plays a steady eighth-note accompaniment. The score includes markings for 'sord.' and 'Re.'.

Measures 58-60: The right hand plays a melodic line with various ornaments and dynamics, while the left hand plays a steady eighth-note accompaniment. The score includes markings for 'soave' and 'rechter Fuß'.

Measures 61-63: The right hand plays a melodic line with various ornaments and dynamics, while the left hand plays a steady eighth-note accompaniment. The score includes markings for 'soave' and 'rechter Fuß'.

Measures 64-66: The right hand plays a melodic line with various ornaments and dynamics, while the left hand plays a steady eighth-note accompaniment. The score includes markings for 'soave' and 'rechter Fuß'.

Measures 67-71: The right hand plays a melodic line with various ornaments and dynamics, while the left hand plays a steady eighth-note accompaniment. The score includes markings for 'soave' and 'rechter Fuß'.



In the passages discussed in this section of the chapter, mm. 14-27 (section two), mm. 43-51 (a part of section four), and mm. 58-73 (a part of section five), Busoni used the sostenuto pedal to prolong pedal points without employing the damper pedal at all, a technique that makes each layer of the polyphonic textures audible in an unusually transparent manner. My findings, based on a comprehensive close reading of Busoni's notation, including motivic and harmonic analyses, and informed by my own playing of these passages, allow me to argue that Busoni's indications of the use of the sostenuto pedal in mm. 20-21 and 24-27 are insufficient. He indicated only the prolongation of a pedal point, notated on the bottom stave of m. 20 and 24. However, when the performer follows Busoni's instructions by pushing down the sostenuto pedal in m. 20 and m. 24, he inevitably prolongs two tones of the middle layer. Yet, this imprecise effect contradicts the precise notations that Busoni marked elsewhere. Therefore, I explain this contradiction in terms of Busoni's occasional inexact pedalling markings. I propose that more precise instructions (as shown in Example 4.8), grounded in Busoni's own pedalling principles, may help make an effect more consistent with his uses of the sostenuto pedal elsewhere. Thus, in the passages discussed in this section, Busoni used the sostenuto pedal for three purposes: 1) to prolong a pedal point, 2) to allow the performer to optimize the clarity of

each line of the polyphonic texture, and 3) to make uneven the length, volume, and resonance of the tones of the *Haupt-Stimme* that overlap the pedal point.

4.7 Conclusion

My analyses reveal that Busoni's extensive use of the sostenuto pedal in *Mit Anwendung* (1923) prolongs chords and pedal points that form specific layers within the polyphonic textures of the work. The prolongation of these elements using the sostenuto pedal makes clear Busoni's polyphony and harmonic progressions. The primary purpose of my analyses is to help performers play this work using the sostenuto pedal in a way that best approximates Busoni's intent. The secondary purpose is to explain Busoni's concept of "Polyphonic Harmony" (*polyphoner Harmonik*), which he defined in his essay, "The Score of Doktor Faust" (1921), as the use of "pure melodic lines" that "cross and support each other and move independently, and from which the harmony arises."¹¹⁹ My research helps me question Larry Sitsky's work. He notes that Busoni used the sostenuto pedal to create chords based on what he called "unrelated" harmonies.¹²⁰ Yet, I show in my analysis that Sitsky's claim oversimplifies Busoni's nuanced harmonic effects. I argue that Busoni used the sostenuto pedal to play the harmonies generated by what he might call "pure melodic lines" in the *Haupt-Stimme* over the chords or notes of the *Liegende Töne*. Sitsky's claim of "unrelated harmonies" fails to fully explain Busoni's sophisticated use of harmonies and tonal framing because his claim underestimates Busoni's incorporation of the sostenuto pedal in his compositional thinking. My analysis, however, shows that Busoni used the sostenuto pedal to bring out tonal instability and polychords in each section of the piece while maintaining a firm tonal framework. The prolongation of chords—F major (the tonic chord in F major) mm. 1-9 , F minor chord (the minor tonic chord in F major) in mm.

¹¹⁹ Busoni, *Essence*, 74.

¹²⁰ Sitsky, *Busoni and the Piano*, 171.

10-13, A minor chord (the mediant chord in F major) in mm. 28-31, B-flat major chord (the subdominant chord in F major) in mm. 36-39, and F major (the tonic chord in F major) in mm. 80-86—suggest that F major is the key of the whole piece. In other words, I argue that Busoni's use of the sostenuto pedal generates tonal instability on the sectional level while providing overall tonal stability.

Busoni had already used the sostenuto pedal to prolong chords with their own dynamic and articulation over multi-layered textures in the first Appendix of his edition of Bach's Well-Tempered Clavier in 1894. The use of the sostenuto pedal in Examples 86-90, discussed in Chapter Three, optimizes the textural clarity of the performance. Although this use of the sostenuto pedal in *Mit Anwendung* also helps the performer to maximize the clarity of the polyphonic textures, its main function, I argue, is to form polychords. While Busoni used the sostenuto pedal in Examples 86-90 of the first Appendix to enable the performer to play different articulations simultaneously in multi-layered textures while gradating the dynamic of each layer, Busoni's use of the sostenuto pedal is indispensable to bringing out the polyphonic and harmonic intricacies in *Mit Anwendung*.

Chapter 5: Epilogue

In this dissertation, I have conducted a thorough investigation of Ferruccio Busoni and his use of the sostenuto pedal in ways that no scholar has done before. I explain how Ferruccio Busoni expanded the pedalling technique of the piano using the sostenuto pedal in the first Appendix of his edition of Bach's Well-Tempered Clavier (1894) and *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)* (1925). In Chapter Two, I contextualize Busoni's groundbreaking use of the sostenuto pedal analyzing Liszt's use of the sostenuto pedal in the two fragments attached to his letter to William Steinway, written in 1883. Scholars Victor Wolfram, Margaret Houck, David Rowland, and Kenneth Hamilton identify Liszt as the first major composer who notated his use of the sostenuto pedal; therefore, Liszt is Busoni's only antecedent.¹²¹

Although Wolfram, Houck, Rowland, Hamilton, Frances Clidat, and Geraldine Keeling mention Liszt's letter in their research, no one had analyzed in detail Liszt's use of the sostenuto pedal.¹²² Kenneth Hamilton observes that Liszt originally wrote both *Consolation* No. 3 (1849) and *Danse des Sylphes* (1883) for a piano that did not have the sostenuto pedal.¹²³ Moreover, Victor Wolfram notices that even though Liszt used the damper pedal exclusively when composing *Consolation* No. 3, the performer can fully prolong the pedal point in mm. 1-7 only if he uses the sostenuto pedal.¹²⁴ While Hamilton and Wolfram's claims are helpful, they do not

¹²¹ Wolfram, *The Sostenuto Pedal*, 30; Houck, "The History and Development," 20; Rowland, *A History of Pianoforte*, 153; Hamilton, *After the Golden Age*, 174.

¹²² Wolfram, *The Sostenuto Pedal*, 24-30; Houck, "The History and Development," 20; Rowland, *A History of Pianoforte*, 153; Hamilton, *Liszt, Sonata in B*, 68; Clidat, "The Transcendental Studies," 315-318; Keeling, "Liszt and Steinway," 99-100; Liszt, *Liszt Letters*, 236-237; Hamilton, *After the Golden Age*, 174.

¹²³ Hamilton, *After the Golden Age*, 174.

¹²⁴ Wolfram, *The Sostenuto Pedal*, 28.

explain how some compositional features in *Consolation* No. 3 and *Danse Des Sylphes* benefit from the use of the sostenuto pedal. I argue in Chapter Two of this dissertation that Liszt employed the sostenuto pedal to prolong pedal points while enabling the performer to make clear the harmonic changes of the upper layers by changing the damper pedal in mm. 4, 5, and 6 of *Consolation* No. 3 and throughout mm. 41-141 of *Danse des Sylphes*. I claim that the purpose of using the sostenuto pedal in these works is to refine the pedalling of these three-layered textures.

Eleven years after Liszt's letter to William Steinway, Busoni provided in the "first Appendix" of his edition of Bach's *Well-Tempered Clavier* (1894) fifteen excerpts to demonstrate his use of the sostenuto pedal, all of which I analyzed in Chapter Three. Although Joseph Banowetz observes that Busoni used the sostenuto pedal in his Examples 79 and 83 to prolong pedal points that were originally played on the pedal board of the organ, and Kenneth Hamilton comments more generally that Busoni used the sostenuto pedal to emulate the sound of the organ, no scholar has offered a thorough explanation of Busoni's use of the sostenuto pedal in Examples 76-90 of the Appendix.¹²⁵ For this reason, I examined all of these fifteen examples. In my analyses, I discovered that Busoni composed these examples thoughtfully and systematically. In fact, Busoni far exceeded Liszt's contribution to the development of the sostenuto pedal technique: each example illustrates one special use of it. Based on my findings, I divided these fifteen examples into three groups. Each group presents one clearly defined usage of the sostenuto pedal.

I concluded that in the first group of excerpts (what Busoni calls Examples 76-78), Busoni expanded the pedalling technique by using the sostenuto pedal to modify the typical three-step sequence of sound production of the piano—attack of a tone, its sustaining, and its

¹²⁵ Banowetz, *The Pianist's Guide to Pedaling*, 133; Hamilton, *After the Golden Age*, 176.

release—creating an alternative way of sustaining and releasing tones that would otherwise be impossible to produce on the piano without the sostenuto pedal. In the second group of excerpts, Examples 79-85, Busoni used the sostenuto pedal to prolong pedal points, optimizing the clarity of independent lines in polyphonic textures. In the third group of excerpts, Examples 85-90, he used the sostenuto pedal to gradate nuanced and contrasting articulations and dynamics in multi-layered textures.

Once again, Busoni indicated the use of the sostenuto pedal in *Mit Anwendung des III. Pedals* (*Steinway & Sons Sustaining-Pedal*), published posthumously in 1925. Although some scholars briefly mention the use of the sostenuto pedal in *Mit Anwendung des III. Pedals* (*Steinway & Sons Sustaining-Pedal*), no one has published a detailed analysis of Busoni's use of the sostenuto pedal in this work. Anthony Beaumont and Kenneth Hamilton merely identify this work as a “study” for the sostenuto pedal.¹²⁶ Virginia Englund erroneously claims that Busoni used the three pedals of the piano simultaneously.¹²⁷ Larry Sitsky oversimplifies Busoni's pedalling effects, describing them only in the simple terms of the prolongation of a chord “while unrelated harmonies move above it without any blurring.”¹²⁸ Building on the work of these scholars, I provided a detailed analysis of Busoni's use of the sostenuto pedal in *Mit Anwendung des III. Pedals* (*Steinway & Sons Sustaining-Pedal*).

My analysis, presented in Chapter Four of this dissertation, shows that Busoni used the sostenuto pedal to bring out the polyphonic and harmonic intricacies in *Mit Anwendung des III. Pedals* (*Steinway & Sons Sustaining-Pedal*). The performer prolongs chords and pedal points that form a unique layer within the three-layered texture, which consists of the tones prolonged

¹²⁶ Beaumont, *Busoni the Composer*, 306; Hamilton, *After the Golden Age*, 177

¹²⁷ Englund, “Musical Idealism,” 61-62

¹²⁸ Sitsky, *Busoni and the Piano*, 171.

by the use of the sostenuto pedal and two melodic lines. In the passages where Busoni prolonged pedal points, mm. 14-27, 43-51, and 58-73, he used the sostenuto pedal to maximize the clarity of independent lines in polyphonic textures. In mm. 1-13, 28-31, 36-39, and 80-86, he superimposed the chords prolonged by using the sostenuto pedal and the harmonic progressions outlined by the melodies, generating polychords. Additionally, he used the sostenuto pedal to establish the tonal center of the work. In the first section of the work, he prolonged the tonic chord—F major—and the minor tonic chord—F minor—. He prolonged the mediant chord—A minor—in the third section and the subdominant chord—B-flat major— also in the third section. Busoni finished the piece prolonging the tonic chord—F major—in the sixth and final section of the work. Busoni, therefore, used the sostenuto pedal in *Mit Anwendung* to control a large-scale structural tonal framework while forming polychords that elucidate chromatic complexities on the local level.

To conclude this dissertation, I contextualize Busoni's contribution to the use of the sostenuto pedal further by examining its relevance to other twentieth-century piano works. I compare in this epilogue Busoni's use of the sostenuto pedal with the notated uses in three excerpts of other twentieth-century works: Percy Grainger's *One More Day, My John* (1916), Luciano Berio's *Sequenza IV* (1966), and George Crumb's *Music of Shadows* (1972).

The use of the sostenuto pedal in Grainger's *One More Day, My John* resembles Busoni's pedalling of Examples 77, 78, and 81 in the first Appendix of his edition of Bach's Well-Tempered Clavier, which, as mentioned above, was published in 1894. Australian pianist Percy Grainger studied piano with Busoni in Berlin in 1903. According to Grainger's diary, pedalling was a major focus in Busoni's piano pedagogy.¹²⁹ Thereafter, Grainger became an advocate of

¹²⁹ Knyt, "From Bach-Busoni," 33.

the sostenuto pedal, making extensive use of this pedal in his piano works (see Appendix C for a list of works that make use of the sostenuto pedal). In the preface to his edition of Grieg's *Norwegian Bridal Procession* (1920), for example, Grainger considered that the use of the sostenuto pedal was a prominent feature of what he called "modern pianism." He claimed that "the sostenuto pedal has, during recent years, developed, extended and perfected the piano playing more than any other single factor."¹³⁰ In the excerpt shown in Example 5.1, the first measure of *One More Day, My John*, Grainger wrote detailed instructions of the use of the sostenuto pedal: "before you begin to play, press down these 3 keys silently, catching the dampers with the sustaining pedal. Hold the sustaining pedal down till the middle of bar 8." Grainger's use of the sostenuto pedal prolongs the three C-sharp tones when the performer plays the first chord in the first measure. It also allows the vibration of their overtones, which resonate throughout the first eight measures. Grainger's use of the sostenuto pedal, therefore, generates an atmospheric accumulation of resonances.

I argue that Grainger's use of the sostenuto pedal appears in Busoni's first Appendix of his edition of Bach's *Well-Tempered Clavier*. The performer also uses the sostenuto pedal to keep the dampers of a silently depressed chord raised in Busoni's Examples 77 and 78. In Grainger's *One More Day, My John*, the purpose of using this technique is to prolong only the three C-sharps from the first beat of the first measure through the fourth beat of the eighth measure. If the performer were to press the sostenuto pedal after playing the chord of the first beat in m. 1, he would prolong all the notes of that chord. Busoni's use of the sostenuto pedal in Example 78 serves the same purpose: the performer uses the sostenuto pedal to prolong only the

¹³⁰ Jeffrey Johnson, ed., *Piano Lessons in the Grand Style: From the Golden Age of the Etude Music Magazine (1913-1940)* (Mineola, NY: Dover Publications, Inc, 2003), 55.

three tones of a D major chord on the third beat of the third measure (see Example 3.3). Additionally, sustaining of the three C-sharps in the opening of *One More Day, My John* generates a haze of sound that reinforces the character of the piece: “lazy and dreamy, with a somewhat wafted far-away lilt.” Busoni’s use of the sostenuto pedal in Example 81 makes a similar effect by reinforcing the character of the excerpt: “*energicamente*” (see Example 3.8). As these parallels are specific and traceable, it is safe to claim that Busoni influenced Grainger’s use of the sostenuto pedal in technical and poetic ways.

Example 5.1. Percy Grainger, *One More Day, My John*. m. 1.

Lazy and dreamy, with a somewhat wafted far-away lilt.
 M. M. ♩ = about 63

Before you begin to play, press down these 3 keys silently, catching their dampers with the sustaining pedal. Hold the sustaining pedal down till the middle of bar 8.

Right hand

The top notes very bright and glassy

Left hand

pp *p* *pp* *f*

pp *p* *pp*

ped. *ped.*

Busoni's pedalling techniques predated works of other composers of the twentieth century, such as Luciano Berio's *Sequenza IV* (1966). Berio used the *sostenuto* pedal extensively in this work.¹³¹ In her analysis of *Sequenza IV*, scholar Zoe Doll explains that Berio employed the *sostenuto* pedal to "manipulate the listener's perception of rhythm and harmony."¹³² According to Doll, Berio's use of the *sostenuto* pedal "becomes a kind of acoustic envelope generator, lengthening the release time of chords while simultaneously creating 'phantom' attacks."¹³³ Mm. 145-146 of *Sequenza IV*, shown in Example 5.2, illustrates Doll's point. In m. 145, Berio employed the *sostenuto* pedal to sustain a chord that consists of the tones D, A-flat, D-sharp, F-sharp, A, and B-flat, throughout mm. 145 and 146. When the performer plays the following eight notes, the use of the *sostenuto* pedal prolongs the notes that overlap the chord.¹³⁴ Remarkably, the overlapped notes are notated as quarter notes as well as eighth notes in this eighth-note stream, which means that these overlapped notes serve two functions: they are part of the eighth-note stream, and they form a second melodic line: f-sharp¹ and a¹ played by the right hand and d-sharp¹, d, and g-sharp played by the left hand.

Berio's use of the *sostenuto* pedal, I argue, resembles Busoni's use of it in Example 76 of the first Appendix of his edition of Bach's *Well-Tempered Clavier*. In Example 76, Busoni used the *sostenuto* pedal to prolong a C major chord that partially overlaps a C major arpeggio (see Example 3.1). Busoni's use of the *sostenuto* pedal prolongs only the tones of the C major arpeggio that overlap the C major chord, thereby creating unequal duration, volume and

¹³¹ Berio's use of the *sostenuto* pedal in *Sequenza IV* has been discussed in Cheryl I. Pauls, "Structuring in Luciano Berio's *Sequenza IV*" (DMA diss., University of British Columbia, 1997), 72-91; Philip Thomas, "Berio's *Sequenza IV*: Approaches to Performance and Interpretation," *Contemporary Music Review* Vol. 26 No. 2 (2007): 189-205; Doll, "Phantom Rhythms," 53-66.

¹³² Doll, "Phantom Rhythms," 54.

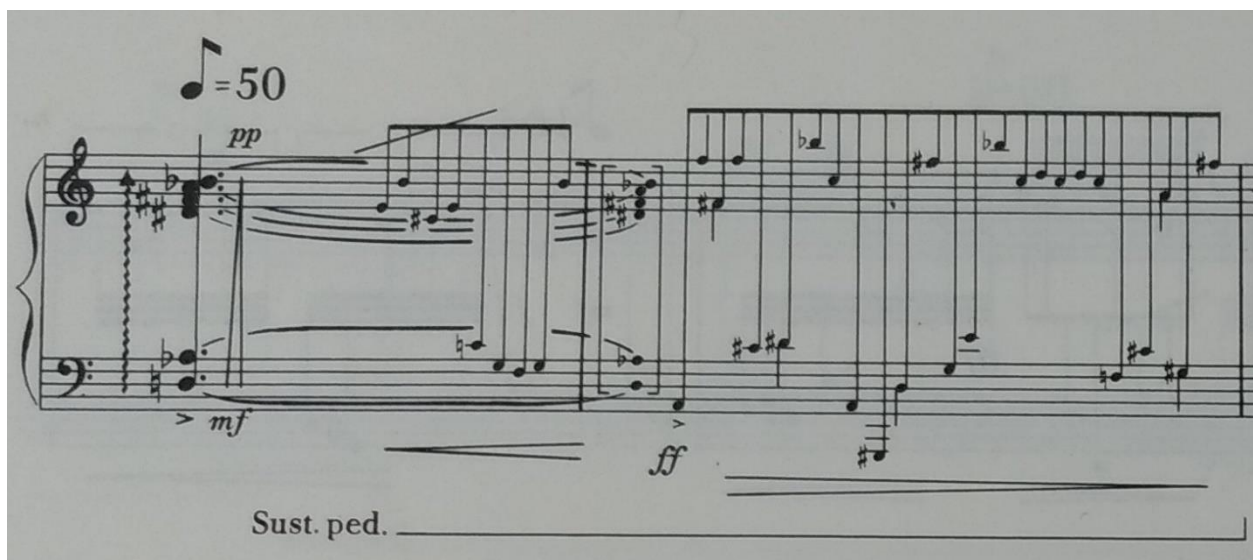
¹³³ *Ibid.*

¹³⁴ Cheryl Pauls explains in her dissertation "Structuring in Luciano Berio's *Sequenza IV*," that "when material is played while the *sostenuto* is depressed, the reiteration of any of the *sostenuto* pitches will again sound for a full decay time as if held down." See her "Structuring in Luciano Berio's *Sequenza IV*," 72-73.

resonances within the tones of the arpeggio. Thus, both Busoni and Berio use the sostenuto pedal in these excerpts to achieve an unevenness of length, volume, and reverberation in what would otherwise be uniform lines.

Example 5.2. Luciano Berio, *Sequenza IV*, mm. 145-146.

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Another work that resembles Busoni's pedalling techniques is George Crumb's "Music of Shadows (for Aeolian Harp)" from *Makrokosmos* (1972).¹³⁵ This composition is the seventh piece of the first volume of Crumb's *Makrokosmos*. In this work, Crumb generated chords without a proper attack by silently depressing chords and catching these yet-to-be-sounded

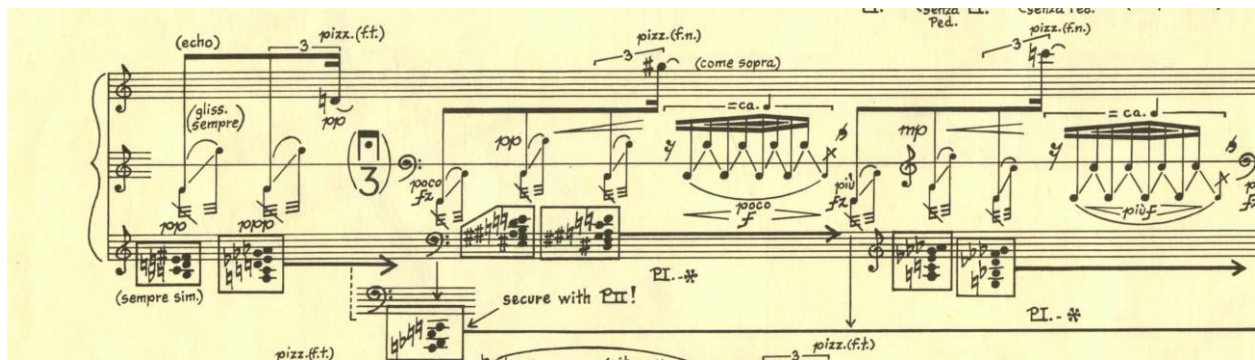
¹³⁵ The use of the sostenuto pedal in *Makrokosmos* has been discussed in Hyangmee Kim, "A Performer's Guide to George Crumb's *Makrokosmos IV (Celestial Mechanics)*" (DMA diss., University of North Texas, 2008), 10-11; Liang Deng, "Performance Techniques in Modern Piano Music" (DMA diss., University of Auckland, 2011), 106-107; Mayumi Tayake, "Performance Guide to *Makrokosmos Volume II*" (DMA diss., University of Washington, 2012) 75-76.

chords with the sostenuto pedal, which he referred to as PII.¹³⁶ Crumb asked the performer to silently depress all the chords notated in the boxes shown in Example 5.3, without making any attack while executing *glissandi* and *pizzicati* on the strings of the piano. The performer uses the sostenuto pedal on the third silently depressed chord of that system (the boxed chord notated below the bottom staff that is linked to the indication “secure with PII!”). The use of the sostenuto pedal keeps the dampers of the tones of the silently depressed chord raised (i.e., F¹, G-flat¹, B¹ and C). While the performer keeps the dampers of these notes raised, he executes a *glissando* on the strings of the piano with his right hand, which is written in the middle staff and reaches the lower register of the piano (i.e., from A² to B-flat). Therefore, the *glissando* activates the vibration of the strings of the notes sustained by the sostenuto pedal (F¹, G-flat¹, B¹ and C). The performer uses the sostenuto pedal to sustain these resonances throughout the following materials (marked with a horizontal line underneath the bottom staff). After the *glissando* in the lower register of the piano, the performer silently depresses a different chord with his left hand, e-sharp, g-sharp, a-sharp, b, d¹, and e¹, and plays another *glissando* on the strings. This *glissando* reaches a higher register (i.e., from c to d²) which means that it activates the vibration of the string of the tones sustained by the left hand. He repeats the procedure pressing down another chord with his left hand (i.e., d-sharp, f-sharp, g-sharp, a, c¹, d¹), again without attack, while playing another *glissando* with his right hand followed by a *pizzicato*, g-sharp², which he plucks on the strings of the piano while using the damper pedal (marked “PI...”). The *glissando* reaches from c to d², effectively activating the vibration of the strings of the tones sustained by the left hand (i.e., d-sharp, f-sharp, g-sharp, a, c¹, d¹). Due to the low register of the chords and

¹³⁶ In volume one of *Makrokosmos*, Crumb explained his pedalling markings: PI indicates the use of the damper pedal, PII the use of the sostenuto pedal, and PIII the use of the soft pedal. See George Crumb, *Makrokosmos Vol. 1: Twelve Fantasy-Pieces After the Zodiac for Amplified Piano*, (New York: Peters, 1974), 5.

the range of the *glissandi*, the use of the sostenuto pedal causes an accumulation of resonances. Thus, Crumb used the sostenuto pedal to generate chords without an attack, a pedalling technique similar to the one Busoni used in Example 77 of the first Appendix of his edition of Bach's Well-Tempered Clavier (see Example 3.2).

Example 5.3. George Crumb, "Music of Shadows (for Aeolian Harp)" from *Makrokosmos* Volume 1.
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The parallels between Busoni's use of the sostenuto pedal and the excerpts of Percy Grainger's *One More Day, My John* (1916), Luciano Berio's *Sequenza IV* (1966), and George Crumb's "Music of Shadows (for Aeolian Harp)" (1972), are based on my findings in Chapter Three and Chapter Four. Although Busoni's influence on Grainger's pedalling is documented in Grainger's diary and discussed in Erinn Knyt's article "From Bach-Busoni to Bach-Grainger: Adaptation as Composition," Luciano Berio and George Crumb did not specify Busoni's use of the sostenuto pedal as an influence in their work.¹³⁷ Whether or not Berio and Crumb studied Busoni's varied uses of the sostenuto pedal in his works, it is indisputable that Busoni was a

¹³⁷ Knyt, "From Bach Busoni to Bach Grainger," 33.

pioneer in the exploration of the use of the sostenuto pedal in the piano repertory around 1900. My goal in this part of the epilogue is to point out, for the first time, Busoni's pedalling techniques in some twentieth-century piano works. A comprehensive study of Busoni's impact on the use of the sostenuto pedal in the twentieth-century piano repertory is beyond the scope of this dissertation. I do, however, provide a partial list of works that explicitly require the use of the sostenuto pedal in Appendix C. This list may contribute to further research on this topic.

To conclude, I argue that Busoni significantly expanded the use of the sostenuto pedal in his fifteen examples of the first Appendix of his edition of Bach's Well-Tempered Clavier (1894) and *Mit Anwendung des III. Pedals* (1925). In these works, he diversified the use of the sostenuto pedal from merely prolonging a pedal point, as Liszt did, to devising four pedalling techniques new to the history of piano playing. One, he used the sostenuto pedal to re-order the customary sequence of sound production of the piano: attack, sustain, and release (Examples 76, 77, and 78 of the Appendix, and mm. 2-9 and 43-51 of *Mit Anwendung des III. Pedals*). Two, he used the sostenuto pedal to make clear contrasting articulations and dynamics in multi-layered textures (Examples 86-90 of the Appendix). Three, he used the sostenuto pedal to prolong pedal points, increasing the clarity of multi-layered textures (Examples 79-85 of the Appendix, and mm. 14-27 and mm. 58-73 of *Mit Anwendung des III. Pedals*). Finally, he used the sostenuto pedal to form polychords (mm. 1-13, 28-31, 36-39, and 80-86 of *Mit Anwendung des III. Pedals*). Busoni's innovative pedalling techniques were groundbreaking. As shown in Examples 4.1, 4.2, and 4.3, Busoni's use of the sostenuto pedal predated pedalling techniques of some twentieth-century composers, including Percy Grainger, Luciano Berio, and George Crumb. These findings lead me to the conclusion that Busoni's use of the sostenuto pedal expanded the pedalling technique of the piano.

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Appendices

Appendix A. List of Volumes of the Edition of Johann Sebastian Bach's Keyboard Works Supervised by Ferruccio Busoni and Published by Breitkopf and Haertel in 1894-1922

Volume	Title	Editor	Year of Publication
1	Das Wohltemperierte Klavier I Teil (heft 1-4)	Ferruccio Busoni	1894
2	Das Wohltemperierte Klavier II Teil (heft 1-4)	Busoni	1916
3	18 Kleine Präludien, Fughetta, 4 Duette	Busoni	1916
4	15 Zweistimmige Inventionen	Busoni	1914
5	15 Dreistimmige Inventionen	Busoni	1914
6	Französische Suiten 1-6	Egon Petri (1881-1962)	1918
7	Englische Suiten 1-3	Petri	1916
8	Englische Suiten 4-6	Petri	1916
9	Partiten 1-3	Petri	1918
10	Partiten 4-6	Petri	1923
11	Konzerte nach B. Marcello, G. P. Telemann, A. Vivaldi, etc. No. 1-8	Bruno Mugellini (1871-1912)	1915
12	Konzerte 9-16	Mugellini	1915
13	Italienisches Konzert und Partita H moll	Petri	1918
14	Mehrsätzliche Vortragsstücke	Busoni	1915

Volume	Title	Editor	Year of Publication
15	Aria mit 30 Veränderungen	Busoni	1915
16	Variationswerke	Busoni	1921
17	Tokkaten	Petri	1922
18	Tokkaten, Fantasie und Fuge A moll	Busoni	1918 and 1920
19	Präludien und Fugen	Mugellini	1917
20	Präludien, Fughetten, Fugen	Mugellini	1917
21	Fugen	Mugellini	1917
22	Fantasien und Fugen	Petri	1922
23	Sechs Suiten	Petri	1923
24	Suiten und Sonaten	Mugellini	1921
25	Drei Sonaten, Konzert C moll, Capriccio E dur, 3 Menuette	Petri	1923

Appendix B. List of Volumes of the Second Edition of Ferruccio Busoni's *Klavierübung* (1925)

Volume	Title	Works ¹³⁸
First book	Tonleitern	
Second book	Von Tonleitern abgeleitete Formen	
Third book	Akkordisches	
Fourth book	À trois mains	
Fifth book	Triller	
Sixth book	Lo Staccato	
Seventh book	Acht Étuden nach Cramer	
Eight book	Variationen und Varianten zu Chopin	
Ninth book	Sieben kurze Stücke zur Pflege des polyphonen Spiels	<p>a) Sieben kurze Stücke zur Pflege des polyphonen Spiels:</p> <ol style="list-style-type: none"> 1. Preludietto 2. (no title) 3. (no title) 4. (no title) 5. Preludio 6. nach Mozart 7. Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal). <p>b) Perpetuum Mobile</p>
Tenth book	Étuden nach Paganini-Liszt	

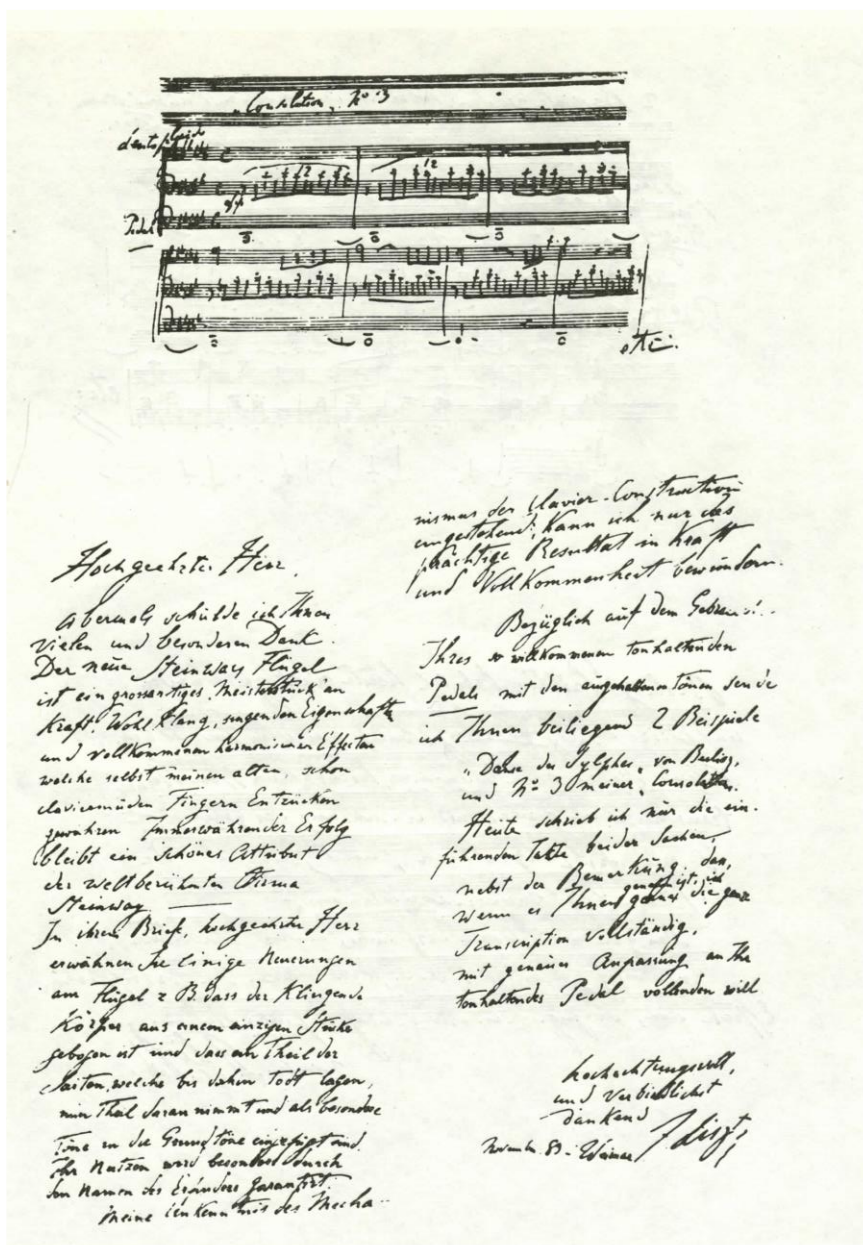
¹³⁸ Each book of the *Klavierübung* consists of numerous pieces and exercises. Since I discuss *Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)* in Chapter Three, I am providing only the titles of the works of the ninth book.

Appendix C. Index of Piano Works that Explicitely Require the Use of the Sostenuto Pedal

Composer	Work	Date
Franz Liszt (1811-1886)	Fragment of <i>Consolation</i> No. 3	1883
Franz Liszt	Fragment of Berlioz's <i>Danse des Sylphes</i>	1883
Ferruccio Busoni (1866-1924)	Appendix of <i>Well-Tempered Clavier</i> Book 1.	1894
Charles Ives (1874-1954)	"Three-age Sonata"	1905
Charles Ives	Study No. 20	1908
Percy Grainger (1882-1961)	Irish tune from County Derry	1911
Percy Grainger	Colonial Songs (1913)	1913
Percy Grainger	One more day my John	1915
Charles Ives	Sonata No. 2	1915
Percy Grainger	The Gum-Suckers March	1916
Percy Grainger	Gay but Wistful	1916
Percy Grainger	Molly on the Shore	1918
Percy Grainger	Eastern Intermezzo	1922
Ferruccio Busoni	Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)	1923
Roger Sessions (1896-1985)	Sonata No. 1	1927
Percy Grainger	Jutish Medley	1928
Percy Grainger	To a Nordic Princess	1928
Percy Grainger	The Hunter in his career	1929
Aaron Copland (1900-1990)	Piano Variations	1930
Percy Grainger	Blithe Bells	1931
Percy Grainger	Porgy and Bess: Fantasy for two pianos	1935
Percy Grainger	Der Rosenkavalier	1937

Composer	Work	Date
Percy Grainger	Scotch Strathspey and Reel	1939
Percy Grainger	The Merry King	1939
Percy Grainger	The immovable do	1940
Béla Bartók (1881-1945)	Suite for two pianos Op. 4b	1941
Béla Bartók	Concerto No. 3	1945
Elliot Carter (1908-2012)	Sonata	1945
Roger Sessions	Sonata No. 2	1946
Samuel Barber (1910-1981)	Sonata Op. 26	1948
György Ligeti(1923-2006)	Invention	1948
Samuel Barber	Souvenirs Op. 28	1953
Karlheinz Stockhausen (1928-2007)	Klavierstück VII	1954
Olivier Messiaen (1908-1992)	Catalogue d'oiseaux: -Le traquet rieur -Le traquet stapazin -La Rousselle Effarvatt	1956-58
Aaron Copland	Piano Fantasy	1957
Elliot Carter	Double Concerto	1961
Pierre Boulez (1925-2016)	Sonata No. 3	1961
Samuel Barber	Concerto Op. 38	1962
George Crumb	Five Pieces for Piano	1962
Elliot Carter	Concerto	1965
Roger Sessions	Sonata No. 3	1965
Luciano Berio (1925-2003)	Sequenza IV	1967
Aaron Copland	Night Thoughts	1972
Alberto Ginastera (1916-1983)	Concerto No. 2 Op. 39	1972
George Crumb (1929)	Makrokosmos Volume 1	1972
George Crumb	Makrokosmos Volume 2	1973

Composer	Work	Date
Samuel Barber	Ballade Op. 46	1977
Elliot Carter	Night Fantasies	1980
György Ligeti	Etudes second book: -Galamb Borong -L'escalier du diable	1988-94
György Ligeti	Piano Concerto	1988
Luciano Berio	Leaf	1990
Luciano Berio	Sonata	2001
Elliot Carter	Two thoughts about the piano	2005



¹³⁹ This reproduction was taken from Hirt, *Meisterwerke des Klavierbaus*, 79-80.

2 Beispiele zu dem Gebrauch des Pedals mit angegebener Fingering.

Beispiel: *Dance de Sylphes. Danse des Fées.*

Chorale in G-dur, 3/4 Takt.

Allegretto

Pedal

etc.

Handwritten musical notation for a piano piece, showing a melody line and a pedal line. The notation includes various musical symbols such as notes, rests, and bar lines.

Berlioz Partitur habe ich heute nicht zu Händen,
und citire das Symphonie-Orchester, aus dem Partitur ist.
Wenn es aber Wunsch, hochgeachteter Herr,
transcribire ich gerne, mit Rücksicht der Fingering
Pedal, die ganze Stück, und gleichfalls die
Hummel'schen Consolations.
Das genannte Pedal darf nicht, immer Erachtens
zu häufig gebraucht werden, wird aber, von vortheilhafter
Epochen sein, vorzüglich in etwas ruhigen, ruhigen Stellen.

Handwritten musical notation, likely a continuation of the piece, showing a melody line and a pedal line. The notation includes various musical symbols such as notes, rests, and bar lines.

Handwritten signature and date: *Handwritten signature* 1855-1856.

Appendix E. Translation of Liszt's Letter to William Steinway

Esteemed Sir:

Once again, I owe you many and special thanks for your magnanimous munificence. The new Steinway Grand is magnificent in its power, tone, cantabile and perfect harmonic effect. Ever continual will remain a fine attribute of the world-famous Steinway Company; even my own piano-tired fingers rejoice in it. A few changes in the manufacture of the instrument which you were so kind as to send me you have indicated in your letter, esteemed Sir. Your protection will surely guarantee the name of the inventor. My ignorance of mechanics permits me only to praise the excellent result in the "vibrating body."

Concerning the use of the sostenuto pedal, I am enclosing to you two examples: *Danse des Sylphes* of Berlioz and N. 3 of my *Consolations*. For today, I am only writing out the opening bars of both pieces, together with the remark that, if it should suit you, I will gladly make a complete transcription, with a precise adaptation for the said pedal.

My address from the beginning of January to mid-April, is Budapest (Hungary). I am writing to Herr Halwade, the Steinway agent in Hamburg, to say that the previous grand in Weimar is at your disposal. This has been played in public only by virtuosi of the highest rank: *Bülow*, *Rubinstein*, *Saint-Saëns* and a few of their successors.

On the occasion of the next *Tonkünstler-Versammlung*, in June, in Weimar, perhaps you may pay me a visit here, to which you are invited, provided that you would like to come.

Your most faithfully,
And with many thanks
F. Liszt

Weimar.

November [18]83.¹⁴⁰

[Postscript]

I do not have the Berlioz score at hand today, and cite the "Sylphentanz" motive from memory. If you would wish it, dear Mr. Steinway, I would gladly transcribe the entire piece in an arrangement using the sustained pedal, and likewise number 3 of my *Consolations*.

¹⁴⁰ The translation of Liszt's letter was published in Liszt, *Liszt Letters*, 236-237.

The pedal referred to should not, in my opinion, be used too frequently, but will be of excellent effect, especially in somewhat tranquil *piano* passages.

November [18]83, Weimar

F. Liszt¹⁴¹

¹⁴¹ The translation of the postscript was published in Wolfram, *The Sostenuato Pedal*, 29.

Appendix F. List of Examples of the First Appendix of Busoni's Edition of Bach's Well-Tempered Clavier, Book 1

Examples	Sections of the First Appendix
Examples 1-42	1) Doublings
Examples 43-60	2) Registration
Examples 61-66	3) Liberties
Examples 67-90	4) Use of the Piano Pedals
Examples 91-100	5) Interpretation (Style of Playing)

Appendix G. Formal Diagram of Mit Anwendung des III. Pedals (Steinway & Sons Sustaining-Pedal)

First Section	Second Section	Third Section	Fourth Section	Fifth Section	Sixth Section
mm. 1-13	mm. 14-27	mm. 28-42	mm. 43-57	mm. 58-79	mm. 80-86
a motif b motif	c motif	Melody based on b motif	a motif b motif c motif	a motif variation of b motif c motif	
Sostenuto pedal prolongs F major-F minor chords	Sostenuto pedal prolongs pedal points (Ab-D-F- A)	Sostenuto pedal prolongs the chords of A minor and Bb major	Sostenuto pedal prolongs a pedal point, quadrupled C	Sostenuto pedal prolongs a pedal point, F	Sostenuto pedal prolongs a F major chord