

MUSIQUE CONCRÈTE INSTRUMENTALE IN HELMUT LACHENMANN'S

CHILD'S PLAY (1980): A PEDAGOGICAL STUDY FOR

LATE INTERMEDIATE STUDENTS

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Helmut Friedrich Lachenmann is a German composer of contemporary music. In his 1980 work for piano, *Child's Play*, Lachenmann develops one of his own signature concepts, *musique concrète instrumentale*, in which he uses the "standard" (not prepared) piano in non-conventional and innovative ways to explore new sounds and techniques. This dissertation is a pedagogical study that provides a teaching guide for educators who would like to use *Child's Play* as an introduction to some of the sounds and techniques of contemporary music for their late intermediate students. In order for educators to effectively guide their students through *Child's Play*, they should understand the sonorities of *musique concrète instrumentale* as well as the extended techniques it requires. This dissertation addresses those needs through three principal means. First, it introduces Lachenmann's *musique concrète instrumentale* and classifies the various sonorities into three types: descriptive, contrasting, and extended. Second, it analyzes and discusses technical elements in the cycle, including notational considerations, pedaling, and sound effects. Last, the dissertation provides pedagogical suggestions to help students master these technical elements. By studying and playing this piece, students not only become intimately familiar with some of the many sounds they are able to produce on the piano, but they also gain experience in playing contemporary techniques and repertoire and familiarity with nontraditional notation. This study of Lachenmann's *Child's Play* will provide educators with a guide for teaching this valuable work to their late intermediate students.

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CHAPTER 1

INTRODUCTION

The 20th century saw an enormous expansion of instrumental sonorities and techniques. These advances opened up new sound possibilities for almost all instruments, but particularly for the piano, often considered to have a limited sound palette.¹ Famously, composers Henry Cowell (1897-1965) and John Cage (1912-1992) adopted new techniques and procedures that resulted in radically new timbres. Works such as Cowell's *The Banshee* (1925) or Cage's *Bacchanale* (1940), and *Sonatas and Interludes* (1946-48) used a "string" or prepared piano, requiring pianists to play their instrument in a different way and opening up entirely new possibilities for the instrument.² Other composers followed, exploring techniques both old and new to probe the piano's seemingly limitless timbres.

The expansion of sound and technical possibilities on the piano has created a practical dilemma. Professional pianists and educators still generally tend to lack a good working knowledge of these new sounds and techniques.³ Moreover, many contemporary works contain nontraditional notation with which many performers may be unfamiliar. Inexperience with contemporary performing techniques, in turn, often deters performers and educators from working with more avant-garde music.⁴ A sort of vicious cycle is created, where educators and even professional pianists avoid teaching and playing the literature for the reasons mentioned

¹ Ji-Eun Yum, "The Solo Piano Collections *Reaching Out* and *Travels through Sound* by Emma Lou Diemer: Pedagogical for Contemporary Techniques for Intermediate-Level Students" (DMA document, University of North Texas, 2019), 1.

² F. E. Kirby, *Music for Piano: A Short History* (Portland, OR: Amadeus Press, 1955), 346–85.

³ Reiko Ishii, "The Development of Extended Piano Techniques in Twentieth-Century American Music" (DMA document, Florida State University, 2005), 1.

⁴ Steven Wiseman, "Contemporary American Piano Music for The Beginning Student: A Study of Selected Composers and Materials" (Master's Thesis, Northeast Missouri State University, Kirksville, 1981), 4.

above.⁵ To be fair, professional pianists and educators already need to maintain an existing large and varied repertoire. For this reason, I believe the answer to the dilemma lies with educators.

To train future performers, educators have to give young students access to a wide variety of music, from an early age. Avoidance of more avant-garde works unnecessarily limits the choice of repertoire and does not allow students to fully develop their artistry and creative expression.⁶ However, if the students learn expanded performance techniques in their lessons, and absorb new sounds from enthusiastic and well-informed educators, it is more likely they will later identify with this literature, and consider it a natural part of their performing and listening experience.⁷ As young musicians' musical ear develops through exposure, they can more readily accept contemporary musical languages.⁸ Moreover, exposure to different types of music that contain unique sound combinations may stimulate a student's creativity and desire to grow on the instrument.⁹

To foster well-developed, open-minded pianist-musicians, an understanding of pedagogical levels is very important. There are pitfalls at all levels, whether beginner, intermediate, or advanced, but giving students a wide range of musical possibilities can be helpful. For example, advanced students may feel frustrated and eventually quit the piano when

⁵ Marianne Uszler, Stewart Gordon, and Elyse Mach, *The Well-Tempered Keyboard Teacher* (New York: Schirmer Books, 1991), 374–77; Laurie Marie Hudicek, “Off Key: A Comprehensive Guide to Unconventional Piano Techniques” (DMA document, University of Maryland, 2002), 2.

⁶ Erna Czevek, *Music and the Child: Experiences of a Piano Teacher* (Budapest: Corvina Kiado, 1979), 59–63; James W. Bastien, *How to Teach Piano Successfully* (San Diego: General Words and Music, 1977), 265–66.

⁷ Ming Tsu, “A Guide to Contemporary Piano Repertoire for the Developing Student: Interpretive Suggestions for Selected Works by Robert Starer and Seymour Bernstein” (DMA document, University of Washington, 2006), 4.

⁸ Hyun-Joo Song, “*Mikrokosmos* and *32 Piano Games*: Introducing Contemporary Musical Language and Developing Piano Technique for the Beginning Student” (DMA document, University of North Texas, 2011), 6; Jessica Johnson, “Exploring New Sounds: Contemporary Performance Technique for the Pre-College Student” *The American Music Teacher*, April/May 2005, 34.

⁹ Uszler, Gordon, and Mach, *Well-Tempered Keyboard Teacher*, 71; Marianne Uszler, Stewart Gordon, and Scott McBride-Smith, *The Well-Tempered Keyboard Teacher*, 2nd ed. (New York: Schirmer Books, 2000), 136–37.

dealing with new technical difficulties in their more advanced traditional repertoire. However, if in the late intermediate stage students experience and familiarize themselves with a wide range of repertoire, containing a variety of musical and technical elements, this can serve as a bridge to help them avoid frustrations and successfully perform advanced-level repertoire.¹⁰ According to piano pedagogy professors Cathy Albergo and Reid Alexander, late intermediate students have the technical and musical skills to play difficult pieces, placing them at an appropriate level to explore new techniques and sonorities.¹¹ Therefore, from a pedagogical perspective certain contemporary works have great educational value for this level, and educators should introduce and teach the new sounds and extended piano performance techniques of contemporary music to their emerging students.¹²

One outstanding work to achieve the pedagogical aims discussed above is *Child's Play* by Helmut Friedrich Lachenmann (b. 1935). In *Child's Play*, Lachenmann uses one of his own signature concepts, *musique concrète instrumentale*, in which he uses the “standard” (not prepared) piano in non-conventional and innovative ways, to explore new sounds and techniques. Although this piece was composed for the professional pianist, from an educational point of view, it is an excellent way to introduce various sonorities to students who will become future teachers, performers, or audience members. Moreover, the cycle can serve as a vehicle to explore more contemporary techniques and approaches to the instrument. The purpose of this dissertation, then, is to provide a pedagogical study of Lachenmann's *Child's Play* with the goal

¹⁰ Cathy Albergo and Reid Alexander, *Intermediate Repertoire: A Guide for Teaching* (Champaign, IL: C and R Resources, 1988), 6-7.

¹¹ *Ibid.*, 6-7; Uszler, et al., *Well-Tempered Keyboard Teacher*, 185.

¹² Jane Magrath, *Piano Literature for Teaching and Performance: Composers and Keyboard Works from Baroque through Contemporary Periods* (Kingston, NJ: Piano Education Press, 2021), 451; Chia-Shan Yang, “Exploring New Techniques in Contemporary Piano Music: A Guide for the Intermediate-Grade Student.” (DMA document, University of Washington, 2004), 96.

of introducing the sonorities of *musique concrète instrumentale* to late intermediate students.

Lachenmann's exploration of new colors, textures, and emotions within his creative work resulted in the emergence of a new language that the composer refers to as *musique concrète instrumentale*. He was inspired by the *musique concrète* techniques of Pierre Schaeffer, an approach to generating the material of composition based on recording and manipulating natural, human, and mechanical sounds.¹³ His modification of Schaeffer's concept consists of using only acoustic musical instruments to generate sound material. Lachenmann's *musique concrète instrumentale* sets out to discover the various possible sounds that can be created by a specific instrument and uses them as new musical materials.¹⁴ By maximizing a variety of new sounds, and making the sounds of common instruments unfamiliar to the ear, a different approach to musical material was developed.¹⁵

Child's Play is a cycle of seven character pieces for piano, each with an imaginative title. Lachenmann creates *musique concrète instrumentale* in the cycle using a variety of new sonorities such as three types of sound effects—filtered, bell, and percussion. The sound effects are achieved through both conventional and unconventional techniques, which is one of the principal reasons this work is recommended as a good introduction to contemporary music for advancing students, as it explores colorful and interesting contemporary approaches to the instrument.¹⁶

Musicologists have tended to consider Lachenmann's music from the point of view of its

¹³ The Oxford Dictionary of Music, "Musique Concrète" by Joyce Kennedy, Michael Kennedy, and Tim Rutherford-Johnson; Paul Steenhuisen, "Interview with Helmut Lachenmann – Toronto, 2003," *Contemporary Music Review* Vol.23, No. 3/4, (2004).

¹⁴ Gene Coleman, "Musique concrète instrumentale," *Slought*; https://slought.org/resources/musique_concrete_instrumentale, accessed October 11, 2021.

¹⁵ *Ibid.*

¹⁶ Magrath, *Piano Literature*, 451; Yang, "Exploring New Techniques," 96.

musical innovations and perhaps for this reason studies of his music have been written largely for professional performers.¹⁷ However, from an educational point of view, the sonorities and techniques of *musique concrète instrumentale* make excellent material for students. Piano pedagogues have recognized this and Lachenmann's *Child's Play* is mentioned in a handful of studies that introduce contemporary music to late intermediate students, most of the discussions brief and concerned with assessing the work in terms of its level of difficulty. A brief explanation of Lachenmann's *Child's Play* can be found in some studies that introduce contemporary music to late intermediate students. Jane Magrath, professor of piano pedagogy, considers the cycle as a level 9 piece, while pianist Chia-Shan Yang assesses the cycle as late intermediate level and includes a brief description of the cycle and short explanations of all seven pieces in the cycle. The German website dedicated to contemporary music, *Datenbank neue Musik*, generally assesses the cycle as late intermediate level work and contains brief descriptions with didactic information of all seven pieces.¹⁸ The difference between these studies and my own is that, although I also provide explanations of the seven pieces, my main goal is to introduce the various sonorities of *musique concrète instrumentale*. To that end, I provide comprehensive explanations of the technical elements needed to play the various sounds that form the musical material of the cycle, and I also include detailed and focused pedagogical suggestions for both teacher and student to be able to master these technical elements.

In order for educators to effectively guide their students through *Child's Play*, they

¹⁷ Ryan Carter, "Helmut Lachenmann's 'Gran Torso' and the Analysis of *Musique concrète instrumentale*" (PhD diss., New York University, 2014); Chih-Liang Lin, "My Music and Helmut Lachenmann's Concept of Sound" (DMA document, Ohio State University, 2015); Katalin Lukács, "In Pursuit of a Mental Model for the Architectural Interpretation of Music in Performance" (PhD diss., University of California at San Diego, 2013).

¹⁸ "Ein Kinderspiel – Lachenmann, Helmut," *Datenbank neue Musik*, <https://www.datenbankneuemusik.de/datenbank/werke/k/ein-kinderspiel-lachenmann-helmut.html>, accessed March 12, 2022.

should understand the sonorities of *musique concrète instrumentale* as well as the extended technical elements. To artistically express the various sounds, it is necessary to analyze each element, and there is a need for pedagogical suggestions for educators who must effectively guide their late intermediate students through the unfamiliar sounds of the cycle. Therefore, this dissertation aims to fill the need for a student-centered study of *Child's Play* by providing pedagogical analyses and suggestions for educators to guide late intermediate students. This dissertation addresses those needs through three principal means. First, it introduces Lachenmann's various sonorities of *musique concrète instrumentale* and classifies them into three types: descriptive, contrasting, and extended. Second, it analyzes and discusses technical elements in the cycle, including notational considerations, pedaling, and sound effects. Last, the dissertation provides pedagogical suggestions to help students master these technical elements. It is my hope that this pedagogical study of Lachenmann's *Child's Play* will provide educators with a guide for teaching this valuable contemporary work to their late intermediate students.

CHAPTER 2

BRIEF BIOGRAPHY OF HELMUT LACHENMANN AND OVERVIEW OF *MUSIQUE*

CONCRÈTE INSTRUMENTALE

2.1 Brief Biography of Helmut Friedrich Lachenmann

Helmut Friedrich Lachenmann is a German composer of contemporary music. He was born in 1935 in Stuttgart, Germany. He studied at the Musikhochschule Stuttgart from 1955 to 1958, where he learned piano and composition with Jürgen Uhde (1913-1991) and Johann Nepomuk David (1895-1977). In 1957, Lachenmann met Luigi Nono (1924-1990) at the summer course of Internationale Ferienkurse für Neue Musik in Darmstadt and went on to study composition with him in Venice, Italy, between 1958 and 1960. He attended seminars led by some of the most influential composers of the time, such as Karlheinz Stockhausen (1928-2007), at Cologne from 1963 to 1964, and he tried to create his own compositional style based on what he learned at these seminars. From 1968 on, Lachenmann began to develop his own aesthetics of music, including the concept of *musique concrète instrumentale*.

Lachenmann held teaching posts in composition at various points in his career. He taught longest, a cumulative twenty-two years, at the Musikhochschule in Stuttgart: from 1966 to 1970 and again between 1981 and 1999. He also taught at the Ludwigsburg Pädagogische Hochschule from 1970 to 1976, and at the Hanover Staatliche Hochschule für Musik und Theater from 1976 to 1981. He served as the Fromm Visiting Professor at Harvard University in 2007.

Lachenmann has received many distinguished awards, including the Kulturpreis für Musik (Munich, 1965), the Kompositionspreis der Stadt Stuttgart (1968), the Bach-Preis der Freien und Hansestadt (Hamburg, 1972), the Musikpreis der Ernst-von-Siemens-Stiftung (Munich, 1997), the London Royal Philharmonic Society Award (2004), the Berliner Kunstpreis

(2008), the Frontiers of Knowledge Award (BBVA, 2011), the Verdienstkreuz 1. Klasse des Verdienstordens (First Class Cross of Merit of the Republic of Germany) (2011), the Commandeur des Arts et des Lettres from the French Ministry of Culture in 2012, and the Deutscher Musikautorenpreis der GEMA in 2015 in the Contemporary Music Category. Lachenmann is considered one of Germany's representative composers of the late 20th and early 21st century and his works are heard frequently on concert stages. He continues to explore new sounds such as *aesthetic apparatus* today, contributing greatly to the development of contemporary music.¹⁹

2.2 Overview of *Musique Concrète Instrumentale*

Musique concrète instrumentale is a term Lachenmann used to describe his own musical language that makes use of both conventional and unconventional techniques to conjure the full spectrum of sounds an instrument can produce. It was pioneered by Lachenmann in the late 1960s and early 1970s.²⁰ Lachenmann was inspired by the *musique concrète* techniques of Pierre Schaeffer (1910- 1995), also called tape music because it uses recorded media, and generates the material of composition based on recording and manipulating natural, human, noise, and mechanical sounds.²¹ For example, in his 1948 *Étude aux chemins de fer* (Railway Study), Schaeffer recorded a number of train noises, and created *musique concrete* by pitch-shifting, time stretching, and editing the pre-recorded train sounds.²² Like *musique concrète*, Lachenmann

¹⁹ Abigail Heathcote, "Liberating Sounds: Philosophical Perspectives on the Music and Writings of Helmut Lachenmann" (Master's Thesis, Musicology University of Durham Department of Music, 2003), 78.

²⁰ "Musique concrète instrumentale," *Rate your music*; <https://rateyourmusic.com/genre/musique-concrete-instrumentale/>, accessed October 18, 2022.

²¹ The Oxford Dictionary of Music, "*Musique Concrète*" by Joyce Kennedy, Michael Kennedy, and Tim Rutherford-Johnson; Steenhuisen, *Interview with Helmut Lachenmann*.

²² Jonathan Patrick, "A Guide to Pierre Schaeffer, the Godfather of Sampling," *The Vinyl Factory*, Accessed January 08, 2023, <https://thevinylfactory.com/features/introduction-to-pierre-schaeffer/>.

developed a different approach to his musical material by maximizing the number and types of sounds produced on an instrument, and making them unfamiliar to the ear. However, unlike in *musique concrète*, Lachenmann uses only acoustic instruments, and traditional ones at that, breaking away from their conventional usage by employing nontraditional techniques.²³

Lachenmann elaborated on his approach to composition, and use of *musique concrète instrumentale* in an interview, explaining,

I am trying to search for new sounds. With conventional or unconventional sounds, the question is how to create a new, authentic musical situation. The problem is not to search for new sounds, but for a new way of listening, of perception. I felt that I needed to find my own concept of music. I called it *musique concrète instrumentale*. Unlike in *musique concrete* of Pierre Schaeffer, I tried to apply this way of thinking, not with the sounds of daily life, but with our instrumental potentialities.²⁴

By maximizing the variety of new sounds and making even familiar sounds sound unfamiliar to the ear, Lachenmann developed a different approach to musical material. The approach expands the sound possibilities of traditional instruments in creative ways. One example of how Lachenmann expands the sound possibilities of traditional instruments can be seen in his composition *Guero*, in which he borrows the performing technique of the percussion instrument, the Guiro, (see Figure 2.1).

Lachenmann's *Guero* is for piano, but the player is instructed to scratch the surface of the keyboard, rather than pressing down the keys, as usual. This technique mimics the scratching of the gourd's ridges on the Guiro. In *Guero* it is not only piano technique that is expanded, Lachenmann also uses a descriptive type of notation that is action-based, graphically showing the performer how to "scratch" the keyboard (see Figure 2.2).

²³ "A guide to Helmut Lachenmann's Music," *The Guardian to Contemporary Classical Music*; <https://www.theguardian.com/music/tomserviceblog/2012/jun/12/helmut-lachenmann-contemporary-composers-guide/>, accessed October 18, 2022.

²⁴ Paul Steenhuisen, "Interview with Helmut Lachenmann," 9-10.



Figure 2.1: The Instrument “Guiro”²⁵

[Two octaves higher]
zwei Oktaven höher

[A tick mark = quarter note = ca. 60]
ein Tellstrich = $\frac{1}{4}$ = ca. 60

[C1 line]
c'-Linie

f mit Druck
[With pressure]

zwei Oktaven tiefer
[Two octaves lower]

Figure 2.2: Lachenmann, *Guero*, Introduction: Score with Graphic Notation²⁶

Musique concrète instrumentale expands the sounds of traditional instruments, which, in turn, creates a richer listening experience of audience members and may encourage them to

²⁵ Museu de la Música de Barcelona, “Guiro, 1st Half of 20th Century, MDMB 1366,” https://commons.wikimedia.org/wiki/File:Güiro,_fons_del_Museu_de_la_Música_de_Barcelona.jpg, Licensed under CC BY-SA 4.0, Accessed March 28, 2023.

²⁶ Used with permission. Helmut Lachenmann *Guero*, EB 9018, © 1972 by Musikverlage Hans Gerig, Köln, 1980 assigned to Breitkopf & Härtel, Wiesbaden. See Appendix.

explore new music.²⁷ This is the purpose of *musique concrète instrumentale*, and to that end, Lachenmann created his own musical language in which various sonorities are made accessible through unconventional playing techniques. Lachenmann's *musique concrète instrumentale* has become his representative musical style.

²⁷ Centre de documentation de la musique contemporaine, "Lachenmann Helmut (1935)" accessed January 08, 2023, <http://www.cdmc.asso.fr/en/ressources/compositeurs/biographies/lachenmann-helmut-1935>.

CHAPTER 3

OVERVIEWS OF *CHILD'S PLAY* AND SONORITIES OF *MUSIQUE CONCRÈTE INSTRUMENTALE*

3.1 Overview of *Child's Play*

Lachenmann composed *Child's Play* in 1980 and dedicated it to his son David.²⁸ The cycle had its world premiere in Toronto, Canada, 1982 by the composer himself.²⁹ The principles of *musique concrète instrumentale* can be heard throughout the seven movements of the cycle.

Lachenmann's use of traditional piano rather than prepared piano makes this cycle naturally accessible to late intermediate students. Although Lachenmann uses unconventional piano techniques in the cycle, such as nontraditional notation and sound effects, he also created his musical materials with conventional techniques such as staccato, legato, dynamic, and pedals. In addition, the cycle contains familiar folk or children's songs, child-friendly hand positions, and dance forms.³⁰ Therefore, late intermediate students can easily experience new contemporary piano music using traditional and nontraditional techniques while learning the cycle. In the following sections, I provide an overview of all seven pieces of *Child's Play* as well as the sonorities explored in them.

3.1.1 "Little Hans"

In "Little Hans," Lachenmann uses the rhythm of the German children's or folk song *Hänschen klein* (see Ex. 3.1). In Lachenmann's hands, the same melody, with its characteristic

²⁸ Breitkopf & Härtel, *Lachenmann: Child's Play* [publisher's brochure]; <https://www.breitkopf.com/work/3861/ein-kinderspiel>; accessed March 19, 2022.

²⁹ Ibid.

³⁰ Livine Van Eecke, "The Adornian Reception of (the) Child(hood) in Helmut Lachenmann's 'Ein Kinderspiel,'" *International Review of the Aesthetics and Sociology of Music* Vol. 47, No 2 (2016), 226, accessed October 18, 2022, <http://www.jstor.org/stable44234971>.

rhythmic contour, is chromaticized and becomes reminiscent of the famous theme of Georges Bizet's opera *Carmen*, “L’amour est un oiseau rebelle” (see Ex. 3.2).³¹

Example 3.1: *Hänschen klein*, mm. 1-6



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Example 3.2: *L’amour est un oiseau rebelle* theme of Georges Bizet's opera *Carmen* mm.1-8



“Little Hans” makes use of a descending chromatic scale progression together with traditional piano techniques such as *staccatissimo*, appoggiaturas, and dramatic dynamic contrasts as well as nontraditional ones, such as a *stumm* cluster (depressing the keys silently (see Sec. 4.1.2 herein) and thick-line notes (see Sec. 4.1.3). Additionally, “Little Hans” employs the full seven and a quarter octave range of the piano, from the highest C5 to the lowest A2. Through this progression, the students are able to fully experience the piano’s full musical range as well as

³¹ Yang, “Exploring New Techniques,” 96.

how a descending chromatic scale can be made to feel like a melodic line (see Ex. 3.3).

Example 3.3: Lachenmann, *Child's Play*, 1. Little Hans, mm. 1-4

♩ = ca. 108 [Two octaves higher]
(zwei Oktaven höher)
15ma

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3.1.2 “Clouds in Icy Moonlight”

Lachenmann expresses the striking image of “Clouds in Icy Moonlight” by using the damper pedal to project rhythm, together with accents in the right hand. This type of rhythm-projecting pedaling can sound like a percussion instrument due to the knocking sound created by lowering and raising the damper pedal. In the piece, the right hand plays only eighth notes on the pitches within the range of F5 to C6. The left hand, by contrast, supports the steady eighth-note flow of the right hand with an *f* dynamic and bass *stumm* cluster in the lowest octave (see Ex. 3.4). Students must accurately perform the rhythm-projecting pedaling and the right hand accents in order to play this piece well.

Example 3.4: Lachenmann, *Child's Play*, 2. Clouds in Icy Moonlight, mm. 3-4

15ma →
(Ped.)
(stumm)
8va bassa

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3.1.3 “Akiko”

Lachenmann used his daughter's name as the title for “Akiko.” This piece was composed in three versions: 3a1, 3a2, and 3b. The 3a1 version (see Ex. 3.5) is for piano with three hands (two performers), the 3a2 version is for piano with the sostenuto pedal (see Ex. 3.5), and the 3b version (see Ex. 3.6) is for piano without the sostenuto pedal. To play the 3a1 and 3a2 versions well, it is necessary to understand different rhythms, articulations, and dynamics of both hands. In addition, to play the 3b version well, students need to perform two different articulations, create dynamic contrasts, and maintain long-held tone lines using only the right hand. Therefore, the students need to practice right hand finger independence to play the 3b version.

Example 3.5: Lachenmann, *Child's Play*, 3a1 and 3a2. Akiko, mm. 1-4

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Example 3.6: Lachenmann, *Child's Play*, 3b. Akiko, mm. 1-4

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3.1.4 “Fake Chinese” (Slightly Drunk)

The fourth piece in *Child’s Play* features a thick texture created by a progression of staccato chords in both hands in the middle range of the piano (see Ex. 3.7). The notes of the right hand part consist of the white keys of a whole tone scale and the notes of the left hand consist of the black keys of the pentatonic scale, creating the effect of bitonality. At the beginning of this piece, both hands play the same eighth-note rhythms. However, beginning in measure 3, the right and left hands diverge rhythmically: the right hand continues with the steady eighth notes while rests and shorter note values are introduced in the left hand. The rhythms created by both hands together sound like a dotted rhythm or appoggiatura, reminiscent of the image of a drunken man, like in the title of the piece.

Example 3.7: Lachenmann, *Child’s Play*, 4. Fake Chinese, mm. 1-4

The musical score for Example 3.7 consists of two systems of piano music. The first system (measures 1-2) shows both hands playing a steady eighth-note rhythm. The second system (measures 3-4) shows the right hand continuing with steady eighth notes while the left hand introduces rests and shorter note values, creating a dotted rhythm effect. The score is in 4/4 time, marked 'ca. 84' and 'f sempre staccato'.

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3.1.5 “Filter Swing”

Lachenmann depicted in sound the image of a swing in motion by using the filtered sound effect technique. The effect is created by using tone clusters of ten notes to create a thick sound and pedal, then “filtering” by using *stumm* clusters and ties to subtract the sound (see Ex.

3.8). This technique is repeated regularly throughout this piece. Although the technique is challenging for late intermediate students, they can explore the sympathetic vibration of the piano through this piece.

Example 3.8: Lachenmann, *Child's Play*, 5. Filter Swing, mm. 24-27

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3.1.6 “Bell Tower”

Using a bell sound effect technique, Lachenmann describes the phenomenon of ringing a bell once and then again before the sound disappears. He creates the effect by using the thick-line notes and *stumm* notes across the wide range of the piano (see Ex. 3.9). To play the bell sound effect technique well, students need to first play a note *sforzando*, loudly, and shortly, and then play the same note without sound immediately after. In addition, since these notes are written with thick lines of different lengths (and hence held for different durations), to the sounds of the different pitches overlap while they are held down. The successful performance of this movement requires independence in each finger of the left hand in order to control the sound, as well as careful attention to the sound. This piece can be technically and audibly challenging for students.

Example 3.9: Lachenmann, *Child's Play*, 6. Bell Tower, mm. 1-3

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3.1.7 “Shadow Dance”

Lachenmann composed “Shadow Dance” using two layers: left-hand octave bass *stumm* cluster in the lowest register of the keyboard and only two notes, B8 and C8, in the highest register of the keyboard with right hand (see Ex. 3.10). Although the piece has no melody line, Lachenmann used various dynamics, rhythms, pedaling, rest, and repetition (**2x** , **3x** , **4x** , **6x** , and **8x**) to express the image of the title, “Shadow Dance.” In addition, the piece ends with a strong and loud repetition of the noise the performer creates with the damper pedal.

Example 3.10: Lachenmann, *Child’s Play*, 7. Shadow Dance, mm. 5-6

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3.2 Overview of the Sonorities of *Musique Concrète Instrumentale* in *Child’s Play*

In chapters 1 and 2 we have emphasized the benefits that come with studying a sound-based piece such as Lachenmann’s. We must, however, acknowledge that the sheer number and variety of unfamiliar techniques and sounds found in *Child’s Play* could be daunting. To help educators and students to gain a sense of control over the material, I provide three rough categories that are intended only as guides. These categories are: descriptive, contrasting, and extended sound.

Below I offer an overview of the three categories with a single example of each. This section is intended to familiarize the educator and student with *types* of sounds or techniques,

and does not go into detail on all instances of the effects. Chapter 4 will discuss the techniques associated with each category in more detail, incorporated into discussions of notational considerations, pedaling and sound effects.

3.2.1 Descriptive Sound

One of the ways Lachenmann uses *musique concrète instrumentale* is to suggest, or describe, the sounds and movements of objects. He does this by using both conventional and unconventional musical resources on the piano. I call this category of *musique concrète instrumentale* “descriptive sonority” and it can be found in No. 4 “Fake Chinese,” No. 5 “Filter Swing,” and No. 6 “Bell Tower.”

To give an example of a descriptive type of sonority, I consider his use of a filtered sound effect technique to depict the motion of swings at varying heights and speeds in the fifth piece of the cycle, “Filter Swing.” Originally, filter swing refers to a sound, common in electronic music, of a filter opening and closing, creating a “wah-wah” effect. The filtered sound effect in the piano repertory is a technique of subtracting sound (see below, section 4.3.1 Filtered Sound Effect), when a player uses this technique to emphasize different pitches, it sounds like the swing is moving at different heights.

Lachenmann achieves this effect through a variety of techniques: tone clusters, *stumm* clusters (depressing the keys silently), rest, tie, and the damper pedal (see Ex. 3.11). “Filter Swing” begins with clusters in both hands struck at steady intervals (beats 1 and 3), emulating the back and forth motion of a swing. After establishing the swing motion, on beats 2 and 4, two keys are subtracted, or “filtered” (see measure 13 of Example 3.11, below) while the pedal remains down. The effect is that the listener imagines or hears that the swing now swinging higher. In addition to this traditional filter effect, Lachenmann also uses *stumm* clusters that are

constantly changing either in their pitch content or range, to create a variety of filtered sounds that evoke swinging motion.

Example 3.11: Lachenmann, *Child's Play*, 5. Filter Swing, mm. 13-19

[Clusters with both hands as played before]

3x Cluster mit beiden Händen wie zuvor gegriffen

* die stumm Cluster eventuell mit einer Hand, Finger auf schwarze, Handballen auf weiße Tasten

pva bass

[The *stumm* clusters if possible with one hand, fingers on black keys, palms on white keys]

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3.2.2 Contrasting Sound

Another prominent component of Lachenmann's *musique concrète instrumentale* is contrast, which he achieves through combining extremes of musical elements such as range, dynamics, rhythms, or articulations. In "Bell Tower," for example, Lachenmann explored contrasting ranges, using 3 staves in the score. The student is required to play a left-hand *stumm* cluster in the piano's lowest octave while the right hand sounds three-note clusters in the middle range of the piano, and a two-note bell-like progression in the highest register (see Ex 3.12). Together, the contrasting ranges, rhythms, and pitches in "Bell Tower" create a sort of *trompe l'oeil* for the ear, where the listener hears what sounds like more than one performer, each with

their own musical material. Other pieces in the cycle prominently featuring contrasts are found in movements No. 1 “Little Hans” (dynamics and range), No. 3 “Akiko” (dynamics and articulation), and No. 7 “Shadow Dance.” The effect achieved through the contrast varies from piece to piece, but they generally pose special technical demands for the student.

Example 3.12; Lachenmann, *Child’s Play*, 6. Bell Tower, mm. 25-29

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3.2.3 Extended Sounds

One of the most interesting things about *Child’s Play* is how Lachenmann used traditional and nontraditional means, as well as traditional piano techniques in nontraditional ways, to create extended sounds. A noteworthy instance of extended sound emerges at the end of “Shadow Dance,” where the composer uses not only the techniques of tone clusters, *stumm* notes, thick-line notes, but adds noise as his musical material. In Example 3.13 we see how Lachenmann incorporates two types of noise. In measure 39 the sound of the damper pedal is required, “marcato possible.” In traditional piano technique, pianists take great care to avoid making the pedal heard, and in this context, the sound would be seen as “noise.” Here, however, the pedal is both depressed and released with accents, and the sounds that emerge from the pedal are the featured sound, to be repeated “ad libitum.” This extended sound is followed immediately

in measure 40 by the ultimate extended technique of allowing the noises of the instrument and hall to “sound” in a full measure of rest. These extended sonorities can be expressed differently depending on the performer, the reverberation of the performance hall, and the piano.

Example 3.13: Lachenmann, *Child's Play*, 7. Shadow Dance, mm. 38-40

The image shows a musical score for two measures of piano music. The first measure is marked with a box containing "rep. ad lib." and a "22ma" marking above the staff. The dynamic marking "meno f" is present. The second measure is also marked with a box containing "rep. ad lib." and the instruction "marcato possibile" above the staff. The dynamic marking "p" is present. The score is written for piano and includes a grand staff with treble and bass clefs.

Helmut Lachenmann, *Child's Play* EB 8275 ©1982 by Breitkopf & Härtel, Wiesbaden. Reproduced with permission.

The variety of sonorities heard in *Child's Play* may be difficult to explain to the student analytically, it would be good to guide students to think about the descriptive sonority that describes objects or sounds of objects, the contrasting sonority that sounds like two people are playing through extreme contrast, and the extended sonority that extends the limits of sound.

CHAPTER 4

TECHNICAL ELEMENTS OF *CHILD'S PLAY*

In order to reach a point where late intermediate students can perform this cycle, they should first be able to imagine in their mind's ear the various sonorities of *musique concrète instrumentale*. Once they know the sounds they are aiming for, students then must develop technique and musicianship skills that will enable them to play these intended sonorities. Among the necessary knowledge and skills that the cycle requires are various types of notational considerations, pedaling, and sound effects created through extended techniques, all of which are considered in this chapter.

4.1 Notational Considerations

One of students' first obstacles to learning works such as Lachenmann's might be a lack of understanding of the notation and how to interpret the signs and symbols of *musique concrète instrumentale*. Lachenmann uses nontraditional techniques such as tone clusters, *stumm*, and thick-line notes, in *Child's Play* as well as indicating possible cuts to the music with the text *Vi-de*. To help educators of late-intermediate students teach this cycle, I explain below both the notation and the techniques to execute the tone cluster, *stumm*, thick-line notes, and *Vi-de*.

4.1.1 Tone Cluster

In contemporary music, the tone cluster is the most well-known and widely used of all the nontraditional piano techniques. Tone cluster means a mass of sound. The technique, first used by Henry Dixon Cowell (1897-1965), consists of a group of several consecutive notes played simultaneously, and the notes could be part of a diatonic, pentatonic, or chromatic scale.³²

³² Ibid., 8.

A tone cluster can involve white keys, black keys, or both, and will contain at least three notes, although the number of notes in a tone cluster can vary.³³ There are various types of tone clusters, distinguished by their manner of performance; they can be played with the fist, fingers, forearms, entire arm, or even foreign objects.³⁴ The notation of tone clusters also varies, not only from composer to composer, but also from work to work by the same composer.³⁵

Although the tone cluster would appear to be straightforward and easy to execute, it may not be easy for some students. Therefore, their educators need to guide the students as to how to play it, especially on how to position their hands, arms, or whichever part of their body the cluster requires they use. Lachenmann uses three types of tone clusters in the cycle: held, running, and two-hand tone clusters. I discuss Lachenmann's tone clusters according to these three types, explaining how they are used in the cycle.

4.1.1.1 Held Tone Cluster

The primary skill that students can learn from the first piece of the cycle, "Little Hans," is how to play the held tone cluster (see Ex. 4.1). This type of tone cluster is used for long-held tones that are notated with thick lines (see Section 4.1.3 Thick-Line Notes (Long-Held Tone)). Therefore, it can be called a held tone cluster. In Example 4.1, for instance, the tone cluster in the right hand that appears in measure 13 must remain connected with the long-held notes already played in measures 11-12 (see Ex. 4.1). In addition, due to the newly added thick lines, the student should keep this held tone cluster going until m. 18 of the piece. To feel more comfortable when playing all five notes at once, late intermediate students need to practice this

³³ Kevin Richmond, "Non-Traditional Notation and Techniques in Student Piano Repertoire," *MTNA e-Journal*, February 2013.

³⁴ Yum, "The Solo Piano Collections," 31.

³⁵ Yang, "Exploring New Techniques," 8.

held-tone cluster by feeling it like a chromatic scale while positioning fingers.³⁶ In addition, they must hold down the keys of the held-tone cluster on the right hand, holding the keys down firmly and allowing the weight of the arm to rest on the keys, taking care not to be affected by the *staccatissimo* of the left hand that is played at the same time.

Example 4.1: Lachenmann, *Child's Play*, 1. Little Hans, mm. 9-21

The image displays three systems of musical notation for a piano piece. The first system shows a right-hand melodic line with a 'loco' marking and an 8va octave shift, and a left-hand accompaniment. The second system shows a right-hand cluster of notes and a left-hand accompaniment. The third system features a right-hand melodic line and a left-hand accompaniment with an 8va bassa octave shift.

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4.1.1.2 Running Tone Cluster

Tone clusters can also be used to bring out the percussive aspects of the piano. One example of this can be found in the second piece of the cycle, “Clouds in Icy Moonlight” in what

³⁶ Boris Berman, *Notes from the Pianist's Bench* (New Haven and London: Yale University Press, 2017), 34.

I call a running tone cluster, where clusters are played with a repeatedly rhythmic pattern. For this running tone cluster, Lachenmann combined traditional musical materials, such as accents and staccato, with nontraditional materials such as tone cluster and rhythm-projecting pedaling. This running tone cluster of three notes is played with fingers and students must make sure to play all three notes of the running tone cluster simultaneously (see Ex. 4.2).

Example 4.2: Lachenmann, *Child's Play*, 2. Clouds in Icy Moonlight, mm. 11-12



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To express the running tone cluster effectively, the student needs to find the same appropriate fingering for them, such as 1-2-3, as well as maintaining the same hand position once they find a comfortable finger pattern for the three notes of the running tone cluster. In addition, since this type of cluster features notes that are relatively close together, precision is needed, and students should be careful not to play other neighbor notes. Finally, rhythm-projecting pedaling techniques, which will be discussed in greater detail below (see Section 4.2.1 Rhythm-Projecting Pedaling), must be executed correctly in order to perform this type of running tone cluster. Because the repeated rhythm must sound accurately, it is necessary to step on the pedal first, before pressing the tone cluster as instructed in the score. This may seem simple, but it can be difficult because it has to be repeated at a somewhat fast tempo.

4.1.1.3 Two-Hand Tone Clusters

Although a tone cluster can be played using only one hand, it can be also played using

two hands at the same time. A two-hand tone cluster has the advantage of being able to span a wide range of notes, or create more diverse and loud sounds than is possible with only one hand. Both of these effects – range and volume – are achieved with two-hand clusters in the fifth piece of the cycle, “Filter Swing” (see Ex. 4.3).

Example 4.3: Lachenmann, *Child’s Play*, 5. Filter Swing, mm. 1-2

♩ = ca. 66 [Play twice, or [in other words] repeat once.]
2X (zweimal spielen, also einmal wiederholen) *sempre sim.*
f sempre
 Ped.

Helmut Lachenmann, *Child's Play* EB 8275 ©1982 by Breitkopf & Härtel, Wiesbaden. Reproduced with permission.

To play the two-hand clusters of “Filter Swing” effectively, the damper pedal is pressed in advance, followed by the black key tone cluster on the left hand together with the white key tone cluster on the right hand, which need to be played strongly and simultaneously in order to produce a very intense sound. Lachenmann created filtered sound (see below, Section 4.3.1 Filtered Sound Effect) without using *stumm* notes or *stumm* clusters. To create this filtered sound, the students need to first play the two-hand tone clusters loudly. After that, the student continues to press down the keys that need to be left sounding, while the remaining keys must be lifted immediately. The student needs to press the pedal again to sound only the remaining reverberations of these filtered sounds. Listening carefully to these delicate sounds is crucial, a skill late intermediate players may not have fully developed; hence it is important to use the damper pedal always together with a sensitive ear. Lachenmann used the *sempre forte* dynamic

marking in this part, which is intended to maximize the overtone effect, instructing players to sound these tone clusters consistently and strongly. To make a strong sound with two-hand tone clusters, players need to use the weight of their bigger joints (hand, forearm, and upper arm),³⁷ leaning into the keyboard with a fast, almost instantaneous movement, and relaxing both hands immediately after playing the tone cluster loudly.

4.1.2 *Stumm* (Depressing the Keys Silently)

The technique known as *stumm*, which entails holding certain notes, or pressing down certain keys to create a ‘muted sound,’ is often used in contemporary music.³⁸ This technique requires that certain keys be silently depressed to raise the dampers while other notes are played normally, creating a unique timbre from sympathetic vibrations of the strings.³⁹ The typical notation for silently depressed keys, or *Stumm*, is the diamond-shaped note (◊). In addition, composers usually indicate the words “depress silently” somewhere around the first occurrence.⁴⁰ Lachenmann used this *stumm* technique with a single note or as a cluster in the cycle. It is combined with other conventional and unconventional musical elements in the cycle and mainly used for filtered sound effect and bell sound effect techniques.

In his book on contemporary piano techniques, Alan Shockley suggests that, for the *stumm* cluster, the performer should simply depress keys slowly or gently in order to prevent hammers from striking piano strings.⁴¹ Since this advice is meant for professional performers, an

³⁷ Berman, *Notes from the Pianist’s Bench*, 2017, 11.

³⁸ Reimar Riefling, *Piano Pedalling*. (London: Oxford University Press, 1962), 25.

³⁹ Yang, “Exploring New Techniques,” 7.

⁴⁰ *Ibid.*, 8.

⁴¹ Alan Frederick Shockley, *The Contemporary Piano: A Performer and Composer’s Guide to Techniques and Resources* (Lanham, MD: Rowman & Littlefield, 2018), 50.

additional explanation is needed to teach late intermediate students how to play the *stumm* cluster. First, the student must be able to control the force of the fingers on the piano keys. The reason is that if too much force is applied, an undesired sound will be produced, while if the force is insufficient, no sound will be produced because the keys will not be fully depressed. It is important to recognize that a *stumm* cluster is not a single note, and it is a more difficult technique for student to press many notes at once silently. To execute this technique well, it is necessary to touch the keys using the bottom part of the finger pads instead of the fingertips, and practice pressing the keys while delicately adjusting the weight of the arm and the intensity of the touch of the fingers.⁴² For this exercise, the student should first practice feeling these sensations slowly and afterwards try to feel the sensations more quickly.

4.1.2.1 One *Stumm* Note

Lachemann mainly used one *stumm* note in the sixth piece of the cycle, “Bell Tower” (see Ex. 4.4). To play this, the student must have the ability to delicately control their motions. Since the student needs to play the same pitches repeatedly with different dynamics such as *sforzando* and *subito pp*, they need to play different intensities of touch when pressing the keys. This can be seen as a repetitive sound because the student needs to first play the *sforzando* staccato note strongly and shortly, and then immediately play the same pitch without sound.

To play this effectively, first, the student needs to attack the keyboard rapidly to play the *sf* note strongly. Second, when playing the *stumm* note, they should feel their finger slowly and deeply press down on the keyboard. When playing this *stumm* note, however, if the student depresses the key too fast, the sound will ring out, and if too slowly, they cannot press the key to

⁴² Jessica Johnson, “Exploring New Sounds: Contemporary Performance Technique for the Pre-College Student” *The American Music Teacher*, April/May 2005, 31.

the bottom of the keyboard.

Example 4.4: Lachenmann, *Child's Play*, 6. Bell Tower, mm. 1-3

[Two octaves higher]

(zwei Oktaven höher)

15 ma

♩ = ca. 66

Rechte Hand
[Right hand]

Linke Hand
[Left hand]

Ausführung:
[Execution]

[Release the key quickly and immediately press it down silently]

Helmut Lachenmann, *Child's Play* EB 8275 ©1982 by Breitkopf & Härtel, Wiesbaden. Reproduced with permission.

In order to understand the feeling of pressing the piano keyboard to play a *stumm* note or repeat notes, the students need to understand the double escapement mechanism. Double escapement was originally designed by Sébastien Érard (1752-1831) for repeated notes or fast passages. Due to the double escapement, students can feel in their fingers a sense of delay in the middle of the keystroke, which also helps them press the *stumm* note because they can feel the reference point for how much power they need to play a *stumm* note.

4.1.2.2 Octave Bass *Stumm* Cluster

Lachenmann uses octave bass *stumm* clusters in all seven pieces of this cycle. He describes the technique as “consisting of all chromatic half-steps pressed down and held ‘mutely’ (thus soundlessly) with the flat of the hand.”⁴³ In addition, he also included instructions for this type of *stumm* cluster in the score with the text “Cluster stumm niederdrucken” (press down

⁴³ Helmut Lachenmann, preface to *Ein Kinderspiel (Child's Play)* (Wiesbaden: Breitkopf & Härtel, 1982), 3.

cluster silently). In *Child's Play*, these octave bass *stumm* clusters are indicated as blocks with thick vertical lines to indicate the pitch range (see Ex. 4.5).

Example 4.5: Lachenmann, *Child's Play*, 1. Little Hans, mm. 5-8

The image shows a musical score for a piano piece. It consists of two staves: a treble clef staff and a bass clef staff. The treble staff contains a melodic line with notes and rests. The bass staff contains a cluster of notes, indicated by a thick vertical line. Above the treble staff, there is a dashed line labeled '15ma'. Below the bass staff, there is a dashed line labeled '8va bassa'. The score is labeled '15ma' and '8va bassa'. The notes in the bass staff are grouped together, indicating a cluster. The score is labeled '15ma' and '8va bassa'.

Helmut Lachenmann, *Child's Play* EB 8275 ©1982 by Breitkopf & Härtel, Wiesbaden. Reproduced with permission.

Stumm cluster, students should use the entire palm of their left hand to press the white and black keys at once. Although the octave bass *stumm* cluster is always used alone, and it does not create any particular sound, Lachenmann used the octave bass *stumm* clusters in this work together with traditional and nontraditional materials to create different sonorities of *musique concrète instrumentale*. We find an A2-A1 octave bass *stumm* clusters in the cycle's first piece "Little Hans," the second "Clouds in Icy Moonlight," third "Akiko," fourth "Fake Chinese," and seventh piece, "Shadow Dance." In addition, a G2-G1 octave bass *stumm* clusters is found in the fifth and sixth pieces, "Filter Swing" and "Bell Tower." These octave bass *stumm* clusters could be played in the same manner as the *stumm* note described above except that the student plays the octave bass *stumm* cluster with their left hand and the high-pitched notes with their right hand, simultaneously. It is not easy for young late intermediate students with short arms to immediately move their left hand toward the bass part of the keyboard to play the *stumm* cluster. Therefore, they need to stretch their arms wide to both sides of the keyboard to play notes in the

high and low register simultaneously. In addition, students need to hold their right hand and practice moving only their left hand toward the bass of the keyboard to prepare notes in advance in such a way that they do not emit a sound when depressing the keys.

4.1.3 Thick-Line Notes (Long-Held Tone)

Lachenmann uses long-held tones, which are noted with thick lines, to create a pedal effect with the hand alone (see Ex. 4.6). A description of this indication is added to the note of the score: “The long-held tones are notated with a thick line whenever they enter one after another within one hand.”⁴⁴ The thick lines attached to the back of each note indicate the duration; students should hold the notes as long as the length of the thick lines. This technique can be considered as a finger pedal. The finger pedal is held down with fingers to create harmonic continuity by using overlapping touch and it can produce a pedal effect through the hand alone with close tenuto or *legatissimo* touch.⁴⁵ In order to play thick lines, I suggest that the student flatten their fingers to play it and use the fleshy part under their fingernails.

Example 4.6: Lachenmann, *Child’s Play*, Preface



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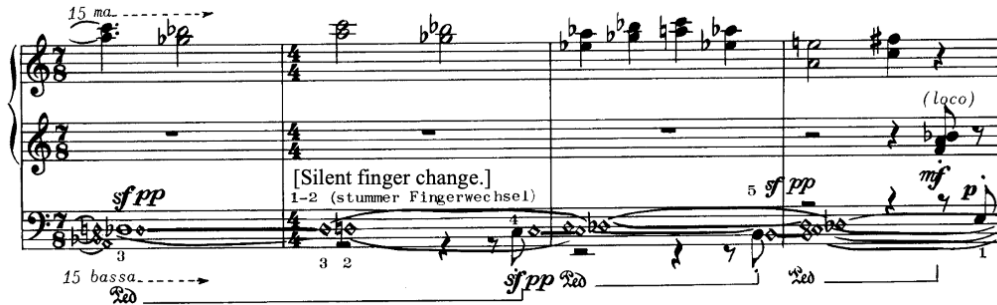
Lachenmann uses thick lines to represent long-held tones in three pieces of the cycle: No.1 “Little Hans,” No.3 “Akiko,” and No.6 “Bell Tower.” The thick-line notation (and

⁴⁴ Ibid.

⁴⁵ Berman, *Note from the Pianist’s Bench*, 2017, 58-9, 109; Riefling, *Piano Pedalling*, 25.

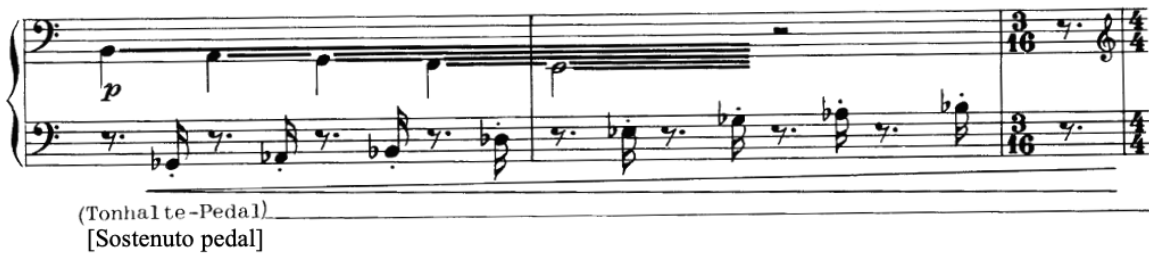
technique) can appear either behind *stumm* notes or a *stumm* cluster (see Ex. 4.7) or in regular notes (see Ex. 4.8).

Example 4.7: Lachenmann, *Child's Play*, 6. Bell Tower, mm. 4-7 showing *stumm* notes or *stumm* cluster with thick-line notation.



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Example 4.8: Lachenmann, *Child's Play*, 3. Akiko, mm. 13-15 showing regular notes with thick-line notation.



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When the long-held tone note is used with *stumm* notes, it can end up sounding like a *stumm* cluster. When it is used with regular notes, it can sound like a tone cluster at the end, creating new sonorities by pressing and holding notes for the length of these thick lines and then adding other thick-line notes of thick lines that overlap them. In order to play these thick-line techniques, the students should position their hands so that they can play with one hand, thinking of four or five notes as one bundle. In addition, they should move their thumb inside the black keys, especially since their thumb is smaller than their other fingers.

4.1.4 *Vi-de*

Although Lachenmann composed this cycle for professional performers rather than for children, he used *Vi-de* to make it possible for younger pianists to play as well as older. *Vi* and *de*, according to the author, are sections that can be removed if they are too difficult for young pianists.⁴⁶ The words are included in the score with the explanation, “Vom *Vi-bis-de* kann übersprungen werden” (From *Vi-to-de* can be skipped).⁴⁷

Vi-de sections can be found in the second, fourth, fifth, and seventh pieces: “Clouds in Icy Moonlight” (mm. 8-12), “Fake Chinese” (mm.14-20), “Filter Swing” (mm. 20-51), and “Shadow Dance” (mm 17-30). Although Lachenmann indicated that these *Vi-de* parts are optional, I believe it is better for students to play the original music without skipping them. To help educators who want their students to play the *Vi-de* parts, I will take those sections of “Fake Chinese” and “Filter Swing” as examples, explaining why Lachenmann thinks they can be omitted and providing pedagogical suggestions to help students master the difficulties in order to play them.

The *Vi-de* section of the fourth piece in the cycle, “Fake Chinese,” is from measures 14 to 20. The passage features a thick texture made by staccato chords in both hands (see Ex. 4.9). The *Vi-de* passage in “Fake Chinese” challenges late intermediate students by requiring them to play detailed dynamics (*crescendo* and *decrescendo*) that are dramatically contrasted. Regarding the execution of the dynamics in this part, Lachenmann indicates that “ab hier gelten für die rechte und die linke Hand voneinander unabhängige *crescendo* und *diminuendo* - Zeichen” (From here on, *crescendo* and *diminuendo* signs [apply] independently to the right and left hand).⁴⁸ The

⁴⁶ Lachenmann, preface to *Ein Kinderspiel*, 3.

⁴⁷ Lachenmann, *Ein Kinderspiel*, 11 (my translation).

⁴⁸ Lachenmann, *Ein Kinderspiel*, 11 (my translation).

meaning of this is that the dynamic of the left hand should be played independently of the dynamic of the right hand.

Example 4.9: Lachenmann, *Child's Play*, 4. Fake Chinese, mm. 13-16

[From *Vi-to-de* can be skipped]

Vi-
(Vom Vi - bis - de kann übersprungen werden)

f

(*stacc. sempre*)

* R.H.

* L.H.

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I believe Lachenmann made the *Vi-de* of “Fake Chinese” optional because it is so difficult to play independent dynamics in both hands. However, if students want to play this part, it is recommended that they practice the dynamics separately with their left and right hands, listening carefully. In order to execute the independent dynamics, the student needs to have a clear image of and feeling for the dynamics in both hands parts before they play the notes.⁴⁹ Once they are familiar with the dynamic nuances in each hand, it is recommended that they practice both hands together. In addition, since at this point young late intermediate students with

⁴⁹ Seymour Bernstein, *With Your Own Two Hands: Self-Discovery through Music* (New York: Schirmer Books, 1981), 119.

small hands may already experience hand and arm fatigue due to the extended passage of two-hand chords that comes before, they may find it difficult to adjust both their hand and arm strength for the required contrasting dynamic in the *Vi-de* part that follows. To remedy this potential fatigue, students should be able to relax their arms and hands in between each of the two-hand chords, and make other adjustments as needed to conserve their strength from the beginning of the piece.

Lachenmann suggested that the *Vi-de* section of the fifth piece in the cycle, “Filter Swing,” can be omitted, given the difficulty of playing *stumm* clusters with both hands at the same time (see Ex. 4.10).

Example 4.10: Lachenmann, *Child’s Play*, 5. Filter Swing, mm. 24-31

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As discussed above (Sec. 3.1.5), in “Filter Swing,” Lachenmann used the filtered sound effect technique, which is created by using the tone cluster, *stumm* cluster (depressing the keys silently), and pedal. The *Vi-de* part of the piece in particular requires both arms and hands to be opened to both extremes of the keyboard and to play the two-hand *stumm* cluster at the same time. The filter sound effect in this example is descriptive of the movement of swings with

different heights, and is evoked musically by varying the pitch of the two-hand *stumm* clusters. For late intermediate students, however, it is not easy to play two-hand *stumm* clusters, where both hands and arms must move quickly to change the pitch. Therefore, to play this part, the student must practice quickly positioning their hands at the correct part of the keyboard in order to find the keys of the *stumm* cluster that they need to depress. At this time, they must be careful to put their hands only on the keys and not press the keys down because they need to control the weight of both their hands and arms. Especially, the left-hand *stumm* cluster often moves to the lower register of the keyboard (see Ex. 4.10, measures 26-27 and 30-31), so the student needs to move their left hand and arm quickly toward the bass of the keyboard.

If once the student has mastered these exercises to train both hands to find their position, it is necessary to practice depressing the keys slowly and deeply so that the two-hand *stumm* clusters do not sound. Once they have mastered silently depressing the keys of the two-hand *stumm* cluster, they should repeat this exercise of slowly and silently pressing down the keys until they are able to play it without a sound, even at high speed. Although this part is difficult for late intermediate students, the swing movement is the central the image of “Filter Swing.” Skipping the *Vi-de* section in this instance leaves the movement without its most characteristic sonority; therefore, I suggest that students practice and play it.

4.2 Pedaling

According to Anton Rubinstein pedaling is the “soul of piano playing.”⁵⁰ Berman wrote of the importance of using the pedal to achieve musical aims: “pianists use pedaling to achieve various goals: to prolong sounds that cannot be held by fingers; to assist fingers in producing

⁵⁰ Heinrich Neuhaus, *The Art of Piano Playing* (London: Kahn & Averill, 1993), 156.


good legato; to combine notes into harmony, or to augment rhythmic accents.”⁵¹ Adding to its already rich array of functions, Lachenmann expanded pedaling to enrich the sound possibilities of the piano. Lachenmann uses pedaling either as a rhythm-projecting element or, in conjunction with other musical elements, to create new sound effects. Pedaling plays a very important role in expressing the sonorities of *musique concrète instrumentale* in this cycle. It should be very sensitive, like fingers, and should be played precisely, following the detailed pedaling markings provided by Lachenmann. The pedaling needs to be practiced with great precision. Therefore, I will categorize the features of the pedaling in this cycle into four types: rhythm-projecting pedaling, pedaling as a timbre aid, percussive effect pedaling, and sostenuto pedal, and I will provide detailed suggestions for performing them.

4.2.1 Rhythm-Projecting Pedaling

In *Child's Play*, the actual length of reverberation is determined by the pedal, not by the hand. To represent a more accurate sense of rhythm-projecting pedaling, Lachenmann precisely indicated where to press down and release the pedal using his own pedal markings. The rhythm-projecting pedaling uses a damper pedal to create rhythm.

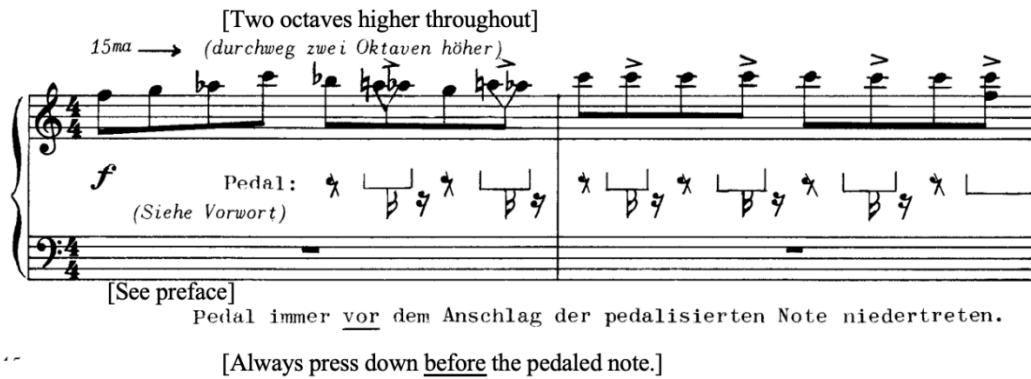
Especially, the second piece of the cycle, “Clouds in Icy Moonlight,” uses the damper pedal as a means to project rhythm. This piece mainly consists of constant eighth note rhythm in the right hand and rhythm-projecting pedaling with the damper pedal using the right foot. Since the right hand plays constant eighth notes (essentially rhythmically undifferentiated), the pedaling determines the rhythm in this piece. In addition, Lachenmann expressed the image of the title of this piece by combining rhythm-projecting pedaling with changes in accent,

⁵¹ Berman, *Notes from the Pianist's Bench*, 104.

amplifying the sound of the damper pedal and giving it a stronger and new sense of rhythm. The dynamics of the piece are only controlled by accents and pedals. The pedaling is presented in the center of the staff along with specific pedal markings () that indicate rhythm-projecting pedaling (see Ex. 4.11).

Example 4.11: Lachenmann, *Child's Play*, 2. Clouds in Icy Moonlight, mm. 1-2

[Two octaves higher throughout]
 15ma → (durchweg zwei Oktaven höher)



[See preface]
 Pedal immer vor dem Anschlag der pedaliserten Note niedertreten.
 [Always press down before the pedaled note.]

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An explanation of how to play the pedaling is added to the music. Lachenmann indicated that “Pedal immer vor dem Anschlag der pedaliserten Note niedertreten” (Always press down before the pedaled note.)⁵² This is an indication to pedal before playing a note with a pedal making. However, before using this rhythm-projecting pedaling, it is necessary to be able to play the exact length of the note without the pedal. To play these notes accurately, students must be able to hear the precise duration of the note, even at a slow tempo.

The rhythm-projecting pedaling in “Clouds in Icy Moonlight” mainly features durations of a sixteenth-note pedal and eighth note pedal. These “pedal rhythms” are combined with accents and alterations of the flow of the piece by continuously changing the weak and strong beat positions.

⁵² Lachenmann, *Ein Kinderspiel*, 6 (my translation).

The sixteenth note rhythm-projecting pedal is used in two ways in this piece. First, it is regularly used for weak beats that are accented (see Ex. 4.12). It was used to effectively maximize the rhythm of upbeat accents on the right hand.

Example 4.12: Lachenmann, *Child's Play*, 2. Clouds in Icy Moonlight, mm. 3-4

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Second, the rhythm-projecting pedaling of the sixteenth note changes the flow of the piece by continuously changing the position of the pedal to alter the beat (see Ex. 4.13). At mm. 9-10, the flow of this piece is shifted by changing the strong beats through use of the rhythm-projecting pedaling on the steady sixteenth note durations.

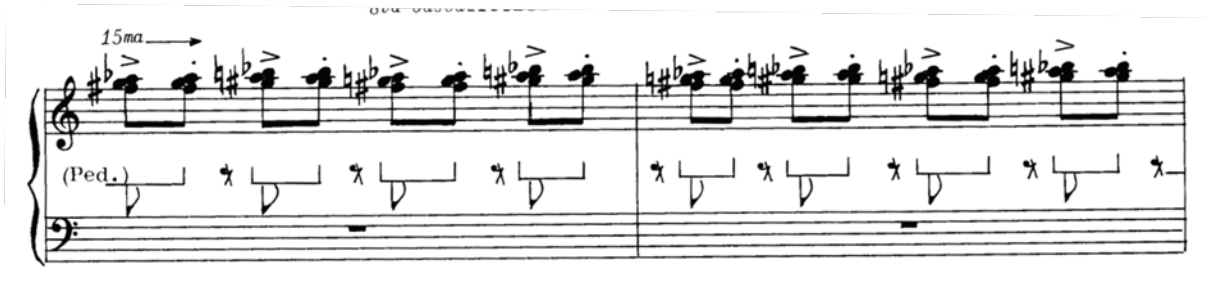
Example 4.13: Lachenmann, *Child's Play*, 2. Clouds in Icy Moonlight, mm. 9-10

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In mm. 11-12, the sonority of the piece is transformed by changing the pedal rhythm from sixteenth notes to eighth notes (see Ex. 4.14). Thus, the irregular sixteenth-note pedaling of measures 9-10 can be seen as creating a sort of transition – from sixteenth-note to eighth-note

rhythm-projecting pedal. This eighth note length pedal is mainly used for strong beats and the pedal was used to augment the sense of rhythmic regularity the passage. In order to play it, the students need to press the damper pedal down before pressing down the key and releasing it simultaneously with staccato.

Example 4.14: Lachenmann, *Child's Play*, 2. Clouds in Icy Moonlight, mm. 11-12



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Lachenmann provides detailed instructions for this type of pedaling, but it is not easy for late intermediate students to use the pedal exactly as the composer instructed. Students should control their right foot with sensitivity in order to carry out the rhythm-projecting pedal. In addition, since good pedaling comes more from a discriminating ear and sensitive touch than from foot technique,⁵³ students need to listen carefully to the exact rhythm of both their right hand and the rhythm-projecting pedaling, even at a slow tempo.

4.2.2 Pedaling as a Timbre Aid

In “Little Hans,” the long damper pedal is combined with many notes to create one of the many sounds of *musique concrète instrumentale*. In Example 4.15 below, we see how in mm. 24-29 the long pedal is used to blend the tones of the descending chromatic scale in major 3rds. This particular use of the piano creates both a new sonority and long phrasing. To express this effect

⁵³ Berman, *Note from the Pianist's Bench*, 105.

successfully, it is necessary to emphasize the dramatic dynamic changes, such as *mp*—*crescendo*—*fff*—*decrescendo ff*—*subito p*, in one long pedal across these six measures. Given the “muddying” effect of the pedal, the student needs to control these rapidly changing dynamics by using only their fingers.

Example 4.15: Lachenmann, *Child's Play*, 1. Little Hans, mm. 23-31

The image displays two systems of musical notation for piano. The first system consists of two staves: a bass staff on the left and a treble staff on the right. The bass staff begins with a dynamic marking of *f*, followed by *mp*, and then *fff* *sempre*. A long damper pedal line is drawn across both staves, starting at the beginning of the first measure and extending through the end of the second system. Performance markings include *8va* (8va bassa) and *15ma*. The second system also features two staves. The treble staff has a dynamic marking of *p*. The bass staff has a dynamic marking of *ff rit.* followed by *p*. A long damper pedal line continues from the first system. Performance markings include *15ma*, *8va*, and *(stumm)*. A time signature of 1' 10'' is indicated at the end of the second system.

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In “Fake Chinese” the long pedal is used in combination with complex rhythmic and dynamic contrasts to create another effect. In mm. 34-36 (see Ex. 4.16), Lachenmann combines two extremely different rhythms and contrasting dynamics (*decrescendo* with *pp* and *crescendo* with *ff*) of both hands with one long damper pedal.⁵⁴

⁵⁴ Gardner Read, *Music Notation: A Manual of Modern Practice* (New York: Taplinger Publishing Company, 1979), 151-153.

Example 4.16: Lachenmann, *Child's Play*, 4. Fake Chinese, mm. 34-36

The image shows a musical score for two staves. The top staff is in treble clef and the bottom staff is in bass clef. Both staves are in a key signature of three flats (B-flat, E-flat, A-flat). The top staff begins with a *pp* dynamic marking and features a series of chords. The bottom staff begins with a *ff* dynamic marking and features a series of chords with a rhythmic pattern of eighth notes. There are some numerical markings above the bottom staff, possibly indicating fingerings or articulation. The score is enclosed in a large bracket on the left side.

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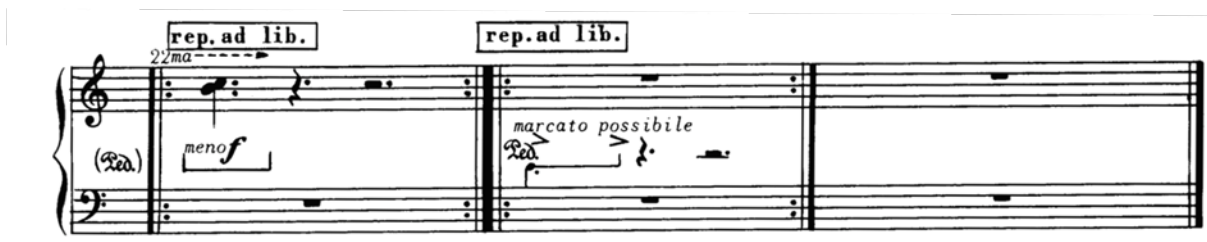
To perform this passage in “Fake Chinese,” the student needs to be able to control these contrasting dynamics and different rhythms of both hands without a damper pedal. In addition, particularly for these exercises, careful and sensitive listening on the part of the students is required. However, since even without the pedals it is not an easy technique, the student should separate the left and right hands to practice each rhythm independently. In addition, once the student is comfortable with the passage, they should practice by adding dynamics in the same way. Afterward, when the student has mastered playing the rhythm and dynamics in the left and right hands independently, they need to practice using both hands at the same time, and the expressions of both hands must be heard independently. Finally, if the student is comfortable with the expression of these dynamics and rhythms both independently and simultaneously, they should try to combine the long damper pedal with them.

4.2.3 Percussive Effect Pedaling

The damper pedal can be used to create a percussive effect on the piano by emphasizing the “tap” sound made when the foot is suddenly removed from the depressed pedal. The damper

pedal is sometimes used this way in contemporary music.⁵⁵ In addition to the percussive effect of the “tap” sound, lifting the damper pedal also adds resonance by initiating the sympathetic vibrations for all the strings of the piano.⁵⁶ This technique is used only for the damper pedal and not for sostenuto or soft pedals. Lachenmann employed noise created by depressing and releasing the damper pedal in the ending section of the seventh piece of the cycle, “Shadow Dance.”

Example 4.17: Lachenmann, *Child’s Play*, 7. Shadow dance, mm. 38-40



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Example 4.17 above shows the percussive effect pedaling in m. 39 of “Shadow Dance.” Lachenmann repeated this percussive sound effect to make listeners regard this sound as noise, creating an extended example of one of his *musique concrète instrumentale* sonorities by using this noise as musical material. In other words, in this passage, he did not use the sound of the piano strings but instead only the noise of the damper pedal being depressed and lifted. Due to the traditional indication of *rep. ad lib*, the students need to extend this effect over a long period of time by repeating it. In addition, because of the *marcato possibile* indication and two accent indications, the student should sound the pedal very loudly.

This percussive effect pedaling can be expressed differently depending on the performer,

⁵⁵ Shockley, *The Contemporary Piano*, 52-53.

⁵⁶ Berman, *Note from the Pianist’s Bench*, 104.

the reverberation of the performance hall, and the piano. To make the damper pedal sound louder and clearer, students should increase the speed of the stepping motion. In other words, when the damper pedal is pressed down, the release should be instantaneous so that the string can vibrate as strongly as possible, and so that the spring action of the damper pedal can be heard loudly. By using the sound of the damper pedal itself as a musical element, Lachenmann expanded the concept of the “sonority” of the piano, another instance of his *musique concrète instrumentale*.

4.2.4 Sostenuto Pedal

The sostenuto pedal, commonly referred to as the middle pedal, prolonging pedal, sustaining pedal, or third pedal, has only one main function: to sustain selected notes while allowing other notes to be dampened.⁵⁷ The first sostenuto mechanism appeared in 1844, but composers did not begin in earnest to incorporate it into their works until after it was patented and commercialized by Steinway and Sons in 1874.⁵⁸ Most upright pianos omit this pedal entirely. The sostenuto pedal is normally depressed with the left foot. When this pedal is depressed, it will catch and hold any dampers that are raised from the strings. Therefore, notes that are to be held by the sostenuto pedal need to be played before this pedal is activated and the sostenuto pedal must be depressed after the notes are played. In addition, the damper pedal must not be activated until after the sostenuto pedal is depressed, or all the dampers will be caught by the sostenuto pedal. The sostenuto pedal must remain fully depressed throughout its use, otherwise unwanted tones will be sustained; it has no effect on tones produced after it is put

⁵⁷ Mary Ray Johnson, “The Development of Techniques for Teaching the Various Uses of the Pedals of the Contemporary Grand Piano” (Ph.D diss., University of Florida, 1989), 198.

⁵⁸ *Ibid.*, 11.

down, as it holds up only the dampers which are raised the moment it is pressed down.⁵⁹

Lachenmann composed the third piece of the cycle, “Akiko,” in three versions, 3a1, 3a2, and 3b, and the sostenuto pedal was used only in the 3a2 version. The three versions stem from a technical challenge: how to hold the sound of the octave base *stumm* cluster in the left hand. The 3a1 version (Version for Piano 3 hands) has the indication, “oder Mitspieler gehalten” (or held by another player)⁶⁰ indicating that one player should play the octave bass *stumm* cluster, and another player should play the melody. Therefore, two performers are needed to play this version. The 3a2 version (Piano with sostenuto pedal) has the indication “Tonhalte-pedal” (sostenuto pedal)⁶¹ instructing one player to play both the octave bass *stumm* cluster and the melody with the sostenuto pedal. In the 3b version (Version for piano without sostenuto pedal), the student needs to hold down the *stumm* cluster with their left hand and play the melodies with their right hand without the sostenuto pedal. Although the performance instructions of these versions are different, the sound effects seem to be the same. I will use only version 3a2 to look at the sostenuto pedaling used in this piece.

The octave bass *stumm* cluster with sostenuto pedal is first required at the very beginning of “Akiko” (see Ex. 4.18). Since the octave bass *stumm* cluster needs to be played again beginning in m. 17, the sostenuto pedal marking in this piece is only indicated from the beginning to m. 16 (see Ex. 4.19). In this passage, first, students must depress the key of the octave bass *stumm* cluster notes very slowly (without audible sound), then depress the sostenuto pedal deeply,⁶² next play the notes of both hands, and finally release the sostenuto pedal at m.16.

⁵⁹ Johnson, “The Development,” 199; Mary Venable, *The Interpretation of Piano Music* (Boston: Oliver Ditson Company, 1913), 182.

⁶⁰ Lachenmann, *Ein Kinderspiel*, 8 (my translation).

⁶¹ Ibid.

⁶² Johnson, “The Development,” 211.

As a result, the sound of the continuous octave bass *stumm* cluster can be achieved beginning in m. 16 thanks to the sostenuto pedal. Therefore, the role of the sostenuto pedal in this passage is to maintain the reverberation from the beginning of the piece up to m. 16, freeing up the left hand from the *stumm* cluster in order to play other melodies.

Example 4.18: Lachenmann, *Child's Play*, 3. Akiko, mm. 1-4

tenuto
mp
 (stumm)
 8va bassa durch [Sostenuto pedal]
 durch Tonhalte-Pedal
 oder Mitspieler gehalten
 [Or held by another player]

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Example 4.19: Lachenmann, *Child's Play*, 3. Akiko, mm. 13-19

(Tonhalte-Pedal)
p
f
 (stumm)
 8va bassa
p poco rit.
 50"

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4.3 Sound Effect

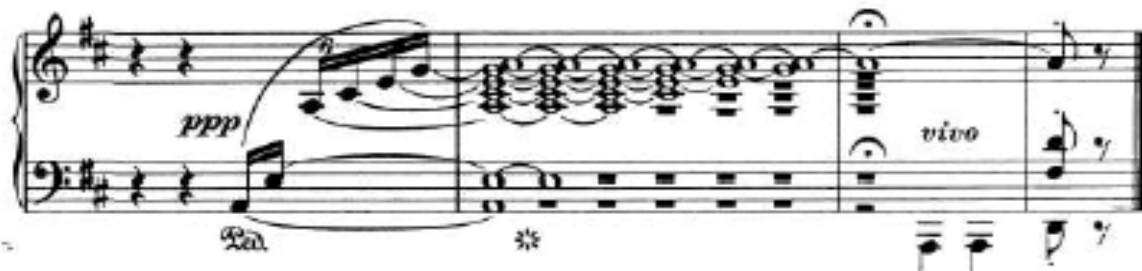
Throughout the cycle, Lachenmann uses three different sound effects as musical

materials: filtered, bell, and percussion sounds. the pianist produces these sound effects using by traditional and nontraditional techniques, creating in the process sonorities of *musique concrète instrumentale*. In what follows, I divide these sound effect techniques into three categories and discuss how they are used in the cycle.

4.3.1 Filtered Sound Effect

In the history of piano literature, filtering technique can already found as early as Robert Schumann's *Papillons*, Op. 2.⁶³ At the end of this piece Schumann indicates that an arpeggiated dominant seventh chord is to be sustained, slowly releasing one note at a time, from lowest to highest note of the chord (see Ex. 4.20). The technique is notated with rests and has the effect of dying away or a nuanced *decrescendo*.⁶⁴

Example 4.20: Schumann, *Papillons*, Op. 2, No. 12, mm. 89-92



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The musicologist Michael Spitzer points out that Lachenmann was influenced by Schumann's filtering technique.⁶⁵ In particular, Lachenmann extended the filtering technique, using contemporary elements to create a unique sonority. Lachenmann's filtered sound effect

⁶³ Michael Spitzer, *A History of Emotion in Western Music: A Thousand Years from Chant to Pop* (New York: Oxford University Press, 2020), 364.

⁶⁴ Joan Chissel, *Schumann, Piano Music* (Seattle: University of Washington Press, 1972), 11–12.

⁶⁵ Spitzer, *History of Emotion in Western Music*, 364.

technique is created through several means: using tone clusters, *stumm* clusters (depressing the keys silently), ties, rests, and pedal. Although the characteristics of the piano's sound cannot be changed once played, Lachenmann changed its character by using the *stumm* cluster and pedal to reduce the sound of the already-sounding tone cluster. This filtered sound effect technique is mainly used in the fifth piece of the cycle, "Filter Swing," by using tone clusters of ten notes to create a thick sound, then "filtering" by using *stumm* clusters to subtract the sound. This technique is repeated regularly throughout the piece. For the *stumm* cluster to be well expressed, the accented tone cluster in the right hand must be played loudly first. In addition, these *stumm* clusters are constantly changing, using different musical ranges or pitches to create different filtered sounds, which depict swing motions of varying heights and speeds, as the title suggests (see Ex. 4.21).

Example 4.21: Lachenmann, *Child's Play*, 5. Filter Swing, mm. 16-19

3X [Clusters with both hands as played before] Cluster mit beiden Händen wie zuvor gegriffen Vi-

* die stummen Cluster eventuell mit einer Hand, Finger auf schwarze, Handballen auf weiße Tasten

[The *stumm* clusters if possible with one hand, fingers on black keys, palms on white keys]

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In addition, an explanation of how to play for the *stumm* cluster is added in the music: "die stummen Cluster eventuell mit einer Hand, Finger auf schwarze, Handballen auf weiße Tasten" (the *stumm* clusters if possible with one hand, fingers on black keys, palms on white

keys).⁶⁶ This means to silently depress the keys of all ten notes at once with one hand (the left): D flat, E flat, G flat, A flat, and B flat with the fingers and D, E, F, G, and A with the palm. Lachenmann instructs to play with one hand, if possible, but if some late intermediate students have small hands and it is difficult for them to play with one hand, they may play with both hands. However, to play with two hands, the student must practice quickly moving both hands to the position of the left hand immediately after playing the first note. From m. 20 (see Ex. 4.22), the *stumm* cluster changes to a triad *stumm* cluster in the left hand, and from m. 22 to triad *stumm* clusters in both hands. This passage also requires careful positioning of both hands, while controlling the touch so as not to create a sound on the two-handed *stumm* cluster.

Example 4.22: Lachenmann, *Child's Play*, 5. Filter Swing, mm. 20-23

The image shows a musical score for piano and bass. The piano part (top staff) has a treble clef and a key signature of one flat. It features a series of chords and notes, with dynamic markings like *f sempre* and accents (>). The bass part (bottom staff) has a bass clef and a key signature of one flat. It features a series of chords and notes, with dynamic markings like *p* and *f*, and performance instructions like "(Dauer:", "sempre sim.)", and "8va bassa".

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The widening of musical range between the hands makes it possible to hear a wider reverberation than before. Although it is possible to omit this part because of the *Vi-de* sign (“which can be cut”),⁶⁷ it expresses an important image, that of a swing that rises high, so it is best to play it if possible. The reason this passage is particularly difficult is that the student suddenly plays *stumm* clusters in both hands. Therefore, it is necessary to practice preparing

⁶⁶ Lachenmann, *Ein Kinderspiel*, 15 (my translation).

⁶⁷ *Ibid.*, 3, preface.

before playing the *stumm* clusters. The student can play the tone cluster in the right hand and then hold it. After that, when the student is ready to move to the next *stumm* clusters, their arm movements can guide their fingers to the position of the keys of the next *stumm* clusters in both hands. But the student must not play yet, but rather, play the *stumm* clusters only when reaching the keys of the *stumm* clusters of both hands correctly.

Example 4.23: Lachenmann, *Child's Play*, 5. Filter Swing, mm. 52-56

-de

Diesen stummen Cluster mit den 10 Fingern niederdrücken.
Tasten genau im Rhythmus nacheinander loslassen.
[Press this *stumm* cluster down with the ten fingers. Release the keys one after the other exactly in rhythm]

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Overall, Lachenmann uses filtered sound effect techniques in this piece using *stumm* clusters to reduce the notes of the tone clusters all at once. Moreover, he uses the filtered sound effect technique differently at the end of “Filter Swing” (see Ex. 4.23). In the music, an explanation of how to play the *stumm* clusters is added: “Diesen Stummen Cluster mit den 10 Fingern niederdrücken. Tasten genau im Rhythmus nacheinander loslassen” (Press this *stumm* cluster down with ten fingers. Release the keys one after the other exactly in rhythm).⁶⁸ To

⁶⁸ Ibid., 17 (my translation).

follow these instructions, play the tone cluster in the right hand aloud, then quietly press a *stumm* cluster of ten notes in both hands, then lift the fingers one by one rhythmically, starting with the lowest notes. This is not a way of reducing the sound of notes all at once, but of removing the notes of the already played *stumm* cluster one by one, so that the notes of the *stumm* cluster disappear one by one, ending with one B flat *stumm* note. In other words, this is a technique that reduces the sound once more with the filtered sound effect technique and makes the *stumm* cluster like a melody. To perform this well, each finger needs independence.

This filtered sound effect technique will be a sonority and technique that most late intermediate students have never tried. However, it will be more interesting for those students who can appreciate this new sound and it is a good idea to suggest that the student visualize and hear sounds before playing them. First, have the student imagine swing motions of varying heights and speeds. Then suggest that the student imagine the sound that will be played. This gives the student the opportunity to imagine auditory images, making him or her more sensitive to hearing and playing. Educators should encourage the students, in practicing this filtered sound effect technique, to feel it as part of their new piano performance technique.

4.3.2 Bell Sound Effect

Lachenmann created unique bell sonorities mainly used in the sixth piece of the cycle, “Bell Tower.” He used unconventional elements to generate bell sound effects that include *stumm* notes, long-held tone notes (with thick-line notation), pedal, staccato, all of which are combined with conventional elements. This bell effect technique, like the filtered sound effect technique, uses a method of subtracting sound with a *stumm* note, but subtracts it in a different way, as I explain below.

The bell sound effect technique can be seen in mm. 1-3 of “Bell Tower,” notated as

diamond-shaped notes connected with thick lines, where each of the “bells” is denoted with *sforzando* and *subito pp* markings (see Ex. 4.24). In addition to the musical signs, Lachenmann provides in the score an explanation of how to play for the bell sound effect: “Taste kurz loslassen und stumm nachgreifen” (Release the key quickly and immediately press it down silently).⁶⁹ This means pressing the *sforzando* note and quietly pressing the same note again.

Example 4.24: Lachenmann, *Child’s Play*, 6. Bell Tower, mm. 1-3

[Two octaves higher]

(zwei Oktaven höher)

15 ma

♩ = ca. 66

Rechte Hand
[Right hand]

Linke Hand
[Left hand]

Ausführung:
[Execution]

15 *bassa sempre* (zwei Oktaven tiefer)

Taste kurz loslassen und stumm nachgreifen

[Release the key quickly and immediately press it down silently]

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To do the bell sound effect technique effectively, the *sforzando* notes must first be played loudly and shortly with resonance. Berman wrote that the speed with which the finger strikes the key contributes to changes in volume and the greater the desired speed, the higher we should position the finger.⁷⁰ Therefore, to make the *sforzando* sound, the performer should feel the weight of the arm in their left hand, raise the fingertip of the left hand to a higher position above the key, and attacks the key rapidly. Second, the student should practice pressing the silent stop only halfway down and then fully depressing it to train the finger to control the *stumm* note.

⁶⁹ Ibid., 18 (my translation).

⁷⁰ Berman, *Notes from the Pianist’s Bench*, 11.

Third, the student needs to quickly change dynamics from *sforzando* to *subito pp*; in order to control the dynamics on the repeated notes, they should prepare the next position (of the repeated note) in advance to anticipate the *subito pp* dynamic.

Measures 1-3 offer an example of how to play the bell technique in “Bell Tower.” The fourth finger of the left hand needs to play the first note, a staccato B flat marked *sforzando*, loud and short, then immediately play the same note again but now *stumm* and *subito pp* in order to hold the resonance of the piano. The student should continue in the same manner for the remaining notes – C, D-flat, A, and D-natural – with the third, second, and first fingers of the left hand, one by one. After playing and holding these five notes, they take on the sound of a *stumm* cluster. It is difficult for late intermediate students to play the successive notes in the same manner while continuing to press and hold the already pressed *stumm* notes, as it requires a great deal of finger independence and control.

To aid with the independence of each finger, the student needs to relax their arms and hands, feel the weight of the finger, slowly and deeply press five notes at the same time, then lift only one finger up high, then press down the finger down deeply again. The students need to practice playing all the other notes, one after another, in the same way. Although it is difficult to play this technique effectively, if the student understands the technique well, they can effectively convey the bell sound-image of the title of this piece. In addition, although students do not necessarily have to play a grand piano for this piece, I recommend playing in a large hall or on a large grand piano with good resonance to fully express the bell sound effect.

4.3.3 Percussion Sound Effect

The quest for new sonorities on the part of many contemporary composers for has led to the development of nontraditional playing techniques. Many of these new techniques use the

piano as a percussion instrument, creating new effects and techniques that range from highly energetic sounds that mimic percussion instruments to novel playing methods (such as tapping the outside parts of the piano).⁷¹ Producing a percussive tone from the instrument is one of the hallmarks of contemporary works, and one such effect is created by a quickly executed dropping motion of the fingers as they strike the key.⁷² This technique adds uniqueness to the tone.⁷³

Lachenmann created percussion sound effects by using *stumm* clusters, high register notes, *staccatissimo*, *appoggiatura*, dramatic dynamics, and pedal. This effect is used primarily in the first piece “Little Hans” and the seventh piece “Shadow Dance” of the cycle. In mm. 1-8 of “Little Hans,” Lachenmann creates a strong and short percussion sound effect in the high register of the keyboard in the right hand while playing the lowest octave bass *stumm* cluster in the left hand (see Ex. 4.25). In addition, the damper pedal is used in the first five measures to augment the percussive sound and create more volume by allowing the original tone of the piano to reverberate together with the sound of steel and wood.

In order to play this percussive sonority, the student needs to play the high notes and lowest octave bass *stumm* cluster on the keyboard simultaneously. Reaching with both hands to the extremes of the keyboard can sometimes be uncomfortable for late intermediate students with small body structures. Therefore, students also need to practice leaning toward the piano keyboard with their upper body to make this position more comfortable. In addition, the desired sonorities in this passage should be reminiscent of the sound of a percussion instrument and requires a strong percussive touch to convey it effectively. To execute the necessary strong,

⁷¹ Ibid., 20.

⁷² Sooyun Kim, “Ross Lee Finney’s *32 Piano Games* and Stephen Chatman’s *Amusements*: A Comparison of Two Pedagogical Approaches to Contemporary Musical Elements and Techniques” (DMA document, University of North Texas, 2018), 11.

⁷³ Potamkin, *Modern Piano Pedagogy*, 107.

staccatissimo touch, the student needs to play the key with a “plucked” motion of the finger: rapidly, shortly, and strongly while feeling the weight of their right arm. In other words, they need to pull the fingertip of their right hand back toward the palm of their right hand immediately.

Example 4.25: Lachenmann, *Child's Play*, 1. Little Hans, mm. 1-8

The image shows two staves of musical notation for a piano piece. The top staff is labeled 'Klavier' and has a tempo marking '♩ = ca. 108' and '(zwei Oktaven höher)'. It contains a series of notes with a '15ma' marking above them. The bottom staff has a '15ma' marking above it and contains a cluster of notes with the instruction '[Press down cluster silently]' and 'Cluster stumm niederdrücken'. Below the bottom staff is a bracket labeled '8va bassa'.

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Another the percussion sound effect technique can be found in the seventh piece of the cycle, “Shadow Dance” (see Ex. 4.26). The musical material of the piece consists of only an octave bass *stumm* cluster on the left hand and two notes in the highest range of the piano on the right hand. The right hand plays B and C in the highest range of the piano and these two notes are used like a “hammer chord” in the piece.

Example 4.26: Lachenmann, *Child's Play*, 7. Shadow Dance, mm. 1-2

The image shows a musical score for two staves. The top staff is in treble clef with a 12/8 time signature. It contains a series of notes with dynamic markings *p*, *fff*, and *p*. Above the staff, there is a box containing '2X' and the text '[3 octaves higher]'. Below the staff, there is a box containing '2 X' and the text '= 2 mal spielen (also einmal wiederholen) [Play twice (or repeat once)]'. There are also performance instructions: '22ma (3 Oktaven höher)' with an arrow pointing right, and '8va bassa' with an arrow pointing right. The bottom staff is in bass clef with a 12/8 time signature and contains a whole note chord with the instruction '(stumm)' below it.

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In order to play the two notes of the right hand, students must make firm the fingertip of their right hand, use the weight of their right arm to play the key, and immediately relax their right arm. The two notes are unchanged throughout the movement, except for continuously changing rhythms and dynamics. This piece has no melodic line. Rather, Lachenmann creates the percussive sound effects using dramatic dynamic contrast. To successfully perform “Shadow Dance,” late intermediate students need to be able to play a wide range of rapidly changing dynamics, such as *p*, *crescendo*, *fff*, and *subito p* in a single measure. In mm. 15-16 of the piece, Lachenmann uses a strong *fff* on the weak beat and causes a strong collision effect by using a pedal (see Ex. 4.27). In fact, the *subito fff* is often used as a percussive sound effect technique to produce an overtone effect. The composer changes the position of strong beats by intentionally placing strong notes only on weak beats.

In order to perform the dramatic dynamics that “Shadow Dance” requires, the student needs to develop an awareness of the enormous differences in the dynamics and to feel the difference of touch needed to play such a wide dynamic range. In addition, late intermediate students need to play the same note repeatedly and continuously using only rapid changes of

rhythm in these pieces, which can consume a lot of arm strength. Therefore, the technique of relaxing the arm is essential for them. Although the percussion sound effects technique can be difficult for late intermediate students, imagining the sound of percussion instruments will be helpful for mastering this technique.⁷⁴

Example 4.27: Lachenmann, *Child's Play*, 7. Shadow Dance, mm. 15-16

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⁷⁴ Berman, *Note from the Pianist's Bench*, 9.

CHAPTER 5

CONCLUSION

This pedagogical study provides a teaching guide for educators who would like to use *Child's Play* by Helmut Friedrich Lachenmann as an introduction to the sonorities of *musique concrète instrumentale* for their late intermediate students.

Learning *Child's Play* is good for more than just learning about Lachenmann's *musique concrète instrumentale*— it gives students a chance to “play” with sound, challenge their technique in new ways, and gain a cache of new techniques that allow them to expand their repertoire. It is for these reasons that I have undertaken to explain *musique concrète instrumentale* and the technical elements of the cycle: notational considerations (tone cluster, *stumm*, thick-line notes, and *Vi-de*), pedaling (rhythm-projecting pedaling, pedaling as timbre aid, percussive effect pedaling, and sostenuto pedal), and sound effects (filtered sound effect, bell sound effect, and percussion sound effect). In addition, my pedagogical suggestions for performing these technical elements associated with *musique concrète instrumentale* can be used as reference.

By studying and playing this piece, students not only become intimately familiar with some of the various sonorities of *musique concrète instrumentale*, but they also gain experience in playing contemporary techniques and repertoire as well as familiarity with nontraditional notations. The experience gained from preparing this piece will give students confidence to perform contemporary music at a more advanced level. It is my hope that this study may serve as a pedagogical tool for late intermediate students to educate themselves about the rich sound possibilities of *musique concrète instrumentale* and the broad and continuously evolving repertoires of contemporary musical works in general.

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