

Tanja Orning

THE POLYPHONIC PERFORMER

A study of performance practice in music for solo cello
by Morton Feldman, Helmut Lachenmann,
Klaus K. Hübler and Simon Steen-Andersen

Interactive pdf

Norwegian Academy of Music

Abstract

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A study of performance practice in music for solo cello by Morton Feldman, Helmut Lachenmann, Klaus K. Hübler and Simon Steen-Andersen

Since World War II, a new repertoire has arisen, that in many respects proposes a new role for the cellist and the cello, breaking with the previously established role of musician. The purpose of this project is to investigate, conceptualize, and document this new role on the basis of central works by four composers of contemporary cello repertoire: *Projection I* (1950) and *Intersection IV* (1953) by Morton Feldman, *Pression* (1969) by Helmut Lachenmann, *Opus breve* (1987) by Klaus K. Hübler, and *Studies #1–3* (2007, 2009, 2011) by Simon Steen-Andersen. The aesthetic strength and expressive clarity of these works provide rich incentive to explore new approaches to the music, the resources and expertise called for, and the challenges that they represent. This knowledge contributes to clarifying a contemporary performance practice, and to understanding how the musician's role has evolved since 1950. My investigation of the performance practice circles around four main topics: notation, *Werktreue* (fidelity to the work or its composer), idiomatism, and body (the physical relationship between instrument and performer).

In order to explore and analyze these remarkable and peculiar pieces, we require theoretical and methodical applications that correspond to the nature and demands of the research. I argue that the performer needs new skills and expertise for this repertory, and I investigate these new requirements through my own process of practice and performance. In seeking the answers to my research questions, I draw on artistic practice as a vehicle, tool, or method that situates my study within artistic research.

The project is thematically confined to the repertoire of my own instrument, the cello; however, the ambition of the project is to contribute to the expansion of the scope of discussion within the field of performance practice for performers, composers, conductors, and musicologists alike. In addition to the dissertation, the artistic result of the project comprises twelve videos of my performances of the central works, and a concert series, CELLOPRACTICE undertaken during the course of the research period.

Accessing the video material:



The written dissertation is accompanied by video recordings of my performances of the works in the project. There are 12 videos discussed in the dissertation, and they can be accessed by clicking the icon which is present throughout the text when performances are discussed. The videos can also be found here: <http://prosjekt.nmh.no/orning-polyphonic-performer/>

List of videos (for additional info, see Appendix III)

- 1 Morton Feldman *Projection I* (1950) *Werkreue* interpretation
- 2 Morton Feldman *Projection I* (1950) *Texttreue* interpretation
- 3 Morton Feldman *Intersection IV* (1953) *Werkreue* interpretation
- 4 Morton Feldman *Intersection IV* (1953) *Texttreue* interpretation
- 5 Helmut Lachenmann *Pression* (1969, revised 2010)
- 6 Klaus K. Hübler *Opus breve* (1987) Interpretation 1
- 7 Klaus K. Hübler *Opus breve* (1987) Interpretation 2 (freer)
- 8 Improvisation 1 inspired by Klaus K. Hübler *Opus breve*.
- 9 Improvisation 2 inspired by Klaus K. Hübler *Opus breve*.
- 10 Simon Steen-Andersen *Study for String Instrument #1* (2007)
- 11 Simon Steen-Andersen *Study for String Instrument #2* (2009)
- 12 Simon Steen-Andersen *Study for String Instrument #3* (2011)

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Introduction

In this project, I seek to investigate and conceptualize a performance practice in selected contemporary cello music since 1950. My aim is to generate new knowledge about the practice of the contemporary music cellist: the different approaches to the music, the resources and expertise called for, and the kinds of challenges they represent. This knowledge will contribute to clarifying a contemporary performance practice, and to understanding how the musician's role has evolved since 1950. My own practice as a cellist is central to this investigation.

At the turn of the millennium, I decided to make a radical shift in my musical life and dedicate myself to what attracted me the most: the field of experimental and contemporary music. I left the job I had held for five years as the co-principal cellist in the Stavanger Symphony Orchestra in order to venture fulltime into the expanding field of new music in Oslo. My first major projects were with the string-duo *Kyberia*¹ and the string quartet *Ametri*,² both of which continuously commissioned new works. My interest in expanding the possibilities of the cello through the use of electronics resulted in my solo project, *Cellotronics*, which I recorded in 2004.³ I started doing more of my own composing and took a year of further training in composition at the Norwegian Academy of Music. At the same time, I participated in various improvisational settings, played with the band *Wunderkammer*, and performed regularly with new music groups such as *Ensemble Ernst* and the *Oslo Sinfonietta*. In 2008, I joined the young and active

1 Kyberia's violinist was Victoria Johnson.

2 The other members of *Ametri* were Victoria Johnson and Sigyn Fossnes (violins), and Peter Sebastian Szilvay (viola).

3 *Cellotronics*, ALBEDO 2005.

ensemble *asamisimasa*. I also did interdisciplinary work with contemporary dancers and stage art.

I begin the chapter with this personal account because the new music I performed seemed to require new and different skills from those I had learned during the course of my education. With less context and history at my disposal, and faced with an enormous variation in notational methods, I needed to take a different kind of critical approach to score reading, interpretation, and performance, than I had for older music. The lack of an established tradition in this relatively young performance practice means that performers of new music are required to make judgments and decisions based upon their own experience and an assessment of the each individual work. The lack of normative notation for this repertoire—a set of symbols with a shared and generally understood meaning—results in widely different symbols being used to indicate the same sound or action; and this leaves the performer to decipher the diverging signs for each new piece. Notational experiments are designed to transgress artistic boundaries and test the limits of what a performer can read, understand, and reproduce. Conversely, the improvisational and experimental music scene, with its unexpected and innovative instrumental capabilities and sound palettes, feeds back into composed “art music,” and it is obvious that the notation must strive to the utmost to describe even a slice of the richness of the available sounds. The technology of the instrument is also greatly expanded in new music. Freed of its traditional modes of playing, the cello can fill many functions: it can be a drum, a guitar, a noisemaker, or simply a wooden box with four strings.

This ongoing expansion of written notation, as well as new sounds and instrumentalism, requires a parallel expansion, or augmentation, of the performer’s role. This amounts to a new performance practice, one that makes stringent demands on the musicians to develop their skills, expertise, creativity, and capacity, both in the process of practicing a work and in performing it. For the performer, new and experimental music opens up alternative routes to the well-trodden classical canonical one. New music represents new ways of thinking; it opens the door to unpredictability, questions, doubts, peril, and even failure. This is an area of uncertainty—an experimental field where practice and discourse have not yet filtered out the music that will stand the test of time. The works of new music are thus far untouched by the judge of longevity that mercilessly determines which works will survive and become integrated into the musical canon and which will be left on the garbage heap of history. New-music

performers work in a laboratory, testing out the music in real time—this is history happening *now*—the history of the present. Many paths are yet to be explored and our roles are not clearly defined.

In the course of the years 2000–2008, my experience with practicing and performing different kinds of contemporary music was tremendously expanded, and I found that certain reflections and questions seemed to emerge and re-emerge in the processes. Eventually, this led me to work on a PhD in performance practice in contemporary music. This project is rooted in instrumental and musical practice, and the questions I raise have all emerged from within my own practice while working with the musical material. The project is about music, musical performance, and musical practice, and thus it is vital to add an aspect of this practice to the academic work undertaken in this project. The dissertation is accompanied by the artistic result of the project: videos of the works examined, and I also arranged a concert series, CELLOPRAXIS, performed throughout the research period.

1.1 The polyphonic performer

For a long time, my working title for this project was, “New Music—new cellist?” And in some ways, this question summarizes my project very well. Working with this question over time, however, I have realized that the concepts “cellist” and “performer” are not always synchronized or synonymous. The instrumentalist plays the cello, cultivating the intimate relationship between the instrument and the performer, but the performer must take in many “extra-instrumental” considerations about the act of performance itself. I realized that what I do cannot be contained in the word “cellist,” and I sought a descriptive term that better expressed multiplicity of my role. I chose the title “The polyphonic performer,” in the hope that this captures the musical experience I hope to illuminate in this project.

The term polyphonic derives from Greek *poluphōnos*, (*polu-* “many” and *phōnē* “voice/ sound”), and although the etymological origins do not tie it to music, it is traditionally applied to music producing or involving many voices. Mikhail Bakhtin uses the term in a literary context in his reading Dostoevsky.⁴ He uses the word to describe several different voices with independent narratives and

4 Mikhail Mikhaïlovich Bakhtin, *Problems of Dostoevsky's Poetics*, ed. and trans. Caryl Emerson (Minneapolis: University of Minnesota Press, 1984), p. 7.

perspectives, voices that can even oppose the dominance and ideology of the author. In my project, I attach the adjective polyphonic to the performer, as a metaphor to illuminate the different parts of the whole in the performance practice of contemporary cello music. I also use the concept of polyphony as a vehicle to separate and scrutinize each voice on its own, as one might dissect and analyze a polyphonic musical piece. At the same time, I view the parts as embedded in the practice—simultaneously present in constituting the practice. The parts have a relative independence or autonomy, but as they operate together, their interrelatedness constitutes a whole, a unity in the diversity. Polyphony also points up the non-hierarchical relationship of the *voices* in a musical practice, something vital in describing the multifarious phenomena of a practice, where the complex web of elements comprising performer, instrument, score, composers, audience, and much more are interlinked with no obvious ranking.

The heterogeneous worlds of contemporary music performance practice require many *voices* within the practice. These voices, or roles, work simultaneously: they can at once move both independently and together, not unlike a contrapuntal piece of music. The implications of the different roles within the “polyphonic performer” will be addressed throughout the following four chapters, and revisited in the concluding chapter.

1.2 Research questions and aims

Since World War II, a new repertoire has developed, which in many respects requires new roles for both the cello and the cellist, and which breaks with the role the musician hitherto had possessed. The purpose of this project is to investigate and document this new role on the basis of certain central and groundbreaking works from the contemporary cello repertoire. I have chosen seven works by four composers: *Projection I* (1950) and *Intersection IV* (1953) by Morton Feldman, *Pression* (1969, revised 2010) by Helmut Lachenmann, *Opus breve* (1987) by Klaus K. Hübler and *Studies #1–3* (2007, 2009 and 2011) by Simon Steen-Andersen.

Using these works as my case studies, I look at how we speak of a performance practice in contemporary music. Over the last 60 years, major performers have studied and performed the core repertoire of contemporary works. They have worked closely with composers, and these collaborations have generated a

significant body of knowledge, both tacit and explicit. This complex and accumulated knowledge—a synthesis of the composers' and the performers' knowledge—is embedded as potential in the works themselves, and it is released when the works are practiced or performed anew. Only by investigating the works from inside the practice will they divulge a knowledge that cannot be accessed from outside the work itself. Thus, in this study, the investigation of the performance practice starts with my own experiential study of the works. I look at the instrumental practice connected to the works in all its complexity, searching out common means and methods in practicing and performing the chosen repertoire. What I hope will emerge is a sense of what might be comprised in a performance practice of contemporary music.

My hypothesis is that performers need new skills and expertise in approaching my selection of contemporary music since 1950, and my goal is to investigate these new requirements through my own process of practice and performance. I have drawn, as well, upon the performance practice of leading international performers of contemporary music. The project raises basic questions regarding interpretation, notation, idiomaticism, the work-concept, the role of the body, and even the writing of history. A chapter is devoted to each of the four composers whose works I have studied for the project, and each chapter poses specific research questions related to the practice of these works.

What are the new skills required of performers? The immediate answer is found in the music chosen for the project. The works do something fundamentally different to the cellist and the cello, so that questions arise in the process of studying and performing the works. The works require new approaches to reading notation, as well as to sound and technique, and they radically challenge the relationship between instrument and body. I want to examine these new skills and the ways they play out in the practice.

This research project takes performance as point of departure, and thus follows a certain shift of focus that has taken place within music research the last decades: from the musical text to the action, from the sound result to the sound production, from product to process.⁵ The project can be seen as an investiga-

5 The so-called *performative turn* in music research will be discussed later in this chapter, as well as in Chapter Three. Nicholas Cook has been central in problematizing the relationship between music theory and performance. See, for example, Nicholas Cook, "Music as Performance," in *The Cultural Study of Music: A Critical Introduction*, ed. Trevor Herbert, Richard Middleton and Martin Clayton (London: Routledge, 2003), pp. 204–14.; *Between Process and Product: Music and/as Performance*, <http://www.mtosmt.org/issues/mto.01.7/>

tive approach to performance practice of contemporary cello music, which attempts to define a new “identity” for the instrument and instrumentalist. For practical reasons, the project will be thematically limited to the cello repertoire; however, my ambition is to contribute to the expansion of the scope of discussion within the field of performance practice for performers, researchers, and composers alike.

1.3 Selected works

To investigate performance practice in music after 1950, my strategy is to explore and examine processes around performance of specific works for solo cello representing different points in time and different aesthetic directions. The project focuses on pieces by four composers, chosen because they represent distinct directions, in cello literature in particular and contemporary music in general. My more personal reason for the selection is the simple fact that I appreciate the works highly—and that I like playing them. Some of these works have pioneered notational and playing techniques that have conditioned later practices. All the works clearly represent an aesthetic shift since 1950, and all have contributed to the trends evident in contemporary music today. In addition, the works represent different national tendencies. The works, and the processes in which they are involved, are themselves the subject of research, but they also act as examples or cases that individually and collectively illuminate issues raised in the dissertation. The works’ strong and clear expression and aesthetics provide rich opportunities to highlight important technical, instrumental, musical, and aesthetic challenges for the performer. In short, the process of practicing and performing the works is particularly well suited to shedding light on the questions in this dissertation. In this way, these works can be seen as case studies, a term I will use in its general sense and not with the theoretical and methodological understanding of the concept used by research disciplines within the social sciences.⁶

[mto.01.7.2.cook.html](#)]; and “Analysing Performance and Performing Analysis,” in *Rethinking Music*, ed. Nicholas Cook and Mark Everist (Oxford: Oxford University Press, 1999).

6 As described by e.g. Robert K. Yin, *Case Study Research: Design and Methods* (Los Angeles: Sage, 2009) and Robert E. Stake, *The Art of Case Study Research* (Los Angeles: Sage, 1995).

1.3.1 *Projection I* (1950) and *Intersection IV* (1953)

The earliest works are *Projection I* (1950) (see Fig. 1) and *Intersection IV* (1953) by Morton Feldman (1926–1987). They are among the first graphic scores;⁷ the outline of the notation is a grid where boxes on three levels refer to the high, middle, and low registers. Tempo, timbre, and duration are indicated, but pitch and dynamics are left to the performer to decide.

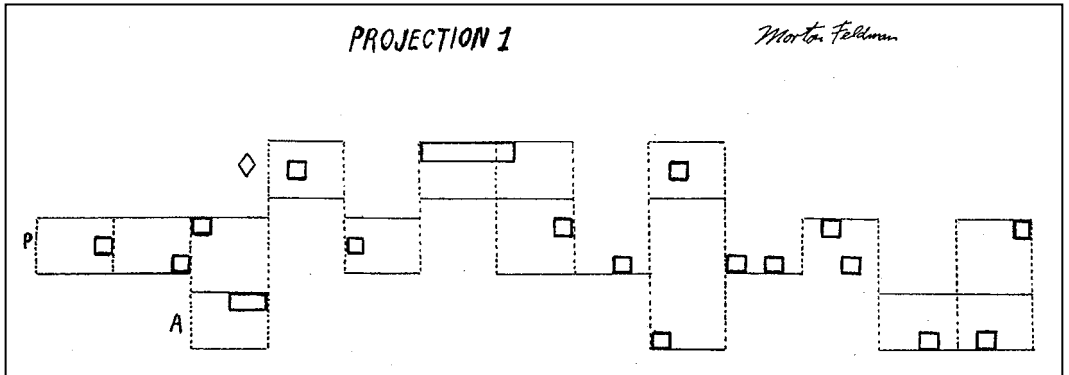


Figure 1: *Projection I* by Morton Feldman. Copyright © 1962. Used by permission of C. F. Peters Corporation. All rights reserved.

The indeterminate performance parameters raise acute questions about interpretative choices in this music, and in particular, about the degree to which a performer today can experience the freedom of choice invited by the score, given Feldman’s dominant voice and the strong performance tradition. Together with John Cage, Christian Wolff, Earle Brown, and David Tudor, Feldman represents the American tradition associated with the New York School. The composer actively disassociated himself from the compositional methods and systems prevalent in Europe at the time, dedicating himself instead to intuition in composition and a “non-intellectual” approach to art, an approach greatly inspired by the abstract expressionist painters in his circle.

⁷ *Projection I* is regarded by many to be among the first modern experiments in graphic notation, although several scores from the beginning of the century include graphic elements. This will be discussed in Chapter Two.

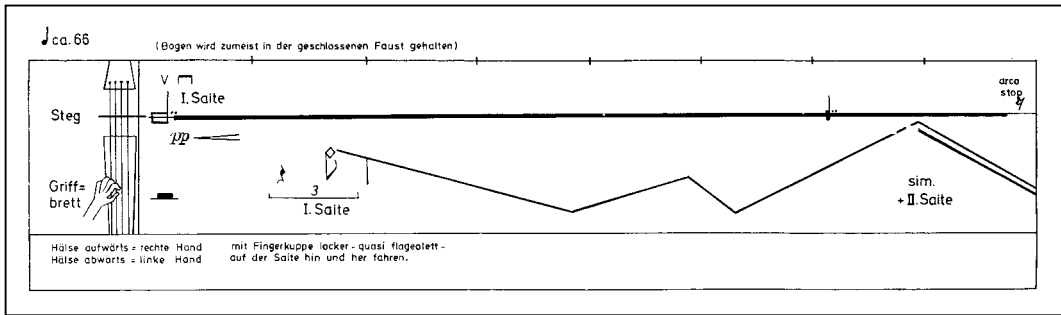
1.3.2 *Pression* (1969)

Figure 2: Helmut Lachenmann “*Pression*” © 1972 by Musikverlage Hans Gerig, Köln 1980 assigned to Breitkopf & Härtel, Wiesbaden

Helmut Lachenmann (b. 1935), the leading composer of the German post-war generation, is constantly seeking ways in which music can serve as a road forwards after the Holocaust, seeing music as a fundamentally existential activity. As opposed to Feldman, who turned for inspiration to the methods of contemporary painters, and used words like “surface” and “texture,” Lachenmann treats the surface not as an autonomous layer, but as the result of a dialectical relationship with the material. In *Pression* (1969), conventional notation and all of the classical sound ideals are abandoned, and the work creates a new sound aesthetic in instrumental music.⁸ The notation is created from point zero—it does not describe the sounds, but the cellist’s actions, a method called *prescriptive*⁹ or *action notation*. The composer calls this “*musique concrète instrumentale*.”

Using drawings or maps of the cello and bow, arrows and lines indicate where the cellist is asked to stroke, rub, and knock on the instrument. Most of the bowing takes place on the body of the instrument, the string holder, on the bridge or behind the bridge, producing a toneless (Ger. “*tonlos*”) sound that is without pitch. *Pression* provides the cello and string literature with a completely new sound vocabulary. Lachenmann asks the performer to play by heart or with a very low music stand so that the audience can see both cellist and cello, as the

8 Lachenmann’s works *Intérieur I* (1966), *Trio fluido* (1966/68) and *temA* (1968) anticipated this aesthetic, but *Pression* represents the radical break.

9 Charles Seeger, “Prescriptive and Descriptive Music-Writing,” *The Music Quarterly* 44 (1958): 184–95; Mieko Kanno, “Prescriptive Notation: Limits and Challenges,” *Contemporary Music Review* 26/2 (2007): 231–54.

performance contains unusual physical and gestural aspects, and the relation between action and sound is foregrounded.¹⁰ *Pression* is also an example of a work in which the composer uses *scordatura*, an alternative tuning: f, d-flat, g and a-flat. *Pression* has become a classic piece in the contemporary music repertoire, with numerous performances and recordings.

1.3.3 *Opus breve* (1987)

Figure 3: Klaus K. Hübler “Opus breve” © 1988 by Breitkopf & Härtel, Wiesbaden

From the direction known as *New Complexity*,¹¹ I have chosen *Opus breve*, of 1987, by Klaus K. Hübler (b. 1956).¹² Notated on three staves, *Opus breve* represents a parametric polyphony of independently performed actions. In spite of the meticulously crafted notation, there is little correspondence between the

10 *Pression* is often associated with music theatre and performance art due to the unusual instrumental actions in producing the sounds. All the actions, however, have musical purposes, and are not related to any theatrical effect. This aesthetic is far from Kagel’s or Stockhausen’s music theatre pieces with incorporated dramatic elements.

11 Richard Toop coined the term *New Complexity* in his article “Four Facets of ‘the New Complexity,’” *Contact* 32 (1988): 4–8, to describe the works of Brian Ferneyhough, Michael Finnissy, James Dillon, Chris Dench, and Richard Barrett. I will discuss this further in relation to Hübler’s *Opus breve* in Chapter Four.

12 My original plan was to include Brian Ferneyhough’s *Time & Motion Study II* (1973–76) in the project, but due to the scope of the project, the piece was replaced by *Opus breve* by Klaus K. Hübler, a work posing some of the same kind of challenges regarding notation, but on a completely different scale. I want to thank Anders Førisdal for introducing me to *Opus breve*.

score and the sonic outcome. Through the detailed separation of the different performance actions, the tablature notation forces performers to be self-reflective about their own instrumental practice, as the physicality, including the performers interface with the instrument—the actual playing of the instrument—has become the compositional material. Hübler’s music has been described as “radically idiomatic instrumentalism,”¹³ music that radicalizes the concept of what it means for composition to be idiomatic to particular instruments.

1.3.4 *Studies for String instrument #1-3* (2007, 2009 and 2011)

Figure 4: *Study for String Instrument #1* (2007), page 1. Used by permission of Edition-S, © 2011 (www.edition-s.dk).

The most recent music in this study is written by a young Danish composer, Simon Steen-Andersen (b. 1976). His *Studies #1–3* for string instrument (2007, 2009, and 2011) explore the relationship between sound and movement in the distinctly small-scale frame and traditional form of a study. He uses prescriptive notation, describing the actions of performance rather than the resulting sound. In *Study #1*, the sound results from the prescribed action and gestures

13 The description “radically idiomatic” was introduced by Richard Barrett, “Standpoint and Sightlines (provisional) 1995—beyond ‘postmodernism!’” In *Diskurse zur gegenwärtigen Musikkultur vom 1994: 13 Beiträge vom 9. internationalen studentischen Symposium für Musikwissenschaft in Giessen 1994*, ed. Nina Polaschegg (Regensburg: ConBrio, 1996), p. 26.

are the initial focus rather than the idea of a desired sound. *Studies #2* and *3* incorporate technology; in *Study #2*, a whammy pedal is constantly shifting the pitch played by the cello, so what is seen and heard are highly incongruent. In *Study #3* there is a pre-recorded video-cellist who is projected in real size upon the live cellist. Together, they play a meticulously choreographed duo, creating an ambiguous realm where optical illusions and playfulness challenge the idea of what a cello is and can do. Throughout the studies, Steen-Andersen shifts the perceptual relationships between action and sound, and he establishes movement as an autonomous parameter. The composer uses the term “hyper-idiomatic,” and this approach can be seen in many ways as the heir to Lachenmann’s *musique concrète instrumentale*, with his concrete approach to instrumental composition.

The selected works were composed over a span of 61 years, from 1950 to 2011. As we can see, the composers were all relatively young at the time they composed the selected work (24–35 years old). Feldman worked in the US, Lachenmann and Hübler in Germany, and Steen-Andersen in Denmark and Germany.

1.4 Departure from the Romantic performance ideal

If my hypothesis is that the performer needs new skills and expertise in approaching these pieces, an important question becomes, what does “new” mean? And new in relation to what? Are there old expertise and skills that are not adequate for this new repertoire? I will investigate whether these reputedly “new skills” break with the “old skills,” or whether they build upon what is already there. In other words, I will examine the relation between post-war modernism and the late romantic tradition. The central and unifying element here is the cello. In the next section, I look briefly at the development of the instrument itself, and the performance practice history of the cello. My purpose here is not to give an exhaustive account of the history of the cello and the development of cello playing, but only to provide a brief overview in order to sketch out, and establish some of the facts around, the value system implicit the prevailing performance practice for the cello in Western classical music in the twentieth century.

1.4.1 The cello

The development of new techniques is documented above all in the scores, but important information also comes from the numerous exercise books and treatises relating to the instrument.¹⁴ After a long period of great variation in sizes, Antonio Stradivari, with his smaller model ('forma B' and 'forma B piccola'), is credited with having standardized the dimensions of the cello around 1707.¹⁵ A notable instrumental development in the late seventeenth–early eighteenth century was the holding position: instead of resting on the floor or a stool, the cello was increasingly held between the calves, a position that liberated left-hand technique and facilitated playing in higher positions. The introduction of the adjustable endpin further eased the physical handling of the instrument and contributed to a more resonant sound.¹⁶ The most important consequence of the introduction of the endpin was the freedom of bodily movement that came with it, a freedom that also allowed women to play the cello.¹⁷ Holding the cello in its natural position between the legs was considered inappropriate for women, but the endpin offered the possibility for playing sidesaddle, with both legs to one side of the instrument. The novelty of a female cellist is evident in an 1844 comment on Lisa Christiani's (1827–53) Paris debut: "It is said that a female

14 Michel M. Corrette, *Méthode théorique et pratique pour apprendre en peu de tems le violoncelle dans sa perfection*, op. 24 (Paris, 1741/R, 2/1783); Eng. trans. in Carol Reglin Farrar, "Seven String Instrument Treatises of Michel Corette: translation and commentary" (PhD diss., North Texas State University, 1978) is generally thought to be the earliest cello method in any language. Stephen Bonta, et al. "Violoncello," *Grove Music Online*. Oxford University Press, accessed December 1, 2013, <https://www.oxfordmusiconline.com>.

15 Bonta et al., "Violoncello."

16 The endpin was used sometimes, but not generally, throughout the eighteenth century, although it seems to have taken hold in general use only in the second half of the nineteenth century. The first recommendation in print to use an endpin, was by Jules De Swert, in his book *The Violoncello* (London, 1882). The adjustable endpin came after 1890 (Bonta et al., "Violoncello.")

17 Female cellists faced challenges presented by the rules of decorum. According to Anita Mercier, "Even with the endpin, however, many women were taught to hold the cello in ways designed to avoid placing the instrument between their legs. A sidesaddle position was popular, with both legs were turned to the left and the right leg either dropped on a concealed cushion or stool or crossed over the left leg. A frontal position with the right knee bent and behind the cello, rather than gripping its side, was also used. Feminine alternatives like these were still in use well into the twentieth century. Paul Tortelier's first teacher, Béatrice Bluhm, played sidesaddle, and a photograph exists of Beatrice Harrison playing in the modified frontal position." (Mercier, Anita. "Guilhermina Suggia," accessed January 31, 2014, <http://www.cello.org/Newsletter/Articles/suggia.htm>)

cellist (!!!) is appearing in a Paris salon, with the name Christiani-Berhier, admittedly to great applause.– These are the fruits of female emancipation!”¹⁸

The elongation of the neck of the cello and the heightening of the bridge, in the nineteenth century, made the instrument strong enough to carry the pressure from increasingly heavy stringing. Together with the stronger bass-bar, all these changes made the sound stronger and more penetrating, meeting the sound ideal of the new concert halls and orchestras, and not least, the equality in partnership with the modern piano. The use of steel strings increased from the 1920s and became widespread in the second half of the century. They allowed for greater tension and thus bigger sound, and together with fine tuners on the tailpiece, they made it easier to tune and keep in tune. The cello we play today is largely the same as the seventeenth century instrument, apart from the longer neck, higher bridge, stronger bass bar, synthetic and metal strings, and endpin. The modern bow was developed by François Tourte by the end of the eighteenth century, and is longer and more concave than its forerunners, which varied greatly in design and weight.

1.4.2 Cellistic performance practice

Allowing for the development of the instrument discussed above, and the natural distinctions between national styles, performance practice of Western classical music as we know it has not altered significantly from the traditions established in the late seventeenth century. The eighteenth century saw the beginnings of a rich solo repertoire, in the works of Antonio Vivaldi, J.S. Bach, and Luigi Boccherini among others. The concertos of C.P.E. Bach and Haydn,¹⁹ and Beethoven’s Triple Concerto document the development of virtuoso technique and an exceptionally high level of playing by the end of the eighteenth and into the nineteenth century, including extensive playing in thumb position.²⁰

18 George W. Kennaway, “Cello Techniques and Performing Practices in the Nineteenth and Early twentieth Centuries.” (PhD diss., University of Leeds, 2009), p. 264. Lisa Cristiani was one of the few celebrated female cellists before the twentieth century. Other pioneers include May Mukle (1880–1963), Guilhermina Suggia (1888–1950) and Beatrice Harrison (1892–1965). In his dissertation, Kennaway (2009, p. 286–7), identifies forty female cellists in the period between 1850 and 1900, compiled from references in periodicals and treatises.

19 Haydn’s virtuosic concertos were written for two principal cellists at Eszterházy: the first, in C (c. 1761–5), for Joseph Weigl (1740–1820) and the second, in D (1783), for Anton Kraft (1749–1820) (Bonta, et al. “Violoncello”).

20 Thumb position is a technique used when the left thumb is placed across the strings, often in stopped fifths to facilitate virtuosic passagework, especially in higher positions. The use of

The nineteenth century had important solo works by Schumann, Dvořák, Tchaikovsky, and Elgar, and the cello made a strong entrance into the twentieth century with concertos by Prokofiev, Shostakovich, Walton, and Britten. With this repertoire, the cello was established as a primary solo instrument, challenging the primacy of the violin.

Up to the middle of the eighteenth century, most of the prominent cellists were also composers—of sonatas, concertos, studies, and exercises. Luigi Boccherini (1743–1805), the most notable cellist in the late eighteenth century, composed an extensive and rich repertoire for the cello. Other composer-cellists are Domenico Gabrielli (1651–1690), Josef Reicha (1752–1795), Heinrich Romberg (1767–1841), and David Popper (1843–1913), who greatly contributed to the virtuosic repertoire.

Even when the composer was not the performer—as became increasingly common after the early nineteenth century, many composers worked closely with the performers who premiered their works. Haydn’s C-major concerto (1761–5), for example, was written as an artistic challenge to the gifted cellist Joseph Weigl, perhaps to entice him to stay at Esterházy, and Dvořák’s cello concerto (1894–5), which was written for his friend, the cellist Hanuš Wihan.²¹ The performer’s influence can also be seen in what was not composed—according to Evgeni Raychev, Beethoven wanted to write a cello concerto to Bernhard Romberg, his greatly admired chamber music partner, but “the cellist rejected the offer, declaring that he performed primarily his own compositions.”²² The lack of a Brahms cello concerto that every cellist mourns could be due to lack of an inspiring cellist. According to cellist Robert Hausmann, after hearing him [Hausmann] play Dvořák’s concerto for him in 1897, Brahms said, “had I known that such a cello concerto as that could have been written, I could have tried to compose one myself.”²³

thumb also expands the range of chords in all positions—double, triple, and quadruple stops.

21 For some reason it was premiered by the English cellist Leo Stern in 1896. Wihan made various suggestions for improvement, including two cadenzas, one at the end of the third movement, but Dvořák accepted only a few minor changes and neither of the cadenzas.

22 Evgeni Dimitrov Raychev, *The virtuoso cellist-composers from Luigi Boccherini to David Popper: A review of their lives and works* (DM diss., The Florida State University, 2003), p. 21, accessed April 25, 2013, <http://diginole.lib.fsu.edu/islandora/object/fsu%3A176353>. Another explanation that is put forwards for Beethoven’s missing cello concerto, is that no one could afford the high commissioning fees Beethoven requested at the time.

23 This claim by Hausmann, who was the cellist of Joachim’s quartet, has been challenged by several scholars, finding it very unlikely that Brahms should not have know Dvořák’s cello

1.4.3 Twentieth century

Pablo Casals (1876–1973) was one of the first “modern” performers, taking advantage of the new technology of recording in the beginning of the century, and bringing the cello and its repertoire to wider recognition. His international career also included figuring as a musical and political ambassador for his beloved Catalonia. Casals had an undogmatic view of technique: “The purpose of technique is to transmit the inner meaning, the message of the music. The most perfect technique is that which is not noticed at all.”²⁴ Although not particularly interested in the then-new, atonal music,²⁵ he was an advocate of musicianship: “a score is like a straitjacket, whereas music, like life itself, is constant movement ... spontaneous, free from any restriction.”²⁶

The key performer in the twentieth century for contemporary music was the Russian cellist Mstislav Rostropovich (1927–2007). He commissioned a great number of works and was the dedicatee of many others.²⁷ He worked closely with Shostakovich, Prokofiev, Britten, Penderecki and Lutosławski, among others. He also worked as a conductor and a composer. Of the same age as Rostropovich, but with more experimental tastes, the German cellist Siegfried Palm (1927–2005) also collaborated extensively with composers, and premiered works by Ligeti, Feldman, Rihm, Xenakis, Kagel, Isang Yun, Bernd Alois Zimmermann and others. A significant new music performer, American cellist and composer Frances Marie Uitti (b. 1946), is known for inventing and developing the two-bow technique—using two bows at the same time, one on top of the strings, and one underneath, thus covering all the four strings. She has been a dedicatee of compositions by Luigi Nono, Louis Andriessen, Jonathan Harvey, György Kurtág, Karen Tanaka, Per Nørgård, Richard Barrett, John Cage, and Giacinto Scelsi among others. She is a prime example of performance goals and

concerto. Apparently, Hausmann had begged Brahms for a concerto in 1884, and Brahms responded with the Double Concerto.

- 24 Pablo Casals and Albert Eugène Kahn, *Joys and Sorrows* (New York: Simon and Schuster, 1974), p. 76.
- 25 Schoenberg dedicated his Concerto for Cello in D major (a reduction of Matthias Georg Monn’s 1746 Clavicembalo Concerto in D Major, 1932–3) to Casals, but he never performed it. Emmanuel Feuermann gave the premiere in London in 1935.
- 26 David Blum, *Casals and the Art of Interpretation* (Berkeley: University of California Press, 1977), p. 70.
- 27 Rostropovich claimed to have given 320 world premieres throughout his career. See Tim Janof, “Conversation with Mstislav Rostropovich,” accessed January 10, 2014, <http://www.cello.org/newsletter/articles/rostopovich/rostopovich.htm>.

experimentation going hand in hand in a performance practice, as she has been active in experimenting and developing electrical instruments and bows.²⁸ Two important contemporary music cellists are the cellists of the Arditti Quartet,²⁹ former member, Rohan de Saram (b. 1939) and the present member, Lucas Fels³⁰ (b. 1962), both of whom have performed and recorded the essential repertoire for string quartet in the twentieth century. They also pursue solo careers, and both have taught at the Internationale Ferienkurse für Neue Musik Darmstadt. The leading contemporary French cellist (also a composer and conductor) Pierre Strauch (b. 1958), is a member of Ensemble InterContemporain. He said this of the new role of the cello in our time:

In contemporary music, the instrument is out of its bass role of the Baroque and the role of the singer of the Romantic era. The cello has become an instrument that can do everything, it can go from brutal to the elegiac. The register is very broad, encompassing [the register of] many instruments. There are also many opportunities for distorted sound.³¹

Strauch's recordings of Xenakis and Lachenmann are important references. The German cellist Friedrich Gauwerky (b. 1951) is known for his interest in complex music, and has premiered and recorded extensively, works such as Brian Ferneyhough's *Time and Motion Study II*, and works by Richard Barrett and Klaus K. Hübler. Of the younger generation, I must mention Arne Deforce (b. 1962), Anton Lukoszevics (b. 1965), Francesco Dillon (b. 1973) and Séverine Ballon (b. 1980), all of whom are renowned performers of contemporary music, both as soloists and in chamber music.³² Apart from those specializing in con-

28 Together with Adrian Freed at CNMAT (University of California, Berkeley), Uitti designed and constructed a 12-stringless meta cello containing a new musical gesture controller that supports conventional and extended two-bow cello gestures. Uitti also performs on an aluminum cello made by the Pfretzner luthier family in 1929.

29 De Saram was a member of the quartet from 1979–2005, when Lucas Fels joined. Previous cellists were John Senter 1974–76 and Helen Liebmann 1976–77.

30 Fels was a founding member of the highly renowned Ensemble Recherche in Freiburg, an important center for contemporary music in Germany.

31 "Pierre Strauch: L'écriture en jeu," interview with Antoine Pecqueur 15/09/09, accessed January 31, 2014, <http://www.ensembleinter.com/accent-online/?p=1466>. "Dans la musique contemporaine, l'instrument est sorti de son rôle de basse de l'époque baroque et de celui de chanteur de l'ère romantique. Le violoncelle est devenu un instrument à tout faire, capable de passer du brutal à l'élégiaque. Son registre est très étendu, englobant celui de nombreux instruments. Il y a aussi de multiples possibilités de son déformé." My translation.

32 In addition to the cellists mentioned, there are several excellent contemporary music cellists, both as soloists and members of contemporary music ensembles such as Ensemble Recherche, Klangforum Wien, Ensemble Modern, musikFabrik, Ascolta, Nadar, Ensemble Accroche-Note, the Nieuw Ensemble, Ensemble SurPlus and Ensemble Contrechamps.

temporary music, there are now, perhaps due to diversity and pluralism in contemporary music, a rising number of classical music performers who incorporate contemporary music in their repertoire.³³

However, a marked change takes place at the beginning of the twentieth century. Up until around that time, musicians had performed contemporary music as a natural part of their practice. Indeed, most music was “contemporary music.” But the twentieth century saw the onset of “contemporary music” as a category distinct from “the classical tradition,” and this, in turn, gave rise to several branches of performance practice. The majority of cellists continue to perform the old repertoire, the canon of cello music from Bach to approximately Prokofiev. Lukas Foss writes:

Around 1915, composition withdrew underground, leaving the field to the performer and to the music of the past. That this created a sterile state of affairs “above” ground was perfectly clear to the more educated virtuoso, who has been trying ever since to resolve the conflict, often leading a Jekyll and Hyde existence on account of it. Thus, Arthur Schnabel gave his audience Beethoven and Schubert; his lifelong involvement with Schoenberg was kept scrupulously to himself.³⁴

Another view is that the composers climbed up to the “ivory tower”—to a secluded elitist and intellectual place, far off mainstream and mass culture. The breakdown of traditional tonality incontestably created a big divide between modernist music and classical music, for a multitude of reasons tied to artistic, social, economic, and political movements. I shall not discuss the reasons for the breakdown in this dissertation; I am interested here in the result of the divide, the development of the performance practice into different directions in contemporary music and that of earlier traditions.

The musical activity of Rostropovich illustrates a direction of contemporary music that, in spite of exploring new instrumental possibilities, never crosses what I would call “the idiomatic threshold”—the boundaries of what is perceived as idiomatic on a cello at any given time. In many regards, the music of Shostakovich, Prokofiev, Britten, Penderecki, and Lutosławski represents the sound of the twentieth century, with their developed aspects of rhythmic, tonal, and timbral possibilities. Though the works are exploring instrumental

33 This goes both ways, as the so-called specialist in new music naturally incorporate older classical music in their repertoire.

34 Lukas Foss, “The Changing Composer–Performer Relationship: A Monologue and a Dialogue,” in *Perspectives on Notation and Performance*, ed. Benjamin Boretz and Edward T. Cone (New York: W.W. Norton, 1976), p. 32.

possibilities like harmonics, *pizzicati* (for the right, and not least, the left hand), as well as a new instrumental virtuosity, they do not break with the tradition, but rather build upon the performance practice from the late romantic epoch. To play something in a romantic manner often means lyrical, expressive, and intense, with a full, rich sound. Today, the romantic sound ideal³⁵ involves a large, solid, and singing sound, usually with continuous vibrato. With slight variations and some exceptions, this aesthetic prevails among soloists, within orchestras, and in educational institutions performing Western classical music.

This is more or less the tradition and the dominant sound ideal in which I have been educated, first at the Norwegian Academy of Music in Oslo, then in London with William Pleeth, and at Indiana University with János Starker. With this relatively traditional background, I approached the contemporary music field in the beginning of the 1990s. So, what is different in the music I have chosen in this project from the music I performed during my training and early professional years?

1.4.4 What is new in New Music?³⁶

All the works in my project demand new ways of playing in one way or another. That is, new in relation to what my education taught me, new in terms of the physical handling of the instrument and bow, and new in the use of extended

35 In the Romantic era, vibrato was possibly used with far more variation and refinement than is normally heard today. See Clive Brown, *Classical & Romantic Performance Practice 1750–1900* (Oxford: Oxford University Press, 1999).

36 “New Music” or “Neue Musik” does not refer simply to recently composed music, but can be considered a historical term. Paul Bekker used the term “Neue Musik” in 1919 to describe the music following the Late Romantic period (Paul Brekker, “Neue Musik,” in *Neue Musik*, vol. 3, *Der Gesammelten Schriften* (Stuttgart and Berlin: Deutsche Verlags-Anstalt, 1923)), and Schönberg wrote, in 1911, “Das Neue und Ungewohnte eines neuen Zusammenklangs schreibt der wirkliche Tondichter nur, um Neues, Unerhörtes, das ihn bewegt, auszudrücken. Das kann auch ein neuer Klang sein, Ich glaube aber vielmehr: der neue Klang ist ein unwillkürlich gefundenes Symbol, das den neuen Menschen ankündigt, der sich da ausspricht.” In Arnold Schönberg, *Harmonielehre* (Leipzig: Universal, 1911), p. 15. “That which is new and unusual about a new harmony occurs to the true composer only for such reasons: he must give expression to something that moves him, something new, something previously unheard-of. His successors, who continue working with it, think of it as merely a new sound, a technical device; but it is far more than that: a new sound is a symbol, discovered involuntarily, a symbol proclaiming the new man who so asserts his individuality.” In Arnold Schönberg, *Theory of Harmony*, translated by Roy E. Carter (Berkeley and Los Angeles: University of California Press, 1983), p. 400. Although the terms new and contemporary music have certain specific connotations rooted in the debate surrounding the historical avant garde, for the present

techniques. For example, in *Pression* by Lachenmann, I bow on several parts of the instrument, including the wood, tailpiece, and behind the bridge. The sound palette in the piece is far from the romantic ideal, in fact it is the opposite of that ideal, as there is only one single note in the piece bowed in a conventional manner, and this stands out as something alien in its context. Lachenmann's statement "to compose is to build an instrument"³⁷ explains, in part, his departure from the clichéd ideals of beauty. He rebukes the composers trying to recreate the old "beauty"—a beauty that for him was irreplaceably lost with the horrors of World War II, a beauty that only represents a masquerade.

Expressing oneself means entering into relationship with one's surroundings; it means confronting, as who one is and who one would like to be, the questions posed by society and the existing categories of communication, and coming to grips with the social value-concepts contained therein. It means, above all, offering as much resistance to the inherited categories of communication as is demanded by the contradictions and unfreedoms embodied in them. It is this resistance which reminds Man of his capacity, and his duty, to determine himself and become conscious of his unfreedom. Expressing oneself therefore means eliciting a sense of social contradictions by rendering them transparent—in other words by reaffirming the human demand for freedom, the 'human potential'. *A demand for beauty which avoids these consequences means only flight, resignation, self-betrayal.*³⁸

Lachenmann introduces a social consciousness into the aesthetic debate, calling upon confrontations and resistance against value-concepts and constrained, "inherited categories of communication." His creative project is not to compose musical pieces *per se*, but to engage in a musical practice that treats "music as existential experience."³⁹

Another example of an instrumental aesthetic far from the conventions of mainstream conservatories is Klaus K. Hübler's *Opus breve*, a polyphonic piece in which multiple performance parameters are decoupled and combined in new ways. The score, which consists of three systems that separate the performance actions optimally, is a challenge to cellists, who practice their whole life to synchronize the right and left arm. Hübler explicitly explores the continuous

purposes the terms are used interchangeably to describe music in the modernist tradition written after World War II.

37 "Komponieren heißt: ein Instrument bauen," in "Über das Komponieren" in *Musik als existentielle Erfahrung: Schriften 1966–1995* (Wiesbaden: Breitkopf & Härtel, 1996), p. 77.

38 Helmut Lachenmann, "The 'Beautiful' in Music Today," *Tempo* 35(1980): p. 22. Originally in German as "Zum Problem des musikalisch Schönen heute," in Lachenmann, *Musik Als Existentielle Erfahrung: Schriften 1966–1995*.

39 Lachenmann, "Musik als existentielle Erfahrung," in *Musik als Existentielle Erfahrung*, p. 226.

tension between what is written in the score (the composer's intentions) and the performers' capabilities and intentions. The inherent resistance in the instrumental practice is used as a filter in his compositions:

... the instrument also confronts the composer with a source of resistance to a degree impossible to determine in advance, since the writing specific to the instrument requires a high degree of penetration into the purely physiological aspects of its treatment.⁴⁰

Hübler composes with the instrumental practice itself as material, with the whole range of possible physical actions at his disposal, gorging himself in his ideal instrumental splendor. The psychological effect of this notational and instrumental experiment is far reaching: he is stretching the performer's reading skills, instrumental capacities, and imagination to the utmost limit.

Practicing and performing the works in the project force me to look closely at my own practice as they challenge me in many new ways. The works pose questions about basic assumptions regarding technique, aesthetics, history, intention, truth, taste, style, and interpretation. They require new skills and expertise. The music has given me experience in radically new ways of performing on a cello and interesting challenges in reading, interpreting, and concretely how to handle the instrument and the bow. For me, this can be called a new performance practice, a practice that includes new elements—new in the sense that they were not included in my classical training. These works turn the perspective from the end product, the sounding result, to the way music aesthetics shape the practice. These works illuminate the processes, the philosophical and the compositional, the physical and the psychological. On an instrumental-technical level, all the composers except Feldman are radical in their approaches, a prominent trait in modernist music in the second part of the twentieth century.⁴¹

40 Klaus K. Hübler, "Expanding String Technique," in *Polyphony and Complexity*, ed. Frank Cox, Wolfram Schurig, and Claus-Steffen Mahnkopf, *New Music and Aesthetics in the 21st Century*, 1 (Hofheim: Wolke, 2002), p. 244.

41 In *Musical Modernism at the Turn of the Twenty-First Century* (Cambridge: Cambridge University Press, 2009), p. 2-3, David Metzger refers to the last quarter of the twentieth century as "late modernism." Claus-Steffen Mahnkopf views this period as a break from Post-Modernism and calls it "Zweite Moderne" (Second Modernity). In Claus-Steffen Mahnkopf, "Second Modernity—An Attempted Assessment," in *Facets of the Second Modernity*, ed. Claus-Steffen Mahnkopf, Frank Cox, and Wolfram Schurig (Hofheim: Wolke, 2008), p. 9.

In “The Nature and Origins of Musical Postmodernism,”⁴² Jonathan Kramer explores the ways the postmodern, as a late modern condition, can be understood as an attitude rather than a historical period. According to Kramer, postmodern music “is not simply a repudiation of modernism or its continuation, but has aspects of both break and an extension.”⁴³ He continues with a list of characteristics, including use of irony, quotations, contradictions, fragmentation, pluralism, eclecticism, multiple meanings and temporalities, distrust of binary oppositions, challenge of the traditional barriers between high and low styles and the boundaries between sonorities, avoidance of totalizing forms, and the consideration of “music not as autonomous, but as relevant to cultural, social and political contexts.”⁴⁴ By Kramer’s definition, Lachenmann, Hübler, and Steen-Andersen might all be considered postmodern composers, or, rather, as possessing a postmodern creative attitude. The subject of postmodernism is both extensive and evasive, and I will not discuss it in detail; but it is important to note, here, that many of the characteristics of the approach to composition and performance practice relevant in my project fall under the postmodern umbrella. We can call this a postmodern or a late modern attitude, to distinguish the music I have chosen to discuss from music that may have been written at the same time, but that retains a more conventional style, based on traditional compositional and performance idioms.

As we have seen, the music in the project contains a multitude of approaches, techniques, and ideologies. In addition to the features described above, I would add that this is music in which there is a willingness to explore and experiment, as well as an embraced risk of failure.

Although written about Richard Barrett’s music, Christopher Fox’s observation is relevant in this context:

The very notion that music might be consciously conceived, as the articulation of any sort of aesthetic project is anathema to many musicians, particularly in London where the prevailing music ethos favours music, which can be learnt quickly, played readily and received uncontroversially. Barrett’s music frequently provokes hostility in performers, not only because it is difficult—after

42 Jonathan D. Kramer, “The Nature and Origins of Musical Postmodernism,” in *Postmodern Music/ Postmodern Thought*, ed. Judy Lochhead and Joseph Auner, *Studies in Contemporary Music and Culture* (New York and London: Routledge, 2002).

43 *Ibid.*, p. 16.

44 *Ibid.*

all new music will inevitably be difficult ... but also because it so evidently articulates a radical critique of mainstream contemporary music.⁴⁵

This critique includes an examination and a commentary of mainstream contemporary music, as the compositional and instrumental history is turned inside out in the process. "... [Barrett's music] does not allow the performer to demonstrate a mastery of the instrument, but instead presents her with tasks that are transparently difficult, tasks which expose the awkwardness of the instrument."⁴⁶ Barrett writes in the prefatory note to the score of *Anatomy*, that

differences in register, playing methods etc., should be emphasized, rather than smoothed over by received ideas of 'good technique'. The resulting timbral differentiations are intended to expose the 'anatomy' of the instruments, to negate the cosmetic homogenisation of instrumental usages in the interests of harmonic and/or chordal coherence.⁴⁷

This approach is central in much of the post-war music in Europe: to aim for the opposite of homogenous and coherent, harmonious and smooth—the highly esteemed qualities in instrumental training. This approach negates perfection and "beauty," and searches for fissures, ambiguities, paradoxes, fractions, discrepancies, and openings. The music can be fragmentary and discontinuous and may be seen as attacking and breaking down established "truths," ready-made solutions and superficial surfaces. These strategies are influenced by twentieth-century theories of post-structuralist thinkers.⁴⁸

Julian Johnson addresses the paradox of relating contemporary music to the past, thus highlighting the unavoidable relationship with history: "... new classical music ... strikes most people as fiercely modern, so much so that modern music seems to embody the most negative aspects of modern life—dissonance, alienation, anxiety and meaninglessness."⁴⁹

If one approaches contemporary music as mere entertainment, one hears only "dissonance, alienation, anxiety and meaningless." Johnson's description of the views of "most people" reflects the view of music as commodity, music as an

45 Christopher Fox, "Music as Fiction: A Consideration of the Work of Richard Barrett," *Contemporary Music Review* 13, no. 1, Special Issue: Aspects of Complexity in Recent British Music (1995): p. 147.

46 *ibid.*, p. 148

47 *ibid.*, p. 149

48 Thinkers like Jean François Lyotard, Jacques Derrida, Gilles Deleuze, and Felix Guattari have greatly influenced the discourse of contemporary music.

49 Julian Johnson, *Who Needs Classical Music?: Cultural Choice and Musical Value: Cultural Choice and Musical Value* (Oxford: Oxford University Press, 2002), p. 93.

object that should please and entertain. But contemporary music is an expression of the time and world in which it is created, and it needs to be understood as such—it explores, reflects, and examines ideas and phenomena from our own time.

The musical material often deviates radically from the past; composers draw upon, and reflect a multiplicity of experiences, and they do this by expanding the palette of musical material, which might now include electronic sounds, text (sensical or nonsensical) philosophical and mathematic concepts, or even the instrumental practice itself.

How do the educational institutions relate to the techniques and aesthetics of contemporary music? Pierre Boulez criticized the teaching culture:

What is in fact taught at a conservatory? A certain number of traditional rules, very limited in date and geographical provenance; after which the student wanting to enter the contemporary field must, as it were, jump with a miniature parachute, taking his life in his hands. How many are brave enough to make that jump? And how many feel strong enough?⁵⁰

The conservatories conserve and preserve, as they primarily cultivate and refine a musical canon that restricts itself largely to music composed before 1930. From this perspective, they are not training musicians to make music of their own time, and some even express contempt for contemporary music. As British composer Brian Ferneyhough writes:

It's difficult to change things in most conservatory situations because the conservatory is seen as the feeder for major components of the prevailing culture industry. It's dependent on the latter, so it can scarcely be expected to deviate significantly from long-established industrial standards and norms if it wants to keep its customers. It's *supposed* to "conserve"... one frequently encounters students in European conservatories who actively avoid contact with contemporary music because of the opposition of their instrumental professors to their participation, apparently because it will "ruin their technique." Their technique for what?⁵¹

The fact that the average classically trained musician is wary of contemporary music, that some protest against the so-called unplayable, is no indication that the music represents something new in itself. If the classically trained musician perceives the new music as a significant break with what they have learned, it says more about the sad lack of updating of the curriculum. Perhaps due to the

50 Quoted in Brian Ferneyhough, *Brian Ferneyhough: Collected Writings*, ed. James Boros and Richard Toop (Amsterdam: Harwood, 1995), p. 393.

51 *Ibid.*, p. 293–4.

conservatory's emphasis on music of the past, it has been a widespread practice that new music is left to specialists—those who are drawn to this music and specifically seek out this music and this knowledge. These may be some of the reasons for this division: a constructed separation between the old and the new.

Parallel to the prevailing instrumental aesthetics, the performers of new music have found themselves in a subculture, a corner on the fringe of Western classical music. But to position the new against the old in this way, is to construct a straw man, to create artificial dichotomies between two things that actually co-exist in and at the same time. Seen from this perspective, the new practice has evolved from the old, in an unbroken line from the breakdown of traditional tonality, one hundred years ago.

How then, can my hypothesis that one needs a new expertise and new knowledge in my selected repertoire be valid, if there has indeed been an unbroken line in the performance practice?

I have tried to demonstrate how the new, historically speaking, can be seen as a continuation of the old. In this project, I set the allegedly new against the prevailing instrumentalist aesthetics, as it is taught in the conservatories today. The backdrop and starting point of my discussion is thus the classically trained performer's standpoint, carrying the legacy of master teachers and so-called "dead white Western male composers" on pedestals, a training not obviously equipped to handle experimental music. Already in 1963, composer-performer Gunther Schuller wrote:

... new performance demands do not necessarily imply the discarding of that older criteria. It is not so much a matter of renouncing the old, although this is sometimes also necessary, as of extending and enriching our musical language by accepting the new. As Varèse once put it: "Just because there are other ways of getting there, you do not kill the horse."⁵²

I turn to the term performance practice, and focus on the four main themes that will be leitmotifs through the dissertation.

1.5 Performance practice

Performance practice of contemporary music is the overarching theme in my study, as I am investigating the performance practice in selected works after

52 Gunther Schuller, "American Performance and New Music," in *Perspectives on Notation and Performance*, p. 2.

1950. The works are investigated through the performance practice, and the performance practice investigated through the works. Performance practice has been characterized as “a term borrowed from the German 19th-century *Aufführungspraxis* to describe the mechanics of a performance that define its style.”⁵³ The term is perhaps most often associated with research on historically informed practices (HIP), where the evidence for how the music may have sounded is often scarce and difficult to interpret,⁵⁴ but can naturally be applied to any musical practice. The “mechanics of a performance” contain a multitude of topics and sub-categories that can be analyzed in an infinite number of ways and include complex topics like interpretation, instrumental skills, technique, aesthetics, and different ways of knowing. The term performance practice thus offers the opportunity to study a field based upon the prevailing skills, knowledge, and principles associated with action and performance. In music, practice has often moved ahead of theory,⁵⁵ so investigating from the perspective of practice, my aim is to gain new understanding of aesthetic preferences, skills, knowledge, and expertise. Music history told from the performer’s point of view is still relatively scarce in the literature, and can contribute new perspectives to the way we read the past. As Jim Samson says,

[t]hinking in terms of practices allows us to build the performer—the act of performance—centrally into the historical study of a repertory, and also to register something of the quest for personal authenticity that is promoted by a practice, often in opposition to the institutions that lodge it. Indeed it is sometimes tempting to imagine a history of music which starts from practices rather than composers, works and institutions. Such a history, it need hardly be said, would embrace multiple, often overlapping, practices, each with its institutions, its sub practices, its enabling agencies, its repertory, its ethos.⁵⁶

53 Andrew Parrott and Neal Peres Da Costa, “Performance practice” in *The Oxford Companion to Music*. *Oxford Music Online*. Oxford University Press, accessed December 5, 2013, <http://www.oxfordmusiconline.com/subscriber/article/opr/t14/e5090>.

54 For some views of research on the performance of earlier repertories, see Richard Taruskin, *Text and Act: Essays on Music and Performance* (Oxford: Oxford University Press, 1995), Peter Kivy, *Authenticities: Philosophical Reflections on Musical Performance* (Ithaca and London: Cornell University Press, 1995), Laurence Dreyfus, “Early Music Defended against Its Devotees,” *Musical Quarterly* 69 (1983): pp. 297–322, and John Butt, *Playing with History: The Historical Approach to Musical Performance* (Cambridge: Cambridge University Press, 2002).

55 Obvious examples of theory preceding practice is with dodecaphony, serialism, and in conceptual art.

56 Jim Samson, *Virtuosity and the Musical Work* (Cambridge: Cambridge University Press, 2003), p. 22.

Samson speaks of a performance perspective, allowing a multitude of practices, a rich diversity of performer's voices that can mold music history in new directions and radically challenge musical institutions.

1.5.1 Four major themes

After defining performance practice as the “mechanics of a performance that define its style,” *The Oxford Companion to Music* continues “study of performance practice aims to pinpoint conditions of performance, conventions, and stylistic developments, and so form a clearer understanding of a composer’s intentions and expectations.”⁵⁷ I will now delve more deeply into specific areas within the mechanics of performance, certain conditions, conventions, and aesthetic elements that can shed light on my research questions. I do so not only to “form a clearer understanding of a composer’s intentions and expectations,” but especially to articulate the performer’s point of view.

As I practiced, performed, and investigated the selected works over time, certain themes seemed to re-emerge and recur in different guises and different contexts. I have identified them as four major themes or concepts: *notation*, *Werktreue*, *idiomaticism*,⁵⁸ and *body*, and I want to use these topoi actively throughout the dissertation as keys to my problematization of the performance practice. The concepts act in pairs, the first, *notation* and *Werktreue*, are closely linked by the central position of notation in the work (*Werk*). The notation in the score is one of the objects to which one is loyal (*treu*). Notation is very concrete: a set of written signs in a score. *Werktreue*, on the other hand is an abstract concept: an approach and way of thinking about music, interpretation, work, composers, performers, and performance.

Notation is at the heart of the performance practice; it is the interface between composer, work, performer, and the audience. A score is a musical artifact charged with knowledge—a carrier of history. Although it has an old-fashioned ring to it, the term *Werktreue* is still surprisingly potent in interpretation of music today, perhaps especially so in contemporary music, where the composer often is alive and can act as an oracle regarding interpretation. The term will be

57 Parrott and Peres Da Costa, “Performance Practice.”

58 The noun *idiomaticism* is rarely used in English, but is common in Norwegian (*idiomatikk*) and German (*Idiomatik*). The term is used in David Huron and Jonathon Berec, “Characterizing Idiomatic Organization in Music: A Theory and Case Study of Musical Affordances,” *Empirical Musicology Review* 4/3 (2009):103–22.

discussed in relation to notation, the changing work-concept, and the nature of loyalty.

The other interlinked pair is *body* and *idiomaticism*. The body is the locus of performance, and idiomaticism is the concept of what is *natural* and *suitable* for the relationship between the body and the instrument, a concept that is continuously conditioned by the context. The definition of idiomaticism—or more accurately, the limits of what constitutes idiomatic writing—has been fundamentally challenged in the course of the last century, with composers writing seemingly impossible scores for performers. I will reassess what idiomaticism might mean in these new contexts, linking the concept more closely to constitutive performance parameters than to an instrumental comfort zone.

A central element in the art as well as the music of the twentieth century was the return of the body. One could argue that in music, the body never “disappeared,” as the performer’s body is crucial in musical performance.⁵⁹ The view of the presence of the body in performance, however, and its significance in performing music, has changed dramatically over the last hundred years.

The four themes each include other sub-themes, but they will serve as main categories in my mapping of the practice. In the next section, I clarify these concepts and make them operational for my research.

1.5.2 Notation

According to *New Grove*, notation is “a visual analogue of musical sound, either as a record of sound heard or imagined, or as a set of visual instructions for performers.”⁶⁰ The history of notation, from its origins in the ninth century to the middle of the twentieth, is in general a history of greater specificity of the “visual analogue” of sound. Once music is written down, it can leave its creator and circulate widely. This is especially true after the advent of printed notation, around 1500. The score becomes the repository of the creator’s intention and the accumulated knowledge about performance. In his book, *History of Bourgeois Perception*, Donald M. Lowe points out that in an oral tradition, the knowledge cannot be separated from the subject that holds the knowledge, so

59 In idealist music aesthetics the body would have been obliterated and the music have become pure spirit.

60 Ian D. Bent, et al. “Notation,” *Grove Music Online*. Oxford University Press, accessed December 4, 2013, <http://www.oxfordmusiconline.com>.

that the senses of hearing and touching are privileged over seeing: “in an oral culture, hearing surpasses seeing as the most important of the five senses.”⁶¹ However, with the development of a typographic culture (and I would suggest even a written culture), the knowledge is detached from the subject. He further says,

the communications media in each period, whether oral, chirographic [written], typographic, or electronic, emphasize different senses or combinations of them, to support a different hierarchical organization of sensing. And change in the culture of communications media ultimately leads to change in the hierarchy of sensing.⁶²

Once the sound is encoded in writing, the way is paved for the work-concept, and the division of tasks into creative and re-creative roles for musicians—composers composing (i.e. creating) and performers performing (i.e. re-creating), both competent and specialized in their field. Scores became increasingly normative—objects detached from the mode of performance. The status of the “objective” and measurable knowledge residing in the written or printed score versus the “subjective” orally and physically transmitted craftsmanship of performing on an instrument became evident. The term objective also seems far from performance practice, which, by its nature is grounded in handed-down traditions and skills. Nevertheless, the term objective resonates with strands in the modernist project, one direction being the “New Objectivity” (*Neue Sachlichkeit*) that emerged in the 1920s in Germany, a reaction to certain sentimental expressions in late Romanticism.⁶³ Paul Hindemith was among the leading figures in the *Neue Sachlichkeit* in music, composing pieces in a neo-Baroque style. His recommendation in *Kammermusik* no.1 opus 24/1 (1922), that performers never try to express their own feelings,⁶⁴ exemplifies the “objective”

61 Donald M. Lowe, *History of Bourgeois Perception* (Chicago: The University of Chicago Press, 1982), p. 7.

62 Ibid.

63 The term *Neue Sachlichkeit* appeared after an exhibition in 1923 of post-Expressionist paintings by G.F. Hartlaub. In music, the term denoted a rejection of the sentimentality and expressivity in the Romantic era. Hindemith's *Kleine Kammermusik* Op. 24 No. 2 (1922) was characterized as *Gebrauchsmusik*—music for use (e.g. teaching, dancing etc) a term often linked to *Neue Sachlichkeit*—as opposed to autonomous music. Other musicians associated with *Neue Sachlichkeit* in the 1920s and 1930s include the conductors Otto Klemperer and Arthur Toscanini, the composers Arnold Schönberg, Ernst Toch, Max Brand, and George Antheil, Kurt Weill, and Ernst Krenek. See Nils Grosch, “Neue Sachlichkeit,” *Grove Music Online*. Oxford University Press, accessed December 4, 2013, <http://www.oxfordmusiconline.com>.

64 “die Vortragenden dem Publikum unsichtbar zu placieren.”

anti-Romantic approach of this movement, an approach clearly related to the concept of *Werktreue*.

One dominant characteristic of musical notation in the last century is the increasing specification of details, already noticeable in dodecaphonic works by Schoenberg and Webern. The practice of specifying an increasing number of details, including performance parameters such as fingerings, string directions, and nuanced dynamics, is an important trait of contemporary music notation. In 1963, Leonard Stein wrote about a “safety valve” for the performer, “elements conducive to a more approximate and spontaneous way of playing,” notated with symbols of a “qualitative” rather than “quantitative” intent. He refers to the dialectic relationship between “total control” and “freedom of choice” and seeks “a path amid this notational Scylla and Charybdis.”⁶⁵ This view of notation is widespread, and is based upon the dichotomies of open/closed, right/wrong, freedom/control, and composer’s intentions versus performer’s intention.⁶⁶ This is again closely tied to how we grasp the work-concept and view the interpretational space for the performer, and will be discussed in relation to *Werktreue*.

The performative turn in the arts refers to a paradigm shift that took place in the humanities in the 1990s, with the acknowledgement of the social construction of reality through the suggestion that all human practices are performed. The performative turn seriously challenged the image of the score as a carrier and transmitter of an objective knowledge. It led to a replacement of essentialist conceptions by a more dynamic understanding of the work of art, which is no longer viewed as a finished work but as an aesthetic event perpetually changing through each performance. The idea that all the aspects of a work exist in the score is abandoned. In performance, the score acts as a temporal object, it is read, interpreted, and rendered in real time. The score is transformed into a process, a performative process, where the written text is only one element in the whole event. The increasing precision of performance parameters and the emergence of extended techniques in instrumental practice has also forced notational practice towards the “doing” aspect of notation. The scores must

65 Leonard Stein, “The Performer’s Point of View,” in *Perspectives on Notation and Performance*, p. 43.

66 The twentieth century has produced extremes on the continuum between freedom and control. Examples of freedom are scores by John Cage, Morton Feldman, Earle Brown and others, representing different degrees of openness and indeterminacy for the performer. At the other end, we find meticulously notated scores by composers like Brian Ferneyhough, Klaus K. Hübler and Richard Barrett.

contain detailed written manuals explaining how to execute these new idioms. The conventional descriptive notation (traditional notation describing pitch, rhythm, articulation, etc.) is now an inadequate visual analogue of musical sound; new forms of notation, rooted in the new instrumental practices, have emerged. The terms *prescriptive* and *action notation* have developed, focusing on the action of executing the music. In “Musik und Graphik,” Stockhausen’s introductory lecture at the Darmstadt courses of 1959, he spoke of notation as “action-script,” in relation to his own music and that of Busotti, Cardew, Cage, and Kagel.

In our century action-script [*Aktionsschrift*] develops—older precedents being found in tablature or “fingering notation”: the notation describing the sound is replaced by markings that indicate to the player how to *produce* the sound. It seemed no longer meaningful to determine the sound to its last physical detail if it will overburden interpretation. The more imprecise the performance of the text, the greater the contradiction between text and what the hearer hears. Music is no longer written exclusively as *sounding phenomena*. This development tends towards a draft (design, plan, outline)—script that the performer mediates as an idea of the music rather than a regulation-script. Sign/characters are employed that describe not the sound phenomena themselves but rather the direction that the player can take. This notation, containing signs for normal occurrences as well as formal processes, would not be confined to definite sound-waves, but allow preferred instruments and playing techniques as far as they accord with the given relational or differentiated changed through history.⁶⁷

Stockhausen pinpoints the fundamental change in the function of notation in much of music since World War II, namely from descriptions of sound

67 Quoted in English in David Gutkin, “Drastic or Plastic?: Threads from Karlheinz Stockhausen’s ‘Musik Und Graphik’, 1959,” *Perspectives of New Music* 50/1–2, Golden Anniversary Issue (2012): p. 274. Adapted as “Musik und Graphik,” in Karlheinz Stockhausen, *Texte zur Musik*, vol. 1, *Aufsätze 1952–1962*, ed. Dieter Schnebel (Cologne: DuMont Buchverlag, 1963), p. 179. “In unserem Jahrhundert wird schließlich die *Aktionsschrift* entwickelt (ältere Vorbilder finden wir in den Tabulaturen, den “Griffnotationen”): anstelle der den Klang beschreibenden Notation treten Bezeichnungen, die dem Spieler die *Hervorbringung* des Klangs indizieren. Es schien nicht mehr sinnvoll zu sein, den Klang bis in die letzten physikalischen Einzelheiten zu bestimmen, wenn dadurch der Interpret überfordert wird; je ungenauer die Wiedergabe des Textes, um so größer der Widerspruch zwischen ihm und dem, was der Hörer hört. Musik wird nicht mehr ausschließlich als *klangliches Phänomen* beschrieben. / Diese Entwicklung tendiert zu einer Entwurfsschrift, die dem Interpreten statt einer Vorschrift eine Vorstellung der Musik vermittelt. Es würden Zeichen verwendet werden, die nicht das Klangphänomen selber, sondern die Richtung beschreiben, die der Spieler einschlagen kann. Diese Notation, die Zeichen sowohl für formale Zustände als auch für formale Prozesse enthielte, wäre nicht auf bestimmte Klangquellen begrenzt, sondern ließe beliebige Instrumente und Spielweisen zu, sofern sie dem angegebenen Verwandtschafts- oder Unterscheidungskriterium entsprechen.”

phenomena to descriptions of actions. His suggestion that the score be viewed as a draft or “script that the performer mediates as an idea of the music” is further developed by Nicholas Cook: instead of thinking of a Mozart quartet as a “text,” he suggests that

to think of it as a “script” is to see it as choreographing a series of real-time, social interactions between players: a series of mutual acts of listening and communal gestures that enact a particular vision of human society, the communication of which to the audience is one of the special characteristics of chamber music.⁶⁸

The increasing innovation and experimentation in the field of notation in the 1950s to 1970s led to a four-year collective research project aiming at a standardization of notational parameters. An international conference was held in Ghent, Belgium, in 1974, where certain standards were agreed.⁶⁹ Some of the endorsed musical signs and symbols from the conference have become normative and others have not. In this light, it is uncertain if this standardization would have occurred independently of the conference, as a result of the sign’s applicable qualities, which then would have survived through practice. The development of notation has depended upon demands from practice from the beginning; as Richard Rastall observes, “systems of notation have been invented as they were found necessary, and modified or abandoned as they were found inadequate; so the story of musical notation in Western Europe is one of innovations, changes and disappearances.”⁷⁰

The works I have chosen for this study all represent extremes of notational practice, with scores that effectively throw light on the roles of the performer. Morton Feldman’s relatively open graphic scores from 1950–53 (see Figure 1 on page 7) are landmarks in music history, searching for an abstraction in approach that departed from the romantic performance practice. In *Pression*, Helmut Lachenmann developed his idiosyncratic notation (see Figure 2 on page 8) derived from tablature, called *prescriptive notation* or *action notation*, musical writing aiming at instrumental action, a form of notation describing what to do rather what is sounding. Klaus K. Hübler’s complex and elaborate three-stave score, *Opus breve* (see Figure 3 on page 9), with meticulously

68 Cook, “Music as Performance,” p. 206.

69 Eighty delegates from 18 countries attended the conference, where a consensus was sought in a wide range of notational issues. The standardization is taken as the basis in the “Index of New Musical Notation” in Kurt Stone, *Music Notation in the Twentieth Century* (New York: W.W. Norton and Company, 1980).

70 Richard Rastall, *The Notation of Western Music* (London: J. M. Dent & Sons, 1983), p. 5.

marked nuances applied to different performance parameters, challenge the performer's reading and playing capacities to the utmost. Simon Steen-Andersen can be seen, in several respects, as Lachenmann's heir, expanding the action notation to a self-referential circuit, creating the instructional signs in *Study #1* (see Figure 4 on page 10. 4) for the performer in a straightforward pragmatic style, far from the elaborate, calligraphic "scores as works" of some of his predecessors.

Notation is a key element in investigating questions of performance practice, as is the primary method of communication between composer and performer; it acts as an interface between the written ideas and sounding actions. The inquiry of all the works in my project arise from the written score, the artifact which not only contains a manual for live performance, but also allows for the preservation of music for future study and performance. I have chosen these scores with extremely different notational methods because I think each of them can shed its own light on the performance practice of contemporary cello music.

1.5.3 *Werktreue*

Werktreue (work-fidelity) implies fidelity to the work and, by implication, the composer's intention; it involves a search for the ideal of correct and authentic interpretation of a score. The *Werktreue* ideal is interlinked with the emergence of the work-concept, which establishes the work as an aesthetic object, and defines by extension the relationships between composer and performer, and between work and performance. The *Werktreue* ideal has been held up as a theoretical position within musicology and has been further theorized by philosopher Lydia Goehr, who claims that the *Werktreue* ideal "pervaded every aspect of practice in and after 1800 with full regulative force."⁷¹ In this view, the ideal presupposes the concept of the autonomous work, thus regulating the performance succeeding it. Richard Taruskin writes:

The "work-concept" ... regulates not only our musical attitudes but also our social practices. It dictates the behaviour of all members of the classical music community, whether composers, performers, or listeners. ... On performers it inflicts a truly stifling regimen by radically hardening and patrolling what had formerly been a fluid, easily crossed boundary between the performing and composing roles.⁷²

71 Goehr, *The Imaginary Museum of Musical Works*, p. 242.

72 Taruskin, *Text and Act: Essays on Music and Performance*, p. 10.

Within this “regimen,” performance is subservient to the score; the musical text is privileged over performance. Because, in practice, fidelity to the work really means fidelity to a score, at least initially, the term *Texttreue* has come to mean *Werktreue*. However, in Chapter Two I will posit a useful distinction between the concepts of *Werktreue* and *Texttreue*.

The *Werktreue* ideal represents a more abstract and peripheral entrance to the work than that of the practicing musician. Goehr writes, “...the performer’s space has been more suggested than systematically investigated within the aesthetic dominated by the *Werktreue* ideal.”⁷³ The ideal has been problematized in relation to the historically informed performance movement, and in the parallel debate about the nature of “authenticity,” but it is little discussed in relation to contemporary music, in spite of its obvious influence on the way we think about practice. It is thus interesting to look at how the concept is negotiated within musical practice of contemporary music. The concept of *Werktreue* is powerfully present for any performer trained in the classical tradition, as the hierarchical positions of the composer and work is securely established. The entire training of a classical musician is designed to develop the ability to follow the intentions of the composer as expressed in the score. I will discuss *Werktreue* and its implications extensively in relation to interpretation, aesthetics, the role of the performer, instrumental technique, and expertise. The function of notation is closely interlinked with *Werktreue*: in practice, to be true to the work means initially to be true to the score, which is the representation of the work for the performer.

1.5.4 Idiomaticism

The term idiomatic derives from the Greek *idiousthai*, to make one’s own, and *idios*, meaning own, personal or private. In linguistics, the term denotes the specific grammatical, syntactic, and structural character of a given language; and “idiomatic terms” are those natural to a native speaker. In music, the term is applied traditionally to music written to suit the natural physical limitations of the specific instrument and human body; idiomatic music is music written using the “language” or even the “dialect” native to the instrument. It has also been described as music written with a complete understanding of the technical strengths and weaknesses of the instrument, as well as a style, which is

73 Lydia Goehr, “Conflicting Ideals of Performance in an Imperfect Practice,” in *The Quest for Voice: On Music, Politics, and the Limits of Philosophy* (Oxford: Oxford University Press, 1998), p. 149.

proper to the instrument for which the music is written. As we can see, these terms are highly interpretative—how are “the natural physical limitations,” defined and by whom? In whose hands are “the technical strengths and weaknesses” determined? And who decides what style is “proper to the instrument”? In short, idiomaticism is determined in context, and it is not strange that the limits of the term have steadily expanded. A common understanding of the term includes what sounds best on an instrument and is qualified by the notion that this is achieved with as little effort as possible. Thus, instrumental idiomaticism has been defined as “the degree to which a given means of achieving a certain musical goal is significantly easier than other hypothetical means.”⁷⁴ Idiomatic could then mean maximum effect through minimal effort. The term is connected to intimate knowledge of the instrument—a kind of thinking with fingers, arms, bow, and body. The performer’s familiarity with the specific instrument ensures that the acoustical and physical principles are followed, making the instrument sound in “it’s own language.” The idiomatic is often coupled with virtuosity; mastery of idiomatic writing on string instruments often includes brilliantly virtuosic string crossing and bowing patterns. The craftsmanship of a composer who knows his instrument is a mark of quality as he highlights the best of the instrument (and thus the instrumentalist). A great part of the performer’s personal instrumental practice over decades resides in the body and in its memory, so that the performer knows immediately whether a piece is idiomatic and can be realized within the established idiom. All musicians know the gratifying feeling of something that quickly sounds and feels good: music that effectively rewards the invested practicing.

One clear musical memory from my childhood is of practicing and performing a Vivaldi Concerto. I remember practicing the whirling, fast, and joyous passages, my fingers running up and down the strings in idiomatic patterns that were tailored for human hands and fingers. I remember the immense joy of mastering the instrument, playing the fast passages that sound difficult but almost played themselves. I felt that this was music springing and growing out of my hands and body. In this way, the idiomatic is related to my next theme, the body. The idiomatic Vivaldi Concerto was music written in a symbiotic relationship between instrument and performer, a truly cellistic music. I use the term *cellistic* to describe topics related to playing the cello, such as cellistic tradition, virtuosity, thinking, writing, and indulgence. Cellistic occasionally replaces the term idiomatic when the cello is the subject, so that cellistic writing then means

74 Huron and Berec, “Characterizing Idiomatic Organization in Music.”

idiomatic writing for a cello. Describing her teacher William Pleeth's influence on Jacqueline Du Pré, Elizabeth Wilson makes an interesting distinction: "effectively, he had given her not only a cellistic grounding, but had formed her as a musician."⁷⁵ For Wilson, being a cellist and being a musician are different things, cellistic, here, relates to the mechanics and technique of playing the cello, whereas being a musician seems to describe something of a higher order, not necessarily expected to be taught by a cellist. This highlights the distinction between craftsmanship and musicianship, albeit in a slightly condescending way.

The possibilities and limitations of the instrument are often defined less by what the performer could actually do with the instrument than by faithfulness to tradition and the inherited wisdom about the craftsmanship aspect of being a performer. There is an ingrained instinct in instrumental practice that tends to preserve and defend the knowledge we have, as that knowledge is fundamental to the construction of the instrumentalist's identity. This largely subconscious instinct can cause resistance and even animosity, and may be the reason musicians often reject knowledge that challenge us to think and act in a new way.

If we were all in perfect agreement about the possibilities and limitations of the cello, then new music could reveal to us only what we already know. Using only the techniques currently available, and restricting the use of the instrument to only what we know, is artistically limiting. In such a context idiomatic means predictable. Composers and performers have always trespassed boundaries; they have been inventors and experimenters, ever moving and expanding the context within which the idiomatic moves. It is the musical imagination, not cellistic inclinations or apparent physical limitations, that moves the idiomatic threshold.

Transidiomatic, non-idiomatic, and radically idiomatic

It is interesting to see how the improvisation community treats idiomaticism. American saxophonist Anthony Braxton (b. 1945) coined the term "trans-idiomatic," as that which "cannot be categorized within any one musical or ethnic tradition, but rather synthesizes elements from all."⁷⁶ British guitarist Derek

75 Elizabeth Wilson, Jacqueline Du Pré: *Her Life, Her Music, Her Legend* (New York: Arcade, 1999), p. 197.

76 Graham Lock. "'What I Call a Sound': Anthony Braxton's Synaesthetic Ideal and Notations for Improvisers," *Critical Studies in Improvisation / Études critiques en improvisation* 4/1 (2008): p.

Bailey (1930–2005), a pioneer of free improvised music, introduced the term non-idiomatic:

I have used the terms ‘idiomatic’ and ‘non-idiomatic’ to describe the two main forms of improvisation. Idiomatic improvisation, much the most widely used, is mainly concerned with the expression of an idiom—such as jazz, flamenco or baroque—and takes its identity from that idiom. Non-idiomatic improvisation has other concerns and is most usually found in so-called ‘free’ improvisation and, while it can be highly stylized, is not usually tied to representing an idiomatic identity.⁷⁷

Bailey aims at improvised music that goes against the idiomatic and predictable, known idioms and personal “licks,” and is thus able to “renew and change the known and so provoke an open-endedness which by definition is not possible in idiomatic improvisation.”⁷⁸ He creates a dichotomy, denoting the known as idiomatic and the unknown as non-idiomatic. He further observes,

I might play the guitar in a way which nobody else plays but I play guitar, I wouldn’t do what I do on any other instrument. It’s very specific. I like the construction of it and the basic tuning, like fourths and a major third. That plays a significant part in what I play, harmonics, open strings, fourths.⁷⁹

Bailey plays deliberately “non-idiomatically” to create new, unused and unheard material, but he still uses the traditional instrument.⁸⁰ Bailey’s uses the term “non-idiomatic” to mean something not unlike what Richard Barrett means by “radically idiomatic instrumentalism,” describing the music associated with New Complexity. Barrett defines the term as “music which radicalizes the concept of what it means for composition to be ‘idiomatic’ to instruments.”⁸¹ Brian Ferneyhough, a prominent composer in the New Complexity, thinks about the specific nature of each instrument he employs in his compositions: “I’m very concerned that the things I ask an instrumentalist to do be so instrument-specific that they conspire to create a sort of ‘X-ray’ of his instrument’s inner

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77 Derek Bailey, *Improvisation: Its Nature and Practice in Music* (London: British Library National Sound Archive, 1992), p. xi–xii.

78 *Ibid.*, p. 142.

79 David Keenan, “‘The Holy Goof’, Interview with Derek Bailey,” *The Wire* 247 (September 2004): p. 44.

80 Perhaps paradoxically, Bailey created a significantly personal style, easily recognizable when listening to his music, proving that any style, even the ones deliberately aiming at not being a style, in the end establishes itself as something known and idiomatic.

81 Barrett, “Standpoint and Sightlines,” p. 26.

essence.”⁸² The unique and characteristic attributes of each individual instrument, in short, the instrument-specific, is, in this context, the idiomatic. Radical, in this setting, refers to the method of decoupling the practice into its most fundamental parts, into multiple components. The compositional processes of layering performance parameters as musical material create scores that are exceptionally complex (see Figure 3 on page 9, Hübler, *Opus breve*), but, at the same time are highly idiomatic.⁸³ This view on idiomatic is also radical in the sense that it departs markedly from the usual practice and common understanding of the term.

Idiomatic constraints and hyper-idiomatic

A prominent tendency in music with a high degree of complexity is the process of overcoming its idiomatic constraints. The instinct to overcome technical obstructions is inherent in all musicians—to master the instrument and the music is the very foundation of what is taught and practiced. This has resulted in an increasingly high technical standard of instrumentalism. The high level of playing, however, is gradually ironing out the resistance in the music, cancelling out what is often a calculated composed obstruction or an aesthetic element deliberately composed into the material. Pianist Ian Pace observes:

Nowadays I perceive an unfortunate trend towards this aesthetic being applied to the performance of contemporary music, to make it more conventionally “musical.” I don’t think we should be afraid of such qualities as dissonance, asymmetry, dryness, flatness, in music; they are all part of the seemingly infinite range of possibilities.⁸⁴

Examples of idiomatic constraints are found in works by for example Hübler, Xenakis, and Ferneyhough. When these works were composed they were called unplayable, but now, a few decades later, they are widely performed by numerous excellent instrumentalists. This is idiomaticism in motion, a measurable progress of musical and instrumental skills. This will be further discussed in Chapter Four.

82 Ferneyhough, *Collected Writings*, p. 375

83 Idiomatic in the sense that everything in the score derives from an instrumental practice, and is “playable.” The score has a different function in the complex music, as the composers are not expecting an exact and “true” reproduction of the notation. Several of the composers associated with the New Complexity speak of performers as filters, as resonators, or as being given tasks of deconstructing the scores. This will be further discussed in Chapter Four.

84 Ian Pace, “Ian Pace, Pianist—Interview with Marc Bridle,” accessed December 1, 2013, <http://www.musicweb-international.com/SandH/2001/Feb01/pace1.htm>.

Simon Steen-Andersen uses the term “hyper-idiomatic,” to describe a situation where different instruments play what he claims is “the same” piece, but where the common link is the movement patterns they share. When the same types of movements are transferred from one instrument to another, the sound will differ (though the degree to which it will differ depends on the degree of affinity between the instruments), but for Steen-Anderson, what makes this the “same piece” is the shared movement, not the resulting sound.

In Steen-Andersen’s idiomaticism, the instrumental choreography and the sound become a unity, as the instrumentalism constitutes the work, something that becomes evident when different instruments play the “same” piece. Idiomaticism is thus applied on three levels: the concrete action of performance, as abstraction and notation. This will be discussed in Chapter Five.

As the new repertoire proposes a new role for the cellist and a new language for the cello, a new understanding of what constitutes idiomatic is called for. Each work in my project proposes a re-articulation of the term idiomatic and clearly shows that the idiomatic potential of the cello is far from fully explored.

1.5.5 Body

In *The Sight of Sound: Music, Representation, and the History of the Body*, Richard Leppert writes about the history of the relationship between seeing and hearing:

The body is a sight, in essence a sight of sights. It is also a site, a physical presence that is biologically empowered to see at the same time it is being seen. The body is a terrain, a land, as it were, both familiar and foreign; as such it can be mapped. The geography of the body has both topography and interiority, surface and depth, and all its levels are meaningful.⁸⁵

The body has naturally always been central in instrumental performance, but the importance it has been given has varied greatly. Performance of music amalgamates sight, sound, movement, and touch—playing an instrument requires bodily skills and coordination. In the process of effectively practicing and performing the standard repertoire of classical music, the body is disciplined through thousands of practicing hours, internalizing these specialized bodily movements. Through performing the repertoire, instrumentalists share a repertoire of gestures and movements, if with individual variations. “The canon”

85 Richard Leppert, *The Sight of Sound: Music, Representation and the History of the Body* (Berkeley and Los Angeles: University of California Press, 1995), p. xix.

is thus not only a canon of works, but of instrumental choreographies.

In musicology, analyzing music or even listening to it has focused on the work and its sound, with no reference to the bodies that produce that sound. The visual presence of the body making the sounds has been regarded as an “extra musical” element, not needing—perhaps even rejecting—recognition. In this paradigm, performers should be transparent mediators of sound. As Lydia Goehr describes it: “performances should be like windows through which audiences directly perceive works.”⁸⁶ We cover the “disturbing body” in black and uniform concert dress, subduing the visual expression so that the body becomes less dominant visually. In an age before music could be piped into the dining room through speakers, performers were hidden behind screens, lest diners be too aware of the bodily movements producing the



Figure 5: Man Ray: *Le Violon d'Ingres* (1924)

sounds. The development of recorded sound has facilitated the banishment of the performing body; the performer has become not just transparent, but invisible.⁸⁷ The quintessence of disembodied sound is electronic music, where the performer is replaced by speakers and thus eliminated altogether. Regarding performers as transparent mediums represents a view on the instrumentalist's body as a vehicle for the realization of musical intentions, which derive from a composer- and work-centered perspective. In the last decades however, we have seen a “turn towards the body” in musicology. The body has become a focus of attention in studies of performance, learning, and practice, drawing on a broad field of theoretical perspectives.⁸⁸

86 Goehr, “Conflicting Ideals of Performance in an Imperfect Practice,” p. 142.

87 Goehr, *The Imaginary Museum of Musical Works*.

88 Research on body and embodiment represent a large theoretical field including cognition, perception, motor skills, and other areas. A comprehensive survey of this literature is outside the scope of this project.

The medium of the concert has as its basis the relationship between sight and sound. The audience experience is a mix of the seen and heard. The audience sees the performers—how they are dressed, their bodily movements, their gestures and interaction with their instrument and the other performers, and how they relate to the audience. Many cellists experience the musical instrument as an extension of, or even a part of their body, and this can be perceived by the audience. On the other hand, the cello and the body may also be seen as opponents, as two objects in opposition and conflict. A solo cello performance is a polyphony of relationships taking place between the performer and instrument. The cello as instrument also resembles a body, something strengthened by the corporeal terms words we use to describe it: body, neck, back, and belly. The closeness of the instrument to the human body is almost unique to cellists; we embrace the instrument, and it literally touches our heart when we play. The intimacy with which the instrument is held closely to the body, the tactile, physical touch in bowing the instrument, has been associated with sensuality and erotic metaphors, not least after it became socially accepted for women to play the cello.

A musical and instrumental practice is obviously and inextricably linked to the body, and it is therefore inseparable from the discourse of performance, knowledge, and identity. Carolyn Abbate speaks of the attempt “to domesticate what remains nonetheless wild. Actual live, unrecorded performances are for the same reason almost universally excluded from performance studies; they too remain wild.”⁸⁹ She examines different modes in performance applying the terms “drastic” and “gnostic”—the drastic representing embodied performance as a physical and material action, while gnostic is the intellectual, perception of the musical work.⁹⁰ She explains:

Jankelevitch’s distinction between drastic and gnostic involves more than a conventional opposition between music in practice and music in theory because drastic connotes physicality, but also desperation and peril, involving a category of knowledge that flows from drastic actions or experiences and not from verbally mediated reasoning.⁹¹

Abbate distinguishes between studying actual live performances—material and carnal, wild and ephemeral—and recorded ones, which treat the performance

89 Carolyn Abbate, “Music: Drastic or Gnostic?,” *Critical Inquiry* 30/3 (2004): p. 509.

90 The terms drastic and gnostic are borrowed from French philosopher and musicologist Vladimir Jankelevitch (1903–1985)

91 Abbate, “Music: Drastic or Gnostic?,” p. 510.

as an objective text. She criticizes performance studies for reducing the body to “another text to be analysed” and for its failure to address

musical performance’s strangeness, its unearthly as well as its earthy qualities, and its resemblance to magic shows and circuses. Because instrumental virtuosity or operatic singing, like magic itself, can appear to be the accomplishment of the impossible, performers at that level appear superhuman to their audiences and inspire worship or hysteria. Yet musical performance challenges notions of autonomy by staging the performer’s servitude, even automatism, and upends assumptions about human subjectivity by invoking mechanism: human bodies wired to notational prescriptions. And, despite all that, it has been discussed as if it were an unremarkable fact of civilized life, and neither love nor fear is given much play.⁹²

Abbate further describes live performance as a “site of resistance to text” and without an “a priori theoretical armour.” Abbate’s call for researching *live* performance rather than scores and recordings foregrounds the body in performance, the strangeness of the body, the fact that performance resembles ritual and magic, and can evoke human feelings of love, fear and hysteria—feelings rarely acknowledged in musicology.

Elisabeth Le Guin—a cellist herself—has coined the term “carnal musicology.” She has developed a method based on her own embodied experience as a performer, embracing the subjective and ambiguous findings in her critique of authoritative interpretations:

My critical eyes have left the score and, as it were, rolled back into my head: I am remembering the experience of having rehearsed and recorded this piece, and I use these tactile memories as my source of information on what the piece is about, what I think it expresses: a different sort of “score.”⁹³

She acknowledges the lack of recognition of the role of the body in current musicology, and calls for a value assessment:

To put the performer always first, front and centre, inverts an established order of musicological thinking; and that order was established for some good reasons. Taking the performative point of view profoundly complicates the whole enterprise of talking coherently about music.⁹⁴

She brings the performing body forwards, as an important source of information by its tactility and gestures:

92 Ibid., p. 508.

93 Elisabeth Le Guin, *Boccherini’s Body: An Essay in Carnal Musicology* (Berkeley and Los Angeles: University of California Press, 2005), p. 204.

94 Ibid., p. 13.

There is similarity here between the carnal description of music that I am proposing, and an account of a dance or set of oratorical gestures. Themes sometimes become pictures of themselves, their particular characters read through a series of visual associations with physical gesture, such as “moving the arms in toward the torso connotes heartfelness.”⁹⁵

She accepts the tacit dimension of this knowledge; a reason she claims is partly due to a cultural repression:

None of these kinaesthetic associations can ever be really free, on account of Western culture’s powerfully normative, powerfully tacit understandings of embodiment; hence, much of the verifiability and transferability of this carnal approach to musicology must rest upon unpacking and discussing those norms.⁹⁶

Le Guin calls her first chapter “Cello-and-Bow Thinking,” and attempts to describe the music from this “carnal perspective”—from behind the cello, with its physical sensations and perceptions. This is not unlike a physical presence, the corporeality of performance described by Roland Barthes:

There are two musics (at least so I have always thought): The music one listens to, the music one plays. These two musics are two totally different arts, each with its own history, its own sociology, its own aesthetics, its own erotic; the same composer can be minor if you listen to him, tremendous if you play him (even badly)—such is Schumann.⁹⁷

The significance of experiencing music through the body is brought forward here; the embodied knowledge familiar to all performers.

In the conclusion of his article “Notes Toward a Performance Practice for Complex Music,” cellist/composer Franklin Cox introduces “corporal thinking” as a performance parameter, “transcending means/end-oriented training (for example of traditional virtuosity).”⁹⁸ The perspectives mentioned are inter-related in that they take performance as a point of departure, not from the audience’s point of view, but from the performer’s. This opens up space for an understanding of performance as a “drastic” action that unfolds with, on, and through a body.

95 Ibid., p. 35.

96 Ibid., p. 24.

97 Roland Barthes, “Musica Practica,” in *Image, Music, Text*, essays selected and translated by Stephen Heath (London: Fontana Press, 1977), p. 149.

98 Frank Cox, “Notes toward a Performance Practice for Complex Music,” in *Polyphony and Complexity*, p. 128.

In the music I have chosen, a great deal of the body actions deviate from the classical repertoire of movements; they propose an expanded or even new role for the cellist and cello. Looking at each piece as choreography, the gestures of the hands and arms, looking for patterns in fingerings and bowings and change of positions, will offer new information about performance. In Feldman's *Projection I* and *Intersection IV*, the interface between the body and instrument is foregrounded—the tactile, kinesthetic aspects, the degrees of touch and movement to and from the instrument. In Hübler's *Opus breve*, the complex notation is translated to complex movement patterns in the body. The logic of the body, a certain idiomatic sphere, is constantly challenged. In Lachenmann's *Pression* the departure from the correlation between the sight and hearing phenomena is striking. By playing with the relationship between visual and audible information, Lachenmann promotes the role of the gestures to the center of attention. The gestures that for made up the "repertoire" of movements involved in making music on the cello for the last 300 years, are now separated from the sound, exhibited, and scrutinized. Steen-Andersen continues Lachenmann's project and goes even further. He emancipates the corporeal gesture, which gains its autonomy as a separate performance parameter. With a playful and explorative attitude, he also rebels against the conventional image of how a cello is held and played, introducing an unexpectedly novel range of movements to the repertoire.

The performance practice growing out of post-war new music affects the body and the body's role; it questions habits and breaks boundaries and taboos. In the new practice, the body is trained to be musically productive in various ways—it must bypass impossibilities and create new paths. The pianist Marc Couroux introduces the term "critical virtuosity," meaning "deliberately writing against conventional physical paradigms in order to trigger new relationships between body and matter."⁹⁹ This corporeal thinking and acting can be seen in the line of radically idiomatic instrumentalism discussed above, where the idiomatic is now encompassing the performer's whole performative equipment. I will have a close look at the "physical paradigms" underlying the music in my project.

99 Marc Couroux, "Evryali and the Exploding of the Interface: From Virtuosity to Anti-Virtuosity and Beyond," *Contemporary Music Review* 21/2-3 (2002): p. 54.

1.6 Theoretical and methodological perspectives

1.6.1 Researching practice

My project investigates performance practice in contemporary cello music, and the concept of practice is thus central to the dissertation. The term “practice” (which is used interchangeably with praxis) derives from the Greek *praitēin*—to do, to act. According to Oxford English Dictionary, practice can be 1) the actual application or use of an idea, belief, or method, as opposed to the theory or principles of it, 2) A habitual action or pattern of behavior; an established procedure or system, 3) Repeated exercise in or performance of an activity, so as to acquire, improve, or maintain proficiency in it... also a session of such exercise.¹⁰⁰ Although abstractions such as ideas or beliefs are connected to practice, it is predominantly a term describing action and activity. In music, the term practice can describe four different phenomena: the act of playing (as opposed to theories about playing), being a professional musician, the customary and habitual ways of doing things, and practicing or rehearsing music. The word is ambiguous, as it encompasses many aspects of the musicianship, from the concrete description of a rehearsal, to musicians’ habitual or professional practice; it is a multifarious term that embraces several layers of knowledge and information. What is the best way to research such process-oriented, changeable, and intangible phenomena? And what kind of knowledge do we look for when we want to describe a practice? One of the definitions speaks of the use of an idea, belief, or method in practice. Which methods lead to knowledge about this idea, belief, and method underlying the practice?

Historically, musical practice has not been subjected to much research.¹⁰¹ The positivist ideals borrowed from the natural sciences have encouraged us to view knowledge as something absolute and true, measurable and falsifiable, far removed from the episteme of practitioners. Within the social sciences, a number of methodical directions have emerged that recognize the relationship between the scientist and the research object, and qualitative methods have

100 “Practice,” Oxford English Dictionary Online. Dictionaries. Oxford University Press. <http://www.oed.com/>. Accessed January 14, 2013.

101 Music research has traditionally focused on the artifacts of the written scores rather than ephemeral performances taking place in real time. However, with the emergence of recordings, the reiterability of the performances has enabled musicologists to study performance more closely and develop methods accordingly.

developed as a result. In this type of research, the *insider position* can be an advantage, since the researcher can draw on the proximity to the field and study object.

1.6.2 Research on my own practice

My project investigates the contemporary cellist—the polyphonic performer’s new and multifaceted roles. The project grew from my questions about my own practice as a cellist, and investigation of my own practice will contribute significantly to knowledge about this role. As my research originates in practice, it is a “bottom up” perspective, an inside–out approach of testing my hypothesis through performance. Throughout the research period, I have drawn on my own experiences as a cellist practicing and performing the works, and I shall try to gain from the relationship between *studying* and *doing* performance. In short, as I make my way, I will oscillate between the paths of “from practice to theory” and “from theory to practice.”

Research on practice opens up a wide field of potential problems related to what research can be and what kind of knowledge this type of study could produce. I begin with the question of how to research practice, my own practice. Is it possible to oscillate between proximity and distance to practice as an object of study, a practice that is deeply embedded in my embodied and intellectual being?

Though there are few research traditions among performers, I am clearly part of a performance tradition in my practice as cellist. One could describe the work of practicing and performing contemporary music carried out by performers as a kind of basic research. However, there are no established traditions or methods of documenting and analyzing the work processes, something that I will do in the project.

My study is a hybrid project, investigating music and practice, performance and scores, abstract intentions and physical expressions. The study has two major methodological and theoretical challenges: to discuss and reflect upon my own presence and role in the project and to clarify the knowledge that is experience-based and implicit, and thus not formulated (tacit knowledge). To meet these challenges, I draw on a number of thinkers who have stimulated my own thinking, and who offer perspectives fruitful to my inquiries; these include musicologists, performers, composers, philosophers, literary scholars, and theatre scholars. None of them is a final authority, they rather shed light on different aspects

of the term performance practice and the action following the investigation. They do not offer a ready-made method, but a rather eclectic selection of voices that weave in and out of the material through the dissertation. In this way, my project offers no overarching theoretical or methodological perspective, but rather uses the relevant thinkers and musicians who serve my purpose: to elucidate performance practice in contemporary music for solo cello from multiple angles.

There are, however, certain theoretical fields often highlighted in the research on musical practice, whose relevance to this project must be considered. A brief overview of these concepts follows.

1.6.3 Artistic research

The last decades have seen a reflexive turn in musicology, where performers in various disciplines have started to study their own practices through reflecting upon and documenting their own artistic processes. Artistic research and performance studies have made their way into academia, establishing PhD and post-doctoral programs.¹⁰²

102 My project is carried out within the doctoral program at the Norwegian Academy of Music, which awarded their first PhD in 2002. My research program is called “Performance practice,” and projects within this program use musical performance as significant material in their research, either through the performing researcher, or in investigating performance-related topics or perspectives. Documentation of the artistic work in the form of a CD has been common. The written part of dissertations within this program have treated, for example, reflections on historical performance practice, interpretation of music, aesthetical and philosophical discussions, biographical documentation, and improvisation. Dissertations within my area of research include: Gjertrud Pedersen, “Spill og refleksjon: En studie av en musikalsk interpretasjonsprosess av Harrison Birtwistles *Deowa* i relasjon til sju andre komposisjoner for kvinnestemme og klarinett” (PhD, 2009), and Astrid Kvalbein, “Musikalsk modernisering: Pauline Hall (1890–1969) Som komponist, teatermenneske og Ny musikk-leiar” (2013). Anders Førisdal’s forthcoming study, “Radically Idiomatic Instrumental Practice in Works for Guitar Solo by Brian Ferneyhough, Richard Barrett and Klaus K. Hübler” discusses the use of instrumental practice as a compositional parameter. Several themes overlap with my study, but our methods and approaches differ. Parallel to the PhD research, The Norwegian Artistic Research Fellowship Programme is a 3-year national scholarship program for artistic development that does not qualify for PhD degree, but primarily documents the creative or performing work in the form of concerts or performances, secondarily in the form of written reflections. The program is among the first in this field in Europe.

Artistic research has been defined as “research where the research question is answered through artistic practice.”¹⁰³ Henk Borgdorff discusses three variations of artistic research, distinguishing between research *on* the arts, *for* the arts, and *in* the arts, expressing “different perspectives on the status of art practice.”¹⁰⁴ According to Borgdorff, research *on* the arts is the “interpretative perspective ... common to the research traditions of the humanities and social sciences, which observe a certain theoretical distance when they make art practice their object of study.”¹⁰⁵ Research *for* the arts is an instrumental perspective in that it “art practice is not the object of study, but its objective,”¹⁰⁶ for example aiming at improving technical solutions. Research *in* the arts is when “artistic practice is not only the result of the research, but also its methodological vehicle, when the research unfolds in and through the acts of creating and performing.”¹⁰⁷ Common for the different definitions is that practice is both “object” and “method” and there is a lack of rigid distinction between artistic and academic research. Borgdorff further points out that the subject of artistic research includes an aesthetic experience, “an experiential component that cannot be efficiently expressed linguistically.”¹⁰⁸ As a consequence of this, the documentation of artistic research often combines a written thesis combined with an artistic portfolio.

In *The Artistic Turn: a Manifesto*, Kathleen Coessens, Darla Crispin and Anne Douglas argue that the development of artistic research represents a paradigm shift parallel to the so-called linguistic and cultural turn the 1960s.

The artistic turn, in this sense, implies a profound questioning of the place of the artist and his or her practice in contemporary society ... The places that the artistic turn seeks to investigate and to illuminate are those of artistic practices

103 Peter Dejans, leader of Orpheus Institute in Ghent, one of the leading centers for artistic research, in a seminar at The Norwegian Academy of Music December 11, 2012.

104 Henk Borgdorff, “The Production of Knowledge in Artistic Research,” in *The Routledge Companion to Research in the Arts*, ed. Michael Biggs and Henrik Karlsson (London: Taylor & Francis, 2010), p. 46. Henk Borgdorff is a central figure in the field of Artistic Research. In addition to being Professor of Art Theory and Research at the Amsterdam School of the Arts, he was one of the founders of the practice-based doctoral program in music (docARTES), and has published extensively on the subject. Borgdorff is building on Christopher Frayling’s distinctions, in *Research in art and design*, Royal College of Art Research Papers 1 (London: Royal College of Art, 1993).

105 Ibid.

106 Ibid.

107 Ibid.

108 Ibid., p. 47.

and their inherent knowledge. “Places” always imply a certain viewpoint; here, the point of view is that of the artist. The artistic turn, by delineating such places, by reclaiming a role in understanding knowledge, is essential in rebalancing ways in which knowledge is produced in culture.¹⁰⁹

In distinguishing artistic research from artistic practice, they write:

Artistic research resides in the recording, expression and transmission of the artist’s research trajectory: his or her knowledge, wanderings, and doubts concerning exploration and experimentation. It is only through the artist that certain new insights into otherwise tacit and implicit knowledge can be gleaned and only through the artist-researcher remaining an artist while pursuing these insights that he or she will be able to enrich the existing inquiries carried out by scientific researchers.¹¹⁰

They acknowledge the position in between disciplines: “Artistic research comes about when there is something to be found out that is addressed neither by science nor by expert practice alone,”¹¹¹ and encourage the use of the friction that occurs, to perform artistic experiment within the frame of research.

My object of study is performance practice related to contemporary music, and I will examine this *in* and *through* performance. In order to answer my research questions, I am dependent on artistic practice as a vehicle, tool, or method. From this perspective, my study can clearly be positioned within artistic research. In my view, this research direction is rather an umbrella term embracing a multitude of approaches and methodologies than a definition or framework. Artistic research also has a political agenda, relating the artistic practices to established traditions within academia in order to legitimize it as research and appreciate the value of different types of knowledge in the art. In short, it aims at challenging established epistemologies.

Artistic research is cyclic by nature, the focus is on processes rather than results, and new insights are constantly returned to the next cycle. In this way, artistic research is related to other theories used in research, such as action research, Donald Schön’s concept of “reflection-in-action” and theories of tacit knowledge, which I will briefly discuss in the next section.

109 Kathleen Coessens, Darla Crispin and Anne Douglas, *The Artistic Turn: A Manifesto*, Collected Writings of the Orpheus Institute: Orpheus Research Centre in Music 1 (Leuven: Leuven University Press, 2009), p. 17.

110 *Ibid.*, p. 91.

111 *Ibid.*, p. 96.

1.6.4 Action research

Action research¹¹² is a research design that equates theoretical and practical knowledge, and is widely used in practice-based research. In my research context, I need tools to describe the work-processes and to raise the awareness of my own role as researcher-subject/object. Here I consider the action research design to help with productive approaches, particularly in the view of learning as a never-ending cycle, where the goal is new beginnings again and again, along the same lines as the integral practicing cycles in musical practices. This is related to how we view knowledge, how we understand it, and how we acquire it. The goal is to initiate a process that involves reflection, testing, and acquisition of new knowledge, with the aim of developing and improving the practice, reforming existing theories and developing new ones. Action research uses a variety of qualitative methods to obtain information, including interviews, observation, analysis of cases and experiments.¹¹³ According to Kurt Lewin, the method is cyclical, in that it involves a) planning of an action, b) the action is carried out, c) the action is followed by observing what happens, and d) the result is object of reflection and is leading to planning of new actions.¹¹⁴ Action research considers the process involving questions and reflection as important as the results of the research. Thus, the reflection on practice and the experiments in practice become mutually dependent and equated. The action researcher is experienced and is involved in the field being researched, and the research can therefore not be considered objective or value-free. The method has much in common with other research methodologies, but what is special about it is that it is change-oriented and that the researcher is the focal point of the investigations.

1.6.5 “Reflection-in-action” and “reflection-on-action”

Donald Schön has greatly contributed to the development of the theory and practice of learning. His concepts “learning society,” “reflection-in-action,” and “reflection-on-action” have been central to practice-based research. Schön’s

112 Action research is a scientific method of design that originated in the United States within social research in the 1930s and 1940s.

113 Thomas A. Schwandt, *Dictionary of Qualitative Inquiry*, second edition (Los Angeles: Sage, 2001).

114 Kurt Lewin, *Group Decision and Social Change* (New York: Holt, Rinehart and Winston, 1958), p. 201.

The Reflective Practitioner brought the concept of reflection into the core of the understanding of what professionals do.¹¹⁵ He challenged practitioners to investigate technical knowledge versus artistic excellence in the development of professionalism. His theories are used in several fields, including education theory, architecture, and health sciences. Schön talks about improving work (practice) continuously through improvisation and “thinking on one’s feet,” and through experience cycles of learning and practice. He writes about reflection in and on action—looking at our experience, getting in touch with our feelings, and being aware of the theories we use. This leads to new understanding, which is returned to the action in the unfolding situation. The theory of reflection-in-action and reflection-on-action is also known as “double-loop learning,”¹¹⁶ in which both processes are required in producing knowledge. Single-loop learning involves identifying mistakes and correcting them, searching for better strategies and making them operational. Double-loop learning involves reflection, a critical approach to unravel underlying values, structures, and ideas. This double loop allows us to reflect upon the action; it leads to questions and ideas related to action. In other words, reflecting on action develops theories of action.

In each instance, the practitioner allows himself to experience surprise, puzzlement, or confusion in a situation, which he finds uncertain or unique. He reflects on the phenomena before him, and on the prior understandings, which have been implicit in his behavior. He carries out an experiment, which serves to generate both a new understanding of the phenomena and a change in the situation.¹¹⁷

Schön addresses the tacit knowledge inherent in practice, and his descriptions of the practitioners’ reflective relationship towards practice as an important source of developing new knowledge is frequently used in describing musical practices.

[C]ompetent practitioners usually know more than they can say. They exhibit a kind of knowing-in-practice, most of which is tacit. ... Indeed, practitioners themselves often reveal a capacity for reflection on their intuitive knowing in the midst of action and sometimes use this capacity to cope with the unique, uncertain, and conflicted situations of practice.¹¹⁸

115 Donald Schön, *The Reflective Practitioner: How Professionals Think in Action* (New York: Basic Books, 1983).

116 Chris Argyris and Donald Schön, *Theory in Practice: Increased Professional Effectiveness* (San Francisco: Jossey-Bass, 1974), p. 7.

117 Donald A. Schön, *The Reflective Practitioner*, p. 68.

118 *Ibid.*, pp. viii–ix.

Yet is reflection-in-action a method? For Schön, reflective practice was to be enacted; it was not theories applicable to experiences or situations. Håvard Åsvoll points out that the different kinds of reflections and varying phenomena that are subject to reflection present tools for the practitioners to conduct research on their own practice:

In light of all possible realisations involved in reflection-in-action, the practitioner can become a researcher on his own practice. The practitioner is thus not dependent on established theory and techniques, but can construct a new understanding and theory based on the unique situation.¹¹⁹

Schön's reflective cycle has much in common with the cycle described in action research.

1.6.6 Tacit knowledge

When it comes to analyzing the knowledge musicians mobilize in their musical practice, theories of *tacit knowledge* constitute a fruitful approach to the investigation. In this section, my discussion touches upon two epistemological traditions, derived from Polanyi and Wittgenstein.

Much of expertise in musical practice is based on tacit perceptions, implicit factors, and skills that are transmitted in the context of apprenticeships and "communities of practice," without necessarily being verbalized. Musicians make a number of decisions based on intuition and internalized knowledge, which is often based on experience, and largely subliminal.

In musical practice, the hours, weeks, months, and years of practicing and playing, the movements are repeated over and over, corrected by teachers, repeated and repeated until internalized, until one plays without thinking—until playing becomes your second nature, something one not only does but something one becomes. I am a cellist, a musician making music. The musical and instrumental experience in its many facets is inscribed into body. The lessons, the concerts, seminars, auditions, chamber music sessions, orchestra rehearsals, solo practicing, all the music is absorbed into the body, great parts of it living its secret life well hidden from the conscious mind. One can naturally speak of it, discuss it, and participate in the discourse. But a large part of the knowledge will remain hidden in the body and in the depth of the unconscious, hidden in part because it is acquired through non-intellectual means: intuitively,

119 Håvard Åsvoll, *Teoretiske perspektiver på taus kunnskap. Muligheter for en taus pedagogikk* (Trondheim: Tapir Akademisk Forlag, 2009), p. 70. My translation.

instinctively, through mimesis and emotion. We do not have access to certain areas, even by searching our mind and trying to analyze our actions. In *The Tacit Dimension*, Michel Polanyi said: “I shall reconsider human knowledge by starting from the fact that *we can know more than we can tell*,”¹²⁰ This applies to both practice and performance, and he focuses on the way theoretical and formal knowledge rest on the dimension of experience.

Polanyi divides knowledge into two types—explicit and tacit. Explicit knowledge can be transferred by means of formal systematic language and can be discussed and shared through verbal dialogue. Tacit knowledge, however, has a personal and often practical quality that makes it hard to formalize and communicate, because it has become part of the person through subliminal actions. Examples of tacit knowledge include the ability to recognize a face without being able to describe its parts, or to ride a bicycle without thinking through the movements involved. Tacit knowledge can also be described as experience or skills. According to Polanyi, by adopting methods of systematization, evaluation, and reflection in one’s practice, tacit knowledge can be revealed and thus become explicit. This is because knowledge can be shared and transferred through actions that the body can remember in specific situations. Polanyi mentions three ways to transfer tacit knowledge: imitation (mimicry), identification, and learning by doing. He writes:

Consider the situation where two people share the knowledge of the same comprehensive entity—of an entity, which one of them produces and the other has received. But the characteristic features of the situation are seen more clearly if we consider the way one man comes to understand the skillful performance of another man. He must try to combine mentally the movements, which the performer combines practically, and he must combine them in a pattern similar to the performer’s pattern of movements. Two kinds of indwelling meets here. The performer co-ordinates his moves by dwelling in them as parts of his body, while the watcher tries to correlate these moves by seeking to dwell in them from outside. He dwells in these moves by interiorizing them. By such exploratory indwelling the pupil gets the feel of a master’s skill and may learn to rival him.¹²¹

Here he writes about transferring tacit knowledge as a skill from one human to another, a situation parallel to a musical lesson. What he describes here is not how to make this knowledge explicit—to verbalize it—but how it is transmitted through indwelling, immersion, imitation, and identification.

120 Michael Polanyi, *The Tacit Dimension* (Chicago: University of Chicago Press, 2009), p. 4.

121 *Ibid.*, pp. 29–30.

A central concept of Polanyi is sensory perception that perceives the totality of the situation. Polanyi borrows the term from Gestalt psychology, which argued that the totality (*Gestalt*) has characteristics that affect the individual details that are parts of the whole. According to Gestalt psychology, the whole is more than the sum of its parts. This overall experience in situations influenced Polanyi's theory of tacit knowledge.

He claims that our attention is constantly shifting between subsidiary and focal awareness: "What makes an awareness subsidiary is the *function it fulfils*; it can have any degree of consciousness, so long as it functions as a clue to the object of our focal attention."¹²² In this way, subsidiary can be seen to be the means, and focal, the end. The two aspects of "knowing what" and "knowing how" (*wissen* and *können* in German), have the same structure, and Polanyi thus does not distinguish between practical and theoretical knowledge.¹²³ His concept of knowledge is therefore at the center of much practice-based research. Polanyi does not present methods to make tacit knowledge explicit, but he prepares the ground and paves the way for others to build upon his theories and concepts and to develop methods for practitioners.

1.6.7 Wittgenstein's "language-game"

In his *Philosophical Investigations*, Ludwig Wittgenstein introduced the term "language-game," which "is meant to bring into prominence the fact that the *speaking* of language is part of an activity, or a form of life."¹²⁴ He investigates the function and meaning of words, and establishes the fact that words need rules and a context in order to have a meaning. He makes an analogy between rules in a language and rules in a game—following the rules is the way the game reveals itself. Wittgenstein's use of language-game foregrounds the *activity* as a key to understanding a concept, and shows how language works as part of social practices embedded in multifarious activities of human life. In this way, the language games are not confined to verbal language, but can be linked to other concepts of "grammar" where specific actions create meaning.

122 Ibid., pp. 95–6.

123 Ibid., p. 7. In *The Concept of Mind* (1949), British philosopher Gilbert Ryle also makes a distinction between "knowing how" and "knowing that" concepts of practical and theoretical knowledge.

124 Ludwig Wittgenstein, *Philosophical Investigations* (Oxford: Blackwell., 1958). PI §23, p. 11e.

Could we, then, by looking at the activities related to the social activity of musical performance, gain insight into the rules, and thus the concept of performance practice? If the rules are “baked” into the practice, can we understand them if we investigate, or even participate in, the practice? Wittgenstein writes: “But if a person has not yet got the *concepts*, I should teach him to use the words by means of *examples* and by *practice*.—And when I do this I do not communicate less to him than I know myself.”¹²⁵ Through their use in practice, concepts may constitute their meanings. Every practice includes several ways of knowing, Wittgenstein writes:

Compare knowing and saying: how many feet high Mont Blanc is—how the word “game” is used—how a clarinet sounds.

If you are surprised that one can know something and not be able to say it, you are perhaps thinking of a case like the first. Certainly not of one like the third¹²⁶

The knowledge involved in knowing the height of a mountain is fundamentally different from describing how a clarinet sounds, as there is no single word that describes the sound. The clarinet, or the cello, is not a word that signifies one specific meaning, but the word “cello” represents a practice, a comprehensive practice with its own rules, which are historically embedded in our cultural practices.

I would like to draw out two main points from this theoretical review that will form the underlying premises in my project. The first is the cyclical method represented by the overarching view of artistic research, and more specifically described through action research. The two basic elements, practice and reflection, with their offshoots, are continuously fed into a loop, in which feedback is rechanneled into practice. The goal is to reflect upon practice, to uncover and extract knowledge and information, both implicit and explicit. The “reflection-in-action” and “reflection-on-action” can be viewed as building blocks in this cyclical method. It is about reflecting in the moment of action, as well as outside of the action, leading to enhanced awareness. The embedded goal, to improve practice—continuously resound as the project’s foundation. Elements of the inherent musical practice are made explicit through this reflective loop, and reinforce the cycle. The second point is the theories of tacit knowledge, which pervades the musical and instrumental practice.

125 Ibid., PI §208, p. 83e.

126 Ibid., PI §78, p. 36e

1.6.8 Music as research and performance as text

When attempting to situate “The Polyphonic Performer” as a work of research, it becomes obvious that this is a hybrid project as it comprises two very different elements: musical performances, documented in the form of twelve videos and a written text in the form of a dissertation. Adorno speaks of the relation between music and words:

Music resembles a language. Expressions such as musical idiom, musical intonation, are not simply metaphors. But music is not identical with language. The resemblance points to something essential, but vague. Anyone who takes it literally will be seriously misled.¹²⁷

Unlike literature and visual art, music is not subject to direct representation or explicit discourse. The core of both the musical practice itself and writing about musical practice revolves around interpretation. There exist no universal, scientifically testable truths in music. The knowledge that evolves from this project is a kind of personal knowledge, a particular and specific knowledge derived from my subjective experience with the individual cases in my research.

1.7 Previous research in the field

The literature covering the field of research can be usefully, if roughly, divided into writing by performers, and writing by musicologists, historians, and theorists. The second category, and the literature about each composer, will be discussed in the relevant chapters and will not be dealt with here. I focus here on literature predominantly treating contemporary music. A characteristic of previous research in this field is that it either has been oriented towards the practical issues confronting the performer,¹²⁸ or has focused on music theory in the more traditional sense. In spite of the increasing focus on performance the last decades, there is still little research literature from performers. Cellist Frances-Marie Uitti has written a chapter on new musical directions and

127 Theodor W. Adorno, *Quasi una Fantasia: Essays on Modern Music*, translated by Rodney Livingstone (London and New York: Verso), p. 1.

128 Nathan Cook, “Scordatura Literature for Unaccompanied Violoncello in the 20th Century: Historical Background, Analysis of Works, and Practical Considerations for Composers and Performers” (DMA thesis, Rice University, 2005). Jui-Chao Wang, “Pedagogical Issues in Contemporary Cello Literature since 1950” (DMA thesis, University of Texas at Austin, 1994). The last of these has a pedagogical perspective, often found in this research.

extended playing techniques in *The Cambridge Companion to the Cello*.¹²⁹ She gives a brief overview of the repertoire from Webern's *Drei kleine Stücke*, Op. 11 (1914) on, covering important aesthetic directions and central contemporary works for cello. Caroline Bosanquet has written a book on cello harmonics, which illustrates the explanations with short exercises.¹³⁰ *The Contemporary Violin*, by Patricia and Allen Strange, is an extensive and methodical survey and presentation of extended techniques, and they also discuss issues related to performing with electronics. Although excerpts from the violin repertoire are used, the book is highly relevant for cellists as most technical issues are common to all string instruments.¹³¹ An extremely important contribution in the performance practice of contemporary string playing is the recently published *The Techniques of Violin Playing* by violinist Irvine Arditti and composer/conductor Robert H.P. Platz. A DVD demonstrating the techniques accompanies the book. The aim is a survey of contemporary techniques for violin intended for composers and performers. Arditti writes: "It would also be useful to standardize playing symbols for extended techniques so that young performers and young composers both begin (and continue) to speak the same language."¹³² Arditti discusses the major modern technique categories, giving concrete examples and practicing advice from central twentieth-century repertoire. His style is factual and to the point, but his vast experience and aesthetic judgment is constantly present in his selection and discussions of the works. The strength in this publication lies in the balance of theory and practice: the combination of the detailed written accounts of the techniques, and their application in excellent performances of snippets of each work. Given Arditti's unique position as a performer and collaborator with composers over the last 35 years, I consider this book/DVD the first publication covering the basics of contemporary string performance practice. In spite of its brevity (117 pages) and selective treatment of techniques and repertoire, it is a gold mine in terms of getting to the core of the practice.

129 Frances-Marie Uitti, "The Frontiers of Technique," in *The Cambridge Companion to the Cello*, ed. Robin Stowell (Cambridge: Cambridge University Press, 1999).

130 R. Caroline Bosanquet, *The Secret Life of Cello Strings (Harmonics for Cellists)* (Cambridge: S] Music, 1996). Also worthy of mention is Paul Zukofsky, "On Violin Harmonics," *Perspectives of New Music* 6/2 (1968): 174–81, on violin-harmonics, with charts showing every possible fingering.

131 Patricia Strange and Allen Strange, *The Contemporary Violin: Extended Performance Techniques* (Berkeley: University of California Press, 2001).

132 Irvine Arditti and Robert Platz, *The Techniques of Violin Playing* (Book and DVD) (Kassel: Bärenreiter, 2013), p. 9.

With *Viola Spaces*, violist Garth Knox has written eight short pieces that explore recurring extended techniques. The score is accompanied by videos of him playing them on his homepage.¹³³ In her dissertation, US violinist Brenda van der Mewre presents, examines, and gives practical advice in relation to technical challenges in a repertoire of contemporary violin music.¹³⁴ The dissertation includes 10 caprices composed by the author, treating specific contemporary parameters. Cellist Ellen Fallowfield's dissertation "Cello Map"¹³⁵ is a systematic and scientific approach to new techniques and an important contribution in this field. "The 'map' of the title is meant in the scientific sense of the word; connections are made between: 'actions that a cellist makes' and 'sounds that a cello can produce.'¹³⁶ Her study is systematizing, however, categorizing and describing phenomena of physical and acoustical nature connected to the cello, but without placing them in a musical context. Where Fallowfield aims at (objectively) considering "every possible sound-modifying action ... as a continuous scale, upon which as yet undiscovered techniques can also be slotted,"¹³⁷ I am more interested in the three-way interface between cellist, cello, and score, emphasizing the subjective interpretative aspects of performing, practicing, and playing. Going further than Fallowfield, double bass player Håkon Thelin has undertaken an artistic research project in multiphonics, which he identifies, describes, discusses, and links to contemporary works, then integrating the techniques into his own compositions.¹³⁸ In doing this, Thelin is developing new techniques by using the insight from his research.

Cellist Siegfried Palm has edited one of the rare educational publications for contemporary music, *Pro musica nova: Studien zum Spielen neuer Musik: für Violoncello*,¹³⁹ for which he commissioned 12 composers to write short pieces,

133 Garth Knox, *Viola Spaces: Contemporary Viola Studies*. (Mainz: Schott 2009). Garth Knox, *Viola Spaces*, <http://www.garthknox.org/viola-spaces/>

134 Brenda van der Mewre, "New Frontiers in the Art of Violin Performance: The Contemporary Study and Pedagogy of Extended Performance Techniques for the Violin" (PhD diss., Boston University, 2005).

135 Ellen Fallowfield, "Cello Map: A Handbook of Cello Technique for Performers and Composers" (PhD diss., University of Birmingham, 2010). Fallowfield's webpage expands the dissertation with a video-catalogue demonstrating the techniques, at <http://www.cellomap.com>.

136 Fallowfield, "Cello Map," abstract.

137 Ibid.

138 Håkon Thelin, "A New World of Sounds—Recent Advancements in Contemporary Double Bass Techniques," <http://haakonthelin.com/multiphonics/>.

139 Siegfried Palm, (ed.), *Pro Musica Nova: Studien zum spielen neuer Musik: für Violoncello* (Wiesbaden: Breitkopf & Härtel, 1985). According to Helmut Lachenmann in conversation

from which he extracted exercises that would prepare students for the pieces. The oboist Christopher Redgate¹⁴⁰ and pianist Marc Couroux¹⁴¹ have also addressed performance issues in specific works with a practical approach. In the interview “Biting the hand that feeds you,”¹⁴² the performer/composer Michael Finnissy writes about the performer’s perspective versus the composer’s, offering interesting cross-perspectives. Pianist/musicologist Ian Pace has contributed to the field of performance practice with several publications, reports, and reviews of contemporary music. His chapter “Notation, Time and the Performer’s Relationship to the Score in Contemporary Music”¹⁴³ discusses different approaches to a range of scores by Elliot Carter, Kagel, Boulez, Feldman, Finnissy, Stockhausen and Ferneyhough. He draws from his experience as a performer, but also brings in key discussions in the interface between notation and on interpretation, both pragmatic and ideological issues which are relevant for the entire field.

Belgian cellist Arne Deforce’s dissertation about performance practice of complex music from the late twentieth and early twenty-first century discusses music by Iannis Xenakis, Brian Ferneyhough, Helmut Lachenmann, and Richard Barrett. His artistic research project includes several performances and three CDs with music by Giacinto Scelsi, Morton Feldman, and Iannis Xenakis. Inspired by post-structuralist thinkers like Jacques Derrida, Gilles Deleuze and Félix Guattari, Deforce chooses an intertextual approach with a numeric structure of 472 short texts called *meditations*, aiming at a nonlinear reading, more in line with the music he is performing:

If one wishes to linguistically approach the thinking that actually takes place in performance practice then an appropriate form has to be found that exposes the shapes of artistic thinking... Inspired by the polyphony and the layered parametric structure of contemporary complexity scores, the meditations are

with me, *Pression* (1969) was originally commissioned to be a part of this publication, but for unknown reasons, Palm omitted it.

140 Christopher Redgate, “A Discussion of Practices Used in Learning Complex Music with Specific Reference to Roger Redgate’s *Ausgangspunkte*,” *Contemporary Music Review* 26/2 (2007): 141–9.

141 Marc Couroux, “Evryali and the Exploding of the Interface.”

142 Michael Finnissy, “Biting the Hand That Feeds You,” *Contemporary Music Review* 21/1 (2002): 71–9

143 Pace, Ian. “Notation, Time and the Performer’s Relationship to the Score in Contemporary Music.” In *Collected Writings of the Orpheus Institute: Unfolding Time: Studies in Temporality in Twentieth-Century Music*. Edited by Darla Crispin, 151–192. Leuven: Leuven University Press, 2009.

designed to take on the structure of an intertextual polyphony. The thesis has been conceived as a labyrinth.¹⁴⁴

Unfortunately, the thesis has not been translated from Flemish, so I am in no position to evaluate its contribution to the research field of performance practice. However, Deforce's recordings are excellent, and I must give him credit for experimenting with the structure and form of his text. In his dissertation "Shut up 'N' Play! Negotiating the Musical Work,"¹⁴⁵ Swedish guitarist Stefan Östersjö is looking at performance practice in contemporary music for guitar, focusing on the relationship between performer and composer. He has developed a model for the work of analysis involving multiple agents: composer, performer, instrument, musical score, and electronics. He questions the concept of authenticity in the performance debate, and divides musical interpretation into two categories: analytic interpretation and "thinking-through-practice." Östersjö's study addresses a number of key concepts: the work's ontology, performance practice, notation, rehearsing, and so forth. These terms and his field of expertise are closely related my study. But where Östersjö investigates the relationship with the composers, it will be appropriate for me to work with the performer's reflection on their own practice.

In her dissertation, "A holistic view of the creative potential of performance practice in contemporary music,"¹⁴⁶ the German violinist and violist Barbara Lüneburg explores performance practice in contemporary music from the point of conceptualizing a concert to its performance on stage. She discusses the processes of commissioning works, collaboration with the composer (she collaborates with 22 composers during her project), curatorial tasks and concert presentations. She addresses what she perceives to be unexplored potential in collaboration between performer and composer in classical music. She investigates and questions certain inherited beliefs and power hierarchies related to the creative and executive roles—questions that I take up in my dissertation.

144 Arne Deforce, "Laborinth II : Denken als Experiment : 472 'Meditaties' over De Noodzaak Van Het Creatief Denken En Experimenteren in Het Uitvoeren Van Complexe Muziek Van 1962 Tot Heden" (PhD diss., Leiden University, 2012), p. 161–2.

145 Stefan Östersjö, "Shut up 'n' Play! Negotiating the Musical Work" (PhD diss., Lund University, 2008).

146 Barbara Lüneburg, "A Holistic View of the Creative Potential of Performance Practice in Contemporary Music" (PhD diss., Brunel University London, 2013).

In her dissertation “Timbre as discourse,”¹⁴⁷ violinist Mieko Kanno problematizes the work-concept, the performer’s role, and performance practice in contemporary music, connected to specific works by Giacinto Scelsi, Richard Barrett, Mathias Spahlinger, John Cage, and Helmut Lachenmann. As a skilled and experienced performer of new music, she contributes with rare and valuable perspectives, communicated in a clear and precise language. Her article, “Prescriptive notation: Limits and challenges,”¹⁴⁸ discusses the performers role in relation to the different notational types in several contemporary works, and the article “As if the composer is dead”¹⁴⁹ examines the interpretative implications (for the performers) of the composer’s presence as a living person. Kanno’s investigation of the two-way relationship between practice and theory, adding her subjective perspectives but nevertheless able to contextualize them, is related to my own line of research.

Many factors that emerge from previous research are fruitful and relevant to my project, but with the exception of Kanno, Fallowfield, Lüneburg, and Östersjö, performers scarcely apply scientific approaches and situate the research in a wider context. There are still unexplored areas between performance and text and between performer’s competence and musicology that I want to investigate. My project will, to a greater extent than previous research, attempt to say something about the implicit and explicit aspects of performance practice in contemporary cello music.

1.8 Outline of the dissertation

This first chapter introduces the main themes and discusses some of the theoretical and methodological considerations in the project. The following four chapters will cover the music by each of the four chosen composers. In Chapter Six, the final chapter, I will discuss my findings in light of the four main themes; *notation*, *Werktreue*, *idiomatic*, and *body*, and look at the polyphonic aspects of the performer.

147 Mieko Kanno, “Timbre as Discourse: Contemporary Performance Practice on the Violin” (PhD diss., University of York, 2001).

148 Kanno, “Prescriptive Notation: Limits and Challenges.”

149 Mieko Kanno, “As If the Composer Is Dead.” *Mortality: Promoting the interdisciplinary study of death and dying* 17 (2012): 170–81.

In Chapter Two, “*Projection I* and *Intersection IV*—performance practice in Morton Feldman’s early graphic score music: A license for improvisation or realizing the ideal of a *totally abstract sonic adventure?*,” I look at the implication of experimental notation, and discuss different aspects of interpretational freedom. Drawing on literary theory, I address the question of authorial intent in the work, following a discussion of the “non-dead” author in contemporary music. The theories are tested on practice as I describe two diametrically different processes of practicing and performing the two works, following the opposite ends of the scale regarding the intentions of the composer; in this context named *Werktreue* and *Texttreue*. Chapter Two concludes with a description of Feldman’s performance practice with the tactile touch and virtuosic listening at the core, and how his abstract ideal is rather concrete, as the point of departure is the material aspects of sound, and what he calls the “acoustic reality.”¹⁵⁰

By setting the notation back to point zero in his graphic notation, Feldman is preparing the ground for later composers. He also departs from the romantic sound ideal, and strives for a pure sound, free of habitual and traditional instrumentalism. He opens up the dynamic doors to new domains; no sound is soft enough for him, a quest requiring a sensitivity of touch hitherto uncalled for. This cannot be called extended techniques, nor is it innovative, instrumentally speaking. But it prepares the ground for later experiments. Feldman resets the practice to zero, throws the instrumental baggage off the back and peeks into unknown terrain.

Chapter Three is named *Pression* and is divided into two parts: “*Pression*—a Performance Study”, and “*Pression* revised: Anatomy of sound, notated energy and performance practice.” For Lachenmann, the cello is a historical object loaded with masterpieces from the past. But the past no longer represents a way forward. After the World War II, Lachenmann sees the former beauty of the cello as withered and vanished, the quest for beauty has turned into a “masquerade.”¹⁵¹ Lachenmann wanted to invent a new beauty, and, not unnaturally, considering the cello’s high status as an expressive solo instrument, he chose the cello for his initial experiments. In *Pression* the cello becomes the arena for the unknown, the unfamiliar sounds and actions. But in spite of this defamiliarization, he demands that each sound is executed with the same meticulous care for the sounds as in traditional classical music. The cello is a vehicle

150 The idea of the acoustic reality is inspired by Edgard Varèse and will be discussed in Chapter Two.

151 Lachenmann, “The ‘Beautiful’ in Music Today,” p. 21.

to promote a new form of listening—a listening to a strange and distorted new beauty, but placed in old context of the traditional concert hall setting. The radical role of the cherished and familiar cello is to illuminate the listeners' habits and expectations of what a cello is, and to question what a beautiful sound is, the ultimate aim is listening as an existential experience.

Lachenmann was in the forefront of experimentation with acoustic instruments in the 1960s. His ingenious innovation, the bridge-clef, facilitating the description of where on the instrument to play, contributes to transform not only the sounds, but also the performer's state of mind. The primary question is not any longer which sound to produce, but *how* to produce it. A manual or a map of the cello shows where the action is to take place, it replaces the conventional abstract descriptive notation which represents the sounding result. Actions such as rubbing, pressing and stroking are in one respect far from the romantic expressions, but still related, as the execution of the actions is required to contain as much care and specificity as in performance of classical music.

Lachenmann is radical in the sense that he transgresses borders and breaks the old taboo that the cello is not to be touched on the treasured varnish on the instrumental body. Traditionally, a string player plays within certain domains on the strings, designated for this. *Pression* crosses this line, making use of the whole cello, without regard to the unspoken rules situated in cello practice. This represents a break in the performance practice of cello. The border of what has been regarded as idiomatic has been thoroughly traversed. The second part of Chapter Three is devoted to the revision of *Pression*, undertaken by the composer in collaboration with renowned cellist Lukas Fels of the Arditti quartet in 2010. The revision of the score reveals valuable information about the performance practice of *Pression* in the course of its 40 years. The first piece in the aesthetic direction Lachenmann named *musique concrète instrumentale*, *Pression* was a milestone in the cellistic performance practice when it comes to prescriptive notation and extended techniques. Expanded notational and instrumental experiments followed in its wake.

Chapter Four, "Radically idiomatic instrumentalism in *Opus breve* by Klaus K. Hübler. An investigation of performance practice in complex contemporary music," discusses the short but dense work, *Opus breve* (1987) for solo cello. The piece is notated on three staves, decoupling the hands in a complex *parametric polyphony* of independently performed actions, pushing the boundaries of the score, performer and instrument to the extreme. I describe the piece from the performer's perspective in different approaches to interpretation of the

notation, and in describing various practicing techniques. I investigate how the prescriptive notation cannot be read, but needs to be carried out in order to be understood. Hübler's music is associated with the term *radically idiomatic instrumentalism*, something I will discuss and relate to alternative readings of idiomaticism. I then examine the development of performance practice of modernist complex music and look at how the ideologies behind the compositions and the complexity of discourse reflect this practice. I argue that the composer's aesthetics and the performer's aesthetic are not synchronized, and I explore the way this leads to unsolvable ethical dilemmas for the performers. I look at the transformation from the linear and transparent performance practice model into the more complex model with the *struggle idiom* and breakdown of control as part of the aesthetic. I ask which kinds of strategies have to be developed in order to practice and perform complex music that clearly cannot be realized in full compliance with the score? How does the *Werktreue* ideal affect performance ethics when it comes to such works? What are the aesthetic implications of the struggle between the performer and score, and how do the ideologies behind the compositions and the complexity of this discourse reflect the performance practice of this music?

In the following chapter, "The hyper-idiomatic cello—a kinetic game of action and sounds. Simon Steen-Andersen's trilogy *Studies for String Instrument #1-3*," I describe the process of working with and performing Steen-Andersen's trilogy (2007, 2009, 2011) and investigate the experimental elements involved and discuss the implications for the performer. Like Hübler, Steen-Andersen investigates a form of complexity, but unlike Hübler's complexity, which springs from the decoupled notational practice, Steen-Andersen's complexity arises from the decoupled performance actions, which he cultivates and magnifies through experiments of synchronization and de-synchronization.

Also under examination in this chapter is the influence on Steen-Andersen of Lachenmann's *musique concrète instrumentale*. I discuss how he expands this aesthetics to incorporate further the physicality and visuality in instrumental performance. He establishes movement as an autonomous parameter by shifting the perceptual relationships between sound and action. Resulting from this is a polyvalent and transmedial expression in which sound, movement and visuals appear as equals, challenging the modernist conception of musical material and the identity of the work.

Investigating the practice in Steen-Andersen's *Studies* brings my project up to date, to the present time. Performing this music involves new skills related

to choreographed movements, interaction with electronics, and a wide range of extended techniques with extremely specific performance demands. This chapter was not originally planned as part of the dissertation, but it came to as a natural result of my extended collaboration with Steen-Andersen. Working with the performance practice since 1950, it also added aspects of the transmedial revolution all arts have been subject to during this time.

Chapter Six will discuss my findings in the light of my hypothesis, my four main themes, and discuss the role of “The Polyphonic Performer.”

1.9 Performance activity during the project

During the research period, I have studied and performed the works in the project as well as related works and chamber music works. I started a concert series called CELLOPRAXIS,¹⁵² a kind of laboratory, where I decided to experiment with different ways of performing the works. In the second year of my research-period, Rikskonsertene¹⁵³ arranged a tour for me in Norway, with a solo program comprising most of the works in the project, which gave me the valuable experience of repeated performances.

During this five-year period, I have also performed regularly with the group *asimisimasa* in Norway, Germany, France, Denmark, UK, Netherlands, and the US. The members of the group represent a valuable community of practice for me, and an important place for learning. Three of the members are presently researchers at the Academy; Anders Førisdal (guitar), Ellen Ugelvik (piano) and Håkon Stene (percussion).

¹⁵² A list of the concerts and the repertoire will be found in the appendix.

¹⁵³ Concerts Norway.

2 ***Projection I* and *Intersection IV*— performance practice in Morton Feldman’s early graphic score music**

A license for improvisation or realizing the ideal of a totally abstract sonic adventure?

“There was a deity in my life, and that was sound” (Feldman)

2.1 Introduction

In *Projection I*¹⁵⁴ (1950) and *Intersection IV*¹⁵⁵ (1953) for solo cello, two of Feldman’s earliest graphic scores, the outline of the notation is a grid, in which boxes on three levels refer to the high, middle, and low registers. Tempo, timbre, and duration are indicated, but pitch and dynamics are left to the performer to decide. With a strong affinity to the abstract painters in New York, Feldman described his ideal as “a totally abstract sonic adventure,”¹⁵⁶ in which the aim was “to project sounds into time, free from a compositional rhetoric.”¹⁵⁷

154 Morton Feldman, *Projection 1* (New York: Peters, 1962). The work was composed in 1950 and published in 1962. The score can be viewed in the appendix.

155 Morton Feldman, *Intersection 4* (New York: Peters, 1964). The work was composed in 1953 and published in 1964. The score can be viewed in the appendix.

156 *Morton Feldman Essays*, ed. Walter Zimmerman (Kerpen: Beginner Press, 1985), p. 38.

157 Ibid.

Because the works are notated graphically with certain indeterminate parameters, the function of the notation is a central issue in *Projection I* and *Intersection IV*. The interpretation of the notation, both the determinate and indeterminate aspects, poses several aesthetic and practical questions. How literally can we take the prescribed freedom for the performer? Which elements are at play in the performance practice of these pieces? And what criteria should inform the performer's choices?

The scores prescribe the freedom to choose any pitch within the given register, but does that include quarter-tones and eighth-tones, or only the chromatic scale? In preparing a performance, should I use the whole range of the cello or could I choose to restrict the range to one octave? To what degree should the legacy of approved performers like David Tudor,¹⁵⁸ and even the composer himself inform the performance practice?¹⁵⁹ To what degree should the performance practice of Feldman's late works inform these early graphic works, in other words, how do we relate to history and reception in our interpretations? To what degree should the intentions of the composer, as expressed both in the score and elsewhere, be taken for granted? In short: is the composer the oracle when it comes to interpretation? These questions open to discussion a number of core issues within the field of performance practice. I will approach these issues from three different perspectives.

My first perspective is that of the performer, and my close reading of the two scores will form the basis of the discussion of the questions and challenges that emerge in the process of interpretation. A close reading, in this context, means not only conventional score reading, but also reading the score through the instrument—a physical and performative reading. The performative perspective will be expanded by including accounts and experiences from other performers of Feldman's music.

The second perspective is that offered by an investigation of the history and context of these works, drawing on the vast Feldman scholarship as well as

158 David Tudor, pianist and composer associated with The New York School, was the most prominent practitioner of new and experimental music in New York at the time. See John Holzaepfel, "David Tudor and the Performance of American Experimental Music, 1952–1959" (PhD diss., City University of New York, 1994) and James Pritchett, "David Tudor as Composer/Performer in Cage's Variations II" *Leonardo Music Journal*, 14 (2004): pp. 11–16.

159 Although my primary focus is the two cello works, I include the performance of all the graphic scores within the *Projection* series (1–5) and *Intersection* series (1–4) when discussing performance practice in Feldman's graphic scores.

Feldman's own writings. Feldman was an avid writer, whose texts often touched on performance issues and included sharp observations about performance. On the other hand, his life-long love of the visual arts steered his language towards metaphors and analogies. Additionally, a hallmark of his writing is the polemicalizing directed at the aesthetics associated with the then-prevailing serialism and formalism of (European) contemporary music. I will look critically at some of Feldman's statements, and this leads to my third and last perspective.

I will investigate the validity of the notion of the "composer's intentions" in this context. In the performance tradition of Western classical music, the authority of the composer has been largely unquestioned. The prevailing performance practice is often rooted in a belief that a valid and authentic interpretation is one that follows closely the wishes of the composer. In literary theory, however, the idea of the author's intention was challenged as early as the 1940s. Wimsatt and Beardsley's article "The Intentional Fallacy,"¹⁶⁰ first published in 1946, and the American "New Criticism" to which it belonged, promoted objective interpretation of the text, viewed as an autonomous object. I will critique the issue of intentionality with regard to Feldman's *Projection I* and *Intersection IV*, and more generally within the performance practice of contemporary music, drawing on Roland Barthes' essay "The Death of the Author,"¹⁶¹ of 1968 and Michel Foucault's "What Is an Author?"¹⁶² of 1969.

The three perspectives are interwoven throughout the text.

After discussing different perspectives on intentionality, I will test these theories in practice. I will perform an experiment with two extreme outlooks on the subject of intentionality in the interpretation of Feldman's early graphic works. In the first model, I use the term *Texttreue*, based on the concept of *The intentional fallacy*, where all the information needed for interpretation is to be found in the text. The other model is based on the authorial intent, biography and history of the composer. In this context, I will use the term *Werktreue*, as the concept of the work can be seen to comprise all these elements.

160 W. K. Wimsatt and Monroe C. Beardsley, "The Intentional Fallacy," in *Philosophy Looks at the Arts: Contemporary Readings in Aesthetics*, ed. Joseph Margolis (Philadelphia: Temple University Press, 1987).

161 Roland Barthes, "The Death of the Author," in *Image, Music, Text* (London: Fontana Press, 1977).

162 Michel Foucault, "What Is an Author?," in *Modern Criticism and Theory: A Reader*, ed. David Lodge and Nigel Wood (Pearson Education, 2008), pp. 113–38.

2.2 New York and Morton Feldman 1950

From the 1950s onwards, the artistic community in New York was a thriving center for experimentation. The terms “New York School” or “Abstract Expressionism” were originally applied to a group of American painters, including Mark Rothko, Franz Kline, Jackson Pollock, Willem de Kooning, and Phillip Guston. In a musical context, the term “The New York School” is associated with John Cage, Morton Feldman, Christian Wolff, Earle Brown, and David Tudor, although they are unified by no common ideology or style; rather they shared a radical approach to musical experimentation that was expressed in widely different ways.

In 1950, Feldman, a Jewish New Yorker, was twenty-four years old; he had studied with Webern-student Stefan Wolpe, and had composed a few pieces. He worked in his family’s textile business, a job he kept until he became the Edgard Varèse Professor at the University at Buffalo in 1973. In January, 1950, Feldman met John Cage—fourteen years his senior—as the two were leaving Carnegie Hall after hearing Anton Webern’s *Symphony*, op. 21. The chance meeting led quickly to a friendship, and Feldman soon moved into an apartment in the building where Cage lived. He was introduced to the New York avant-garde through Cage’s social circle of composers, painters, and poets—all of this leading to life- and art-changing events for the young Feldman.

In the last ten years of his life, Feldman would become known for his remarkably long works, the most extreme being the *String Quartet II* from 1983, which lasts over six hours without a break. Between 1950 and 1953, however, Feldman wrote a series of short works, which he named *Projections*, *Intersections*, *Extensions* and *Intermissions*.

In 1950, sitting in Cage’s apartment while dinner was cooking, Feldman doodled on graph paper and came up with his concept of graphic notation. He then composed *Projection I*, for solo cello—the first work in the *Projection* series and among the first modern experiments in graphic notation.¹⁶³

163 This is not strictly true, as graphic and alternative notational systems had been used earlier, for example in Arthur Loruie’s *Formes an l’air* (1915) and Henry Cowell’s *Two Rhythm-Harmony Quartets* (1919), *Ensemble* (1924), *The Banshee* (1925), and *Tiger* (1929). Percy Grainger also used graphic notation in *Free Music* Nos. 1 and 2 for theremin (1936). Jonathan De Souza gives an account of indeterminate processes in composition and performance in music before 1950, including 20 musical dice games published in Europe between 1757 to 1812, thus “connecting eighteenth-century dice-throwing and twentieth-century coin-tossing.” See Jonathan De Souza, “Reassessing the Emergence of Indeterminate Music,” *British Postgraduate Musicology*, viii

2.3 Projection I and Intersection IV: a brief introduction

In *Projection I* (see Figure 6 on page 69) large and small boxes are placed on three different levels, both horizontally and vertically.¹⁶⁴ Vertically, each large box is designated a timbre, denoted by Feldman (in the score) as three specific performance techniques. From high to low we see \diamond denoting harmonics, P denoting *pizzicato* and A, *arco*. Within each large box, the small boxes on a vertical axis indicate relative pitch in the form of three registers: high, middle, and low. Each large box represents four *icti* at the tempo of “72 or thereabouts.” There are no dynamic markings in *Projection I*, and I will return to this below.

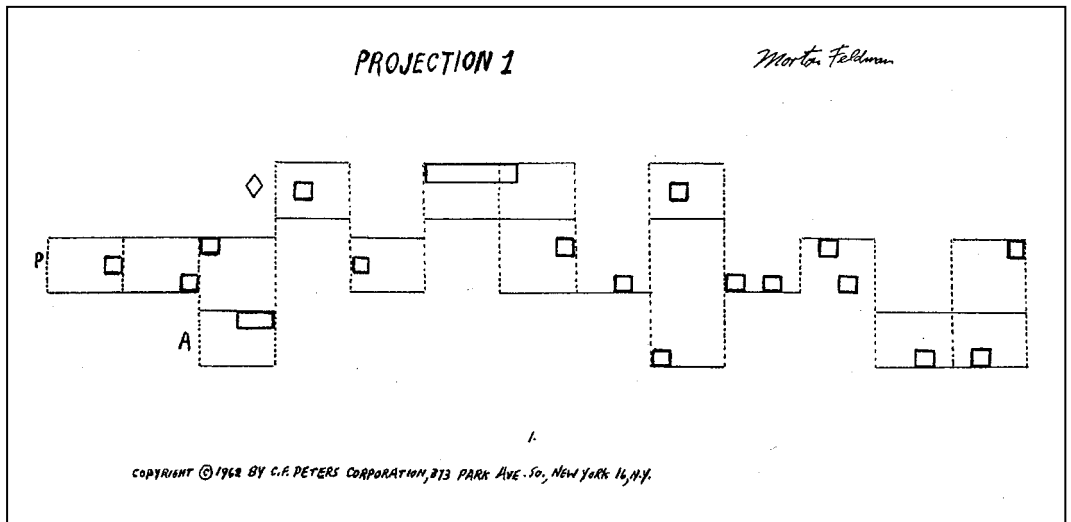


Figure 6: *Projection I* by Morton Feldman. Copyright © 1962. Used by permission of C. F. Peters Corporation. All rights reserved.

Feldman developed his graphic notation gradually, and in his *Intersection* series, the grid is compressed into a three-box system with the performance information regarding playing technique and density specified inside each box (see

(2008), <http://www.bpmonline.org.uk/bpm8/author.html>, accessed 3 November 2013. Among the first to explore indeterminacy in performance, De Souza mentions the cadenza “to play or not to play” in Charles Ives’ *Scherzo: Over the Pavement* (1910), *The Unanswered Question* (1908), which allows the conductor to cue instrumental groups freely, and also Henry Cowell’s “Ritournelle” from *Les mariés de la Tour Eiffel* (1939) with flexible duration and *Mosaic Quartet* (1935), an early example of mobile form.

164 *Projection I* (1950) is the only solo piece in the projection series, *Projection II* (1951) is for flute, trumpet, piano, violin and cello, *Projection III* (1951) for two pianos, *Projection IV* (1951) for violin and piano, and *Projection V* (1951) for 3 flutes, trumpet, 2 pianos and 3 cellos.

Figure 7 on page 70). Each box in this graph represents one *ictus*. The vertical position within the box indicates register, as in *Projection I*. Numbers within boxes represent the amount of notes to be played within one *ictus*, with the reservation, “if possible.”¹⁶⁵ All sounds are *pizzicato* unless designated *arco* (A) or a harmonic (\diamond). In the Intersections, “the player is free to choose any dynamic at any entrance, but must maintain the sameness of volume.”¹⁶⁶

INTERSECTION 4.

$\square = 80$ *Morton Feldman*

1				1			\diamond			\diamond										\diamond				
			1						A ³											1		\diamond		1
3			1						1					P								1		

		1				\diamond	04	1			\diamond			\diamond	1	\diamond	3	2	\diamond			\diamond	\diamond
		\diamond				1	\diamond			\diamond	5	\diamond		3	\diamond		04	\diamond	5	\diamond		\diamond	\diamond
		3				5	2			4	\diamond	3			1	5	\diamond		04	\diamond		2	1

Figure 7: *Intersection IV* by Morton Feldman. Copyright © 1963. Used by permission of C. F. Peters Corporation. All rights reserved.

Grid notation is rarely used in scores where rhythmic specificity is required, as the music within the grid often may be played freely within the time designated to each box. However, in *Projection I*, the single, sparse, notes are placed in something that resembles a steady rhythm, and as the units often last one beat, this can lead the audience to perceive a pulse during the performance. In *Intersection IV*, however, the rhythm has been “freed” through the complex and dense graph notation, and it is up to the performer to decide how to solve, practically and musically, the prescribed numbers of notes and techniques

165 Feldman, *Intersection 4*.
 166 Ibid.

designated in each box—or *ictus*. It is a virtuosic piece, as up to thirteen notes are assigned to one *ictus*, whereas in *Projection I*, there is never more than one note played within a beat.

In *Projection I*, the determinate parameters are relative range, tempo, rhythm, duration of notes and performance technique. The main indeterminate parameters are pitch, specificity of range and dynamics. In *Intersection IV*, the determinate parameters are relative range, tempo, and performance techniques. The indeterminate parameters are pitch, specificity of range and dynamics, rhythm, and duration (the placement of occurrences within the time frame), which is largely indeterminate due to the sometimes high number of notes designated within a single *ictus*. I discuss the performative consequences below, in section 2.6.

The main element of indeterminacy introduced is the composer's surrender of pitch, which can be seen as a radical departure, not only from the traditions of in Western classical tonal music, but also from the music of many of Feldman's contemporaries, who were developing systems to control increasing number of aspects of the composition as well as performance.¹⁶⁷ Feldman frequently replaced the word *pitch* with *sound*. In his view, sounds were free but pitch implied relationship with other pitches. Feldman's complex thinking about sound will be discussed later in the chapter.

2.3.1 Graphic notation

This is grid notation, keeping, like many graphic scores, conventions of the horizontal and vertical axis, the former representing the unfolding of time from left to right, and the latter the relative pitch in vertical steps. The grid format was a central component of visual arts in the 20th century.¹⁶⁸ Art critic Rosalind Krauss says:

¹⁶⁷ Pierre Boulez and Karlheinz Stockhausen are examples of composers expanding the serial technique to multiple compositional parameters. Examples of early experiments with performance parameters as musical material are Messiaen's *Mode de valeur* (1950) prescribing 12 different types of attack and Stockhausen's wind quintet *Zeitmasse* (1956), which treats musical time as dependent on the abilities of the individual player, with indications like "As fast as possible" and "As slow as possible."

¹⁶⁸ Examples of artists working in the grid format are Piet Mondrian, Kazimir Malevich and other artists related to De Stijl, and more recently Sol Lewitt, Damien Hirst, and Chuck Close. The grid was also a noticeable trait in minimalist and conceptual art of the 1960s and 1970s.

In the temporal dimension, the grid is an emblem of modernity by being just that: the form that is ubiquitous in the art of our century, while appearing nowhere, nowhere at all, in the art of the last one ... By “discovering” the grid, cubism, de Stijl, Mondrian, Malevich ... landed in a place that was out of reach of everything that went before. Which is to say, they landed in the present, and everything else was declared to be the past.¹⁶⁹

The grid can also refer to the urban grid. According to Paul Paccione, the title *Intersections* “is meant to suggest the grid-like character of New York City’s streets, where Feldman was living.”¹⁷⁰ Grid notation is the most basic form of graphic notation: a grid or matrix forms the outer frame in which sounds, gestures, and actions are organized. Feldman was a pioneer of this notation, which he used in slightly different versions in all his graphic works.¹⁷¹ The notion of grid also had a role in the more conventional notation of later works, the grid being a fixed number of measures on each line of the score paper, allowing Feldman to insert any musical object at any place.

The *Oxford Companion to Music* defines graphic notation concisely as, “a system developed in the 1950s by which visual shapes or patterns are used instead of, or together with, conventional musical notation.”¹⁷² Music notation has had graphic aspects since the first neumes took shape in the 9th century. But the graphic notation under discussion here emerged within the avant-garde in the US and Europe in the 1950s, when composers and performers were looking for ways to express musical ideas outside of the conventional notational frame. There are several types of graphic notation, ranging from entirely abstract

169 Rosalind E. Krauss, *The Originality of the Avant-Garde and Other Modernist Myths* (Cambridge, MA: MIT Press, 1985), p. 10.

170 Paul Paccione, “Time-Space Synthesis: The Relationship of the Grid to Twentieth-Century Music,” <http://www.ex-tempore.org/paccione89/PACCIONE.htm>.

171 Feldman composed *Projection I* at the end of 1950, after a period of creative blockage; 1951 proved to be a creative year, with 14 graphic works. He used graphic notation between 1950 and 1967, and his graphic works include the *Projection* series (nos. 1–5, 1950–51) and *The Intersection* series (nos. 1–4, 1951–53). In addition, there are two *Intersection* pieces from 1953: *Intersection for magnetic tape* (8 track tape) and *Intersection +*. The tape piece is the only work involving electronics in Feldman’s oeuvre; he was deeply skeptical of the electronic medium. Later came *Ixion* (1958), *Atlantis for orchestra* (1959), *The Straits of Magellan* for seven instruments (1961), *Out of “Last Pieces”* (1961), *The King of Denmark* (1964), for percussion solo, and *In Search of An Orchestration* (1967). In the period between 1950 and 1967, he used both graph and conventional stave notation. After exploring indeterminacy in relation to pitch, Feldman proceeded with *Durations I to V* (1960–61), which are notated with pitch, but with noteheads without rhythm, freeing the parameter of time (duration).

172 Anthony Pryer, “Graphic Notation,” *The Oxford Companion to Music*, ed. Alison Latham (Oxford Music Online, Oxford University Press).

images that invite improvisation, to elaborate systems for representing specifically described sounds.¹⁷³ However, a general trait of the multifarious category graphic notation is that it treats indeterminacy in different ways. The term indeterminacy may mean ambiguity, being uncertain of the outcome or multiple interpretations. Indeterminate music has been defined as “music over which the composer has to some degree relinquished control, perhaps by leaving some aspects to chance or to the performer’s decision.”¹⁷⁴ It is important, however, to distinguish whether the indeterminacy is in relation to compositional processes or the performance.¹⁷⁵ An example of indeterminacy related to compositional processes that results in a determinate score is John Cage’s *Music of Changes* (1951), in which he used the number-generation processes of the *I-Ching* to dictate tempo, duration, and dynamics. Feldman’s *Projection I* exemplifies indeterminacy related to performance, with pitch, dynamics, and articulation as the indeterminate elements. Regarding indeterminacy of composition, John Cage wrote of Feldman’s *Intersection III* (1953) for piano:

With the exception of method, which is wholly indeterminate, the compositional means are characterized by being in certain respects determinate, in others indeterminate, and an interpenetration of these opposites obtains which is more characteristic than either. The situation is therefore essentially non-dualistic; a multiplicity of centers in a state of non-obstruction and interpenetration.¹⁷⁶

Feldman did not adhere to any compositional methods, and in these early experiments with notation, he expressed a kindred spirit to those of the abstract expressionist painters who turned away from form and representation, and towards process and materiality. In this way, the early graphic pieces can be seen as representing indeterminacy of composition, although there is no indication that Feldman applied methodical indeterminate procedures in the way Cage did. Rather he might have been inspired by Jackson Pollock’s famous “drip painting,” which will be discussed later in the chapter.

173 Striking examples of visually abstract scores are Earle Brown’s *Folio* (1952) (including *December*) and Cardew’s *Treatise* (1967). Among other prominent composers who used graphic notation are John Cage and Christian Wolff in the US, and Roman Haubenstock-Ramati, György Ligeti, Karlheinz Stockhausen, Iannis Xenakis and Mauricio Kagel in Europe.

174 Paul Griffiths and Arnold Whittall, “Indeterminate Music,” in *The Oxford Companion to Music*, ed. Alison Latham (Oxford Music Online, Oxford University Press).

175 Bryan R. Simms, *Music of the Twentieth Century: Style and Structure* (New York: Schirmer and London: Collier Macmillan, 1986), p. 357.

176 John Cage, *Silence: Lectures and Writings by John Cage* (Middletown, CT: Wesleyan University Press, 1961), p. 36.

Having briefly described the two scores and their graphic notation, I turn, now, to a discussion of the interpretative challenges in this music, followed by different perspectives on authorship and intentionality.

2.3.2 Interpretative challenges

Feldman's two scores raise a number of interpretational questions for the performer, and the most immediate of these are in relation to the composer's surrender of pitch.

The score prescribes the freedom to choose any pitch within the given register, but does that mean quarter-tones and eighth-tones? Or, knowing that Feldman was not interested in micro tonality, should we assume he means us to choose only from the chromatic scale? Furthermore, should we choose between the vast range of timbres available within a given pitch and instrumental technique, knowing that the composer did not pursue an interest in extended techniques or the non-pitched sound world? Should I use the whole range of the cello or could a freely chosen range be one octave, knowing that Feldman was a "piano-composer,"—that is, when he talked about range, he referred to 88 tones, which is the entire range of the piano? He determines the playing technique, but offers no indication to which kind of sound qualities he is after. How literal, then, is this supposed freedom of range, pitch, and sound quality? On what basis should a performer make these choices? To what degree should the legacy from approved performers like David Tudor and even the composer himself inform our performance practice? Can a performer trust what the composer writes about performance? Or, to turn the equation on its head, can a performer place herself beyond all contexts, beyond all performance practice? If that is not possible, the question is simply which performance practice will she choose?

These questions open up a large area for discussion, around the issue of the degree to which intentions the composer may have expressed outside the score, as well as the performance tradition, should be taken into consideration in musical practice.

I begin with comments from two of Feldman's contemporaries in New York, John Cage and Henry Cowell, who expressed two contrasting views on intentionality in Feldman's music. Cage wrote: "Feldman's conventionally notated

music is himself playing his graph music."¹⁷⁷ So, according to Cage, if we are after the composer's intentions, listening to his conventionally notated music should give a clear indication of what he might have wanted. But Cage was speaking with the benefit of hindsight, looking back with Feldman's whole oeuvre and performance history in mind. It would be interesting to know how the works were received when they came out. In 1952, Henry Cowell heard a rehearsal of *Intersection III* for strings (violin, viola, or both), woodwinds and solo cello, and he wrote in *The Musical Quarterly*:

So a conservative group will employ familiar types of sound, and some "modernist" might employ the less familiar. This is a plan for the control of improvisation and the music will of course never sound twice alike. Its success depends upon what the players contribute.¹⁷⁸

Cowell here views the score as an autonomous object; he reads the text literally with the instructions given of free choice of pitch, and to a great extent sound, within the playing technique prescribed. These reflections from Cowell, who was closely related to the New York School and the teacher of Cage, came from an informed insider. His account reveals one contemporary view of this early attempt at graphic score as something with great freedom and potentiality. He calls it "controlled improvisation," in which the outcome depends on the player's contribution. I see Cage's and Cowell's views as representing two opposing positions on the interpretation of Feldman's graphic scores. In the first view, the performer brings as much knowledge about the intentions of the composer and the subsequent performance practice as possible (using the composer as the primary source). In the second, the performer's information is confined to the information given in the score. I want to emphasize that I see Cage's comment as a specific statement and opinion in this context, and do not regard it as representing his general views on indeterminacy, which were expressed through completely different and more liberal attitudes in his own music. I will examine these two opposing views, and explore what they have to offer, drawing on theories of authorial intent originating in literary theory.

177 Quoted in William Bland and Keith Potter, "Morton Feldman," in *The New Grove Dictionary of American Music*, ed. Wiley Hitchcock and Stanley Sadie (London: Macmillan, 1986), vol. II, p. 107.

178 Henry Cowell, "Current Chronicle," *Musical Quarterly* 38 (1952): p. 131.

2.4 Authorial intention in literature and music

2.4.1 Authorial intention in contemporary music: the composer as oracle?

The composer's intentions and desires are a key element in the performance practice of contemporary music. The intentions of the composer are related to the concept of *Werktreue* (fidelity to the work) ideal of correct and authentic interpretation of a score. The *Werktreue* ideal is itself inextricably linked with the emergence of the work-concept, in which the musical (or other artistic) work is perceived as an aesthetic object, independent of its performance. The work-concept defines the relationships between composer and performer, as well as between work and performance. According to Lydia Goehr,¹⁷⁹ the emergence of the work concept (ca. 1800) led to specialization, and thus a division of labor into performers and composers, roles that earlier had been interlinked. The indisputable high status of "the work" in contemporary musical practice shows us that the regulative force of the concept is still potent. In music by living composers who can communicate directly with musicians, the relevance of the composer's intentions seems obvious. Often the performer has commissioned the work, actively choosing a composer whose music especially attracts her. From this situation arises an explicit and natural interest in what the composer is imagining, in other words: the intentions behind the work. Added to this picture are also the shortcomings of the notation: contemporary music, with its experimental nature, has a fundamental absence of normative notational methods for a variety of sonic textures and instrumental actions. We have a situation in which many playing techniques and timbres have not yet been assigned a character or symbol. At the same time, there often exist a multitude of notational methods for the same phenomenon, and this ambiguity creates an apparent need for communication between composer and performer, even after a score is finished. This is even more acute in the more open scores like Feldman's early graphs. Another aspect of the composer-performer relationship is a widespread practice of collaboration before and during the compositional process.¹⁸⁰ Many performers of contemporary music are active

179 Lydia Goehr, *The Imaginary Museum of Musical Works* (Oxford: Clarendon Press, 1992).

180 See Barbara Lüneburg, "A Holistic View of the Creative Potential of Performance Practice in Contemporary Music" (PhD diss., Brunel University, London, 2013) and Stefan Östersjö, "Shut up 'n' Play! Negotiating the Musical Work" (PhD diss., Lund University, 2008).

improvisers, and it is not unusual that they also compose. The division between creative and re-creative roles emerging from the work-concept is not as straight as it may seem. Thus, we often see active relationships between performers and composers in which the composer can draw upon the sonic and, I would even say, artistic palette from the performer's repertoire.¹⁸¹ Where practitioners of older music must dive into the archives, look at paintings of musicians, and read contemporaneous instrumental treatises in order to get access to what they believe was the composer's intention, historical context, style and sound ideal, contemporary musicians seemingly have all information available before us. If we lack knowledge about the works being created today, we can just ask the living composer, or, if the composers are dead, someone who worked with them. Two pertinent questions arise: Is the composer an oracle in this interpretational context? And is our present time so transparent that we are able to see through the complex mechanisms we are a part of?

The notion of the composer as oracle, omniscient in relation to his own work, has been debated in the early music movement, in relation to the search for a historically informed practice (HIP). This movement, which originated in the 1950s, sought a more "authentic" way of performing the music of earlier periods. The romantic ideal was rejected, and musicians delved into the archives for information to help them recreate the way the music could have been played in its time. Many musicologists have challenged the notion of an achievable

181 The pianist David Tudor was a key performer for the composers in the New York School. Feldman wrote: "This kind of music is more than merely a specialty of Tudor's. In some ways he's entirely responsible for it. Meeting David enabled me to hear and see possibilities I never dreamed of." Harold C. Schonberg "The Far-Out Pianist." *Harpe's Magazine* (June, 1960): 49–54 (p. 52). Cage wrote: "In all my works since 1952, I have tried to achieve what would seem interesting and vibrant to David Tudor. Whatever succeeds in the works I have done has been determined in relationship to him." See John Cage and Daniel Charles, *For the Birds* (Boston: Marion Boyars, 1981), p. 178. Another situation is described by the composer Lisa Lim, working with cellist Séverine Ballon, "... waiting for that moment when they let on some 'secret knowledge' about their instrument—something very idiosyncratic that belongs very much to them and which they offer so generously to a composer" ("Rambler Roundtables: ELISION ensemble." *The Rambler*, <http://johnsonrambler.wordpress.com/2010/02/01/rambler-roundtables-elision-ensemble/>). Within the realm of improvisation, the performer's "ownership" of an artistic palette is more strongly safeguarded, and the performers and composers both have authorial ownership to the work (regardless of notation or a lack of it) not only artistically, but also legally speaking. Two examples of this are the collaboration between Sidsel Endresen and Rolf Wallin, (in the work *Lautleben*) and Christian Wallumrød and Eivind Buene (in the work *Objects of Desire* with Oslo Sinfonietta).

“authenticity” or discernible “intentionality” in music of the past;¹⁸² but the concept has been surprisingly little treated in relation to contemporary music. A look at the debate around the idea of intentionality as it has emerged in the field of literature, can inform a discussion of whether the concept can be fruitful for contemporary music by testing certain ideas through performance approaches.

2.4.2 Authorial intention in literary criticism: the death of the author?

The concept of intentionality was debated in the field of literary criticism, with the New Criticism originating in the US in the 1940s and 1950s, at the time Feldman was composing his earliest works. The new thinking suggested that authorial intention was extraneous to understanding a literary work, that the work did not belong to the author, and that meaning should be sought inside the work itself. The most famous expression of this point of view was Wimsatt and Beardsley’s “The Intentional Fallacy,” of 1946 (rev. 1954). Speaking of the interpretation of poetry, Wimsatt and Beardsley said, “the design or intention of the author is neither available nor desirable as a standard for judging the success of a work of literary art,”¹⁸³ and “the poem is not the critic’s own and not the author’s (it is detached from the author at birth and goes about the world beyond his power to intend about it or control it). The poem belongs to the public.”¹⁸⁴ They argued that any intentions not immanent in the text were irrelevant, and that the author’s biographical and sociological background should be kept outside interpretation: “Judging a poem is like judging a pudding or a machine. One demands that it work.”¹⁸⁵ A continuation of this view is found in post-structuralist linguist Roland Barthes’s famous essay, “The death of the Author” (originally published in French in 1967 as “La Mort de l’auteur”). Barthes criticizes the “Author-God” who controls the meaning of a work, and suggests we reduce him to a “scriptor” with no role, who is born with the text;

182 See especially John Butt, *Playing with History: The Historical Approach to Musical Performance* (Cambridge: Cambridge University Press, 2002); Peter Kivy, *Authenticities: Philosophical Reflections on Musical Performance* (Ithaca: Cornell University Press, 1995); Richard Taruskin, *Text and Act: Essays on Music and Performance* (Oxford: Oxford University Press, 1995); Randall R. Dipert, “The Composer’s Intentions: An Examination of Their Relevance for Performance,” *Musical Quarterly* 66 (1980): 205–18.

183 Wimsatt and Beardsley, “The Intentional Fallacy,” p. 367.

184 *Ibid.*, p. 369.

185 *Ibid.*, p. 368.

in this way, he suggests we can free the text “from any authoritarian control.”¹⁸⁶ “The birth of the reader,” he says, “must be at the cost of the death of the Author.”¹⁸⁷ Barthes argues that a text can have multiple meanings: “To give a text an Author is to impose a limit on that text, to furnish it with a final signified, to close the writing.”¹⁸⁸ By “killing” the author, he eliminates the idea of a work’s (only) one true, monistic interpretation. Barthes is critical of the idea that the author’s intention should be the only right and valid interpretation: “We know now that a text is not a line of words releasing a single ‘theological’ meaning (the ‘message’ of the Author-God) but a multi-dimensional space in which a variety of writings, none of them original, blend and clash.”¹⁸⁹ Two years later, in 1969, French philosopher, sociologist, and historian Michel Foucault wrote an implicit response to Barthes, in his essay “What is an Author?”. Foucault asked when the idea of the author as a high-status individual emerged, and

... at what moment studies of authenticity and attribution began, in what kind of system of valorisation the author was involved, at what point we began to recount the lives of authors rather than of heroes, and how this fundamental category of “the-man-and-his-work criticism” began.¹⁹⁰

Further problematizing the foundations of the relationship between author and text, he introduced his concept of an “author function,” a function applied not just to individual works, but also to larger discourses: “The author function is therefore characteristic of the mode of existence, circulation, and functioning of certain discourses within a society.”¹⁹¹ The attributes of the author function thus expand beyond the mere individual or historical person behind a text:

It is easy to see that in the sphere of discourse one can be the author of much more than a book—one can be the author of a theory, tradition, or discipline in which other books and authors will in their turn find a place.¹⁹²

Both Barthes and Foucault thus challenged traditional ideas of the author figure and the aesthetics centered around the genius and his works. In their writings they attempted to reformulate the concept of the author and to shift the

186 Barthes, “The death of the Author.”

187 Ibid.

188 Ibid.

189 Ibid.

190 Foucault, “What is an Author?,” p. 281.

191 Ibid., p. 286.

192 Ibid., p. 289.

emphasis to the reader, the context, and the foundations intrinsic in the regulation between author and text.

2.4.3 How can these theories be relevant for music?

The theories discussed so far deal with literary criticism, but the concepts discussed can be more broadly applied to the notions of authorship in other creative disciplines. However, there is one important distinction between the two forms of communication: in literature, the reader is the interpreter, whereas in music, the performer interprets the text (score) and transforms it to another medium (music), and the audience receives and interprets the sounding result. In music, then, the reader function is distributed between the performer and the audience. When it comes to interpretation of meaning, the two-sided relationship between writer and reader working with a single medium (text) is distinctly different from the triangular relationship between composer, performer, and audience involving two very different media (text and sound). In instrumental music—music with no words—with no specific function in society, we do not have access to any semantic meaning. As early as 360 BCE Plato wrote: “For when there are no words, it is very difficult to recognize the meaning of the harmony and rhythm, or to see that any worthy object is imitated by them.”¹⁹³ What literature and music do have in common is the concept of the work, and the identification of the work with an author; mutual perspectives linked to those phenomena, thus can prove fruitful for discussion. Further, although neither of these literary theories were intended for the field of music interpretation, they have had a serious impact in research on the performance of early music (HIP), and have contributed greatly to the discussion in these areas. How can this debate be relevant for how we view intentionality in contemporary music?

The non-dead composer

In the wake of the work-concept, a division of labor (and responsibilities) into composers and performers, creative and re-creative roles, has regulated performance practice. Reports of the author’s death have proved exaggerated—at least in music. Composers remain intractably “non-dead,” as Arved Ashby puts it. Ashby asks: “How has the modern musical creator stayed so unequivocally

193 Plato, *The Dialogues of Plato*, vol. 4 (Oxford: Clarendon Press, 1871), p. 191.

‘non-dead’, so robust and healthy, in the Barthesian sense?”¹⁹⁴ He proposes three main reasons for composers’ death-defiance. First, he suggests, may be the particular hierarchical structures that are embedded in musical practice. The commonplace image of composers high upon their pedestals, hovering over the performing “foot soldiers,” has an authoritarian power reinforced by 300 years of music history. In addition to the historical image of the composer-figure, many contemporary composers are literally “non-dead”—still alive and capable of overseeing, if not actually conducting, their own works. Ashby points out the control the composers have over their scores, due to the relative limited number of performances, a control unimaginable for a literary author: “Even when the composer is not a performer,” he says, “he or she remains a kind of unspoken collaborator in the performance in a way unique to the twentieth century...”¹⁹⁵

Even if the modernist composer were very much alive and kicking, and polemical, wide public success and dissemination of a work by him or her would cause its textual meaning to quickly spin out of his or her control—or away from any one person’s authority, for that matter.¹⁹⁶

The second reason for the continuing authority of the composer, according to Ashby, are institutionalized methods of analysis, often leading to monistic interpretations:

It is hard to escape the conclusion that the critical monism set up around modernist music by both its friends and its enemies -- i.e., its rigidity or monodirectionality of interpretation—has to a large degree contributed to its fall in currency, its impending extinction.¹⁹⁷

Critical monism is dangerously close to Barthes “Author-God,” with one theological meaning controlling the work. Critical monism can be seen at work in the regulation of the performance practice, in the dissemination of values and codes in performance. Finally, Ashby points to the lack of semantic autonomy in music, the wish to create semantically the notion of “meaning” in music, that pitch and tonality, for instance, can evoke certain meanings. He points to Lerdahl and

194 Arved Mark Ashby, “Intention and Meaning in Modernist Music,” in *The Pleasure of Modernist Music: Listening, Meaning, Intention, Ideology* (Rochester, NY: University of Rochester Press and Boydell & Brewer, 2004), p. 29.

195 *Ibid.*, p. 30.

196 *Ibid.*, p. 31.

197 *Ibid.*, p. 36.

Jackendoff's theory¹⁹⁸ of pitch and harmony as grammatical aspects of music hierarchically ordered, and the "idea of reciprocal compositional and listening grammars, describing the incongruity between the two that proves frustrating and finally ruinous for a person trying to listen to modernist music."¹⁹⁹

Ashby's arguments point to aspects primarily relating to the status of the work and its analysis, without taking the performative aspects into consideration. I believe that one of the main reasons the composer is "non-dead" and overwhelmingly present is because of the highly disciplined and regulated relationship in the practice between composer and performer in contemporary music. This relationship is an intrinsic part of the performance practice, which is naturally conditioned and influenced by Ashby's points about the status of the work, the controlling mechanisms such as analysis, and the lack of semantic meaning. This performance practice, interwoven with embodied knowledge and inherited habitual patterns, is worth looking at in order to shed light on the omnipresent contemporary composer. A natural consequence of the control Ashby says composers have over their scores is their authority over performances. The work rarely leaves the composer fully to live "its own life," and I believe one of the main reasons for that is that there is a musical and instrumental practice attached to the work. For musicians, normally the musical work is directly associated with the notated score. In the case of the living composer, the human presence of the *creator* can substitute for or supplement information typically extracted from a score. Ideally, the presence of the creator would supplement the information bound in the score, but the differences between written and oral communication, and the limitations of musical notation, tend to favor the nuances of speech and orally transmitted instruction.

The centuries-long relationship between score and musician has in many ways regulated and secured the specific interpretative privileges of the musicians. The division of labor between composer and performer, discussed above, is relevant here, as it serves as a creative contract between the two sides. Scores have been the carriers of the composer's intentions; certain kinds of knowledge are encoded in the notated text, but the implications of this knowledge have been found to a large degree in the performative domain, in the operative and current performance practice. When the living composer enters the scene,

198 The ideas are presented in Fred Lerdahl and Ray S. Jackendoff, *A Generative Theory of Tonal Music*, The MIT Press Series on Cognitive and Mental Representation (Cambridge, MA: MIT, 1983).

199 "Intention and Meaning in Modernist Music," p. 33.

supplementing or substituting the written knowledge in the score, something of a shift is taking place in the relation between the performer and composer. A seemingly direct line between the composer's intentions, represented by the composer himself, and the performer, emerges. The missing link in this direct communication of ideas, is the previously emphasis on the connection between score and performer.

To Ashby's second point, that the institutionalized methods of analysis led to monistic interpretations of modernist works, I would like to add the impact of authoritative interpretations by key performers. In modernist music, leading performers have made recordings that stand as milestones and landmarks, often blessed by the composer as an official and validated interpretation of the work. The composer's endorsement is seen as a mark of quality, and its implications are curiously unproblematized in the music community. For a literary author to sanction one specific analysis of a work, calling it the right and correct analysis, would on the other hand be unthinkable.

In music of the so-called New Complexity,²⁰⁰ the role of the performer has been likened, by Brian Ferneyhough, to that of "relativizing filter."²⁰¹ This is music in which "...the audible (and visual) degree of difficulty is to be drawn, as an integral structural element, into the fabric of the composition itself."²⁰² The performer must filter the multitude of layers in the score: rhythm, pitch, articulation, harmony, and sub-layers of intonation, timing, vibrato, and so on. The idea of performers—as filters—with uniquely different properties and qualities—stresses the importance of acknowledging performance as mediation, opposed to the score as writing—ultimately two different phenomena.

Another significant reason for the "non-death" of the composer is a viable and strong tradition of theoretical writing within contemporary music. The discourse is extensive, encompassing a substantial body of writings by composers, analysts, critics, and musicologists, and it contributes to the strong sense of the binary of written text / performative domain. The body of writing within this semi-closed community, warmly including the composer, keeps the composer "non-dead," and his intentions potent and of continuing interest. This meta-perspective has a high status, adding layers to the discourse, but as it clearly

200 New Complexity is discussed in Chapter Four, through the investigation of Klaus K. Hübler's *Opus breve* (1987).

201 Brian Ferneyhough, *Brian Ferneyhough: Collected Writings*, ed. James Boros and Richard Toop (Amsterdam: Harwood, 1995), p. 5.

202 Ibid.

favors theoretical perspectives and grants mythical qualities to the composer; it widens the gap between the theoretical domain and instrumental practice. The unfortunate absence of the performers' (interpreters') voices in this discourse has several reasons. An important and obvious reason is of a structural character much contemporary music requires a substantial amount of practicing time, leaving performers little time to articulate their experiences in writing. Performers (by necessity) also often have a pragmatic hands-on perspective and may feel alienated in theoretical and conceptual waters. They may also perceive that their voice and experiences are neither invited nor wanted. However, one active participant is violinist and musicologist Mieko Kanno, who claims in her article "As if the composer is dead" that

the musicians do not like a living author meddling with their established practice of performance preparation because performance preparation is their—the musicians'—creative territory and not a territory for composers. While the dead status of the author (as if the composer is dead) secures room for the performer to turn a musical composition into a musical work, the problem originates from a conflict that exists between the authorship of performance and that of composition.²⁰³

Kanno raises the conflict between authorship of performance and that of composition, something more present in contemporary music than in older classical music. In the umpteenth recording of Tchaikovsky's violin concerto, for instance, the focus is on the soloist, her interpretation of this iconic work, what she brings in—her "authorship." The recording of Ferneyhough's *Terrain* (1992) for violin and ensemble, on the other hand, focuses on the authorship of the composer, first because it is a quite young work which has not been performed extensively, and second because there exist only two recordings of the work. This does not necessarily mean a depreciation of the performer as such; the quality of the work, represented by sound, is entirely dependent on

203 Mieko Kanno, "As If the Composer Is Dead," *Mortality: Promoting the interdisciplinary study of death and dying* 17 (2012): p. 178. Kanno works with the idea "as if the composer is dead" to reveal certain traits in our attitudes towards musical practice. She writes (p. 174), "Our understanding of a composer's work has little to do with that individual's status as living or dead, but this status has highly significant relevance in practice." She uses Xenakis, Stockhausen, and Berio as examples of composers who have become "somewhat more accessible since their death by acquiring a commodity-status to which we relate to in our own ways. What these examples show is that the death of a composer prompts a new cultural dialogue with the composer's work" (ibid., p. 176). When the composer disappears from the scene, the interpretational space opens up for the performer. During his lifetime, Stockhausen's control went so far that he decided which performers were allowed to perform certain of his works.

the performer. One could say that the performance of the work is embedded in the assessment of the work—what is shedding light on the work, is the very performance. However, in the contemporary music community, the novelty of *the work* is a natural center of attention—when a work is premiered, it instantly reflects the composer’s authorship and position. The work/composer-centered discourse often fails to give attention to the performer’s contribution to the work.²⁰⁴ Singer Tora Augestad puts it like this:

In contemporary music the composers are the stars. The performers are far less important. But I think this is about to change. The performer’s task is to communicate the composer’s intent to the audience. It is precisely because the composer’s intention is not always as evident in contemporary music, that the task is so exciting.²⁰⁵

Augestad pinpoints here one of the attractions of performing new music: the interpretative space created by uncharted territory, gaps, and fissures within the composer’s intention.

In her famous essay “Terminal Prestige: The Case of Avant-Garde Music Composition,” about the one-time predominance for American composers of atonal music, Susan McClary writes:

By retreating from the public ear, avant-garde music has in some important sense silenced itself. Only to the tiny, dwindling community that shares modernist definitions of the economy of prestige does the phenomenon make the slightest bit of sense ...²⁰⁶

However polemical, her claim that modern music has silenced itself into a decreasing and insiders’ community with a shared belief in an “economy of prestige” according to modernist definitions, is worth looking at. As I have discussed, the dominance of the authorial perspective is profound if we look at discursive outcome in the field of modern music. Aspects of performance are seldom addressed. The links between the work and the practice are complex, and they are conditioned by underlying historical power structures

204 In reviews of contemporary music concerts or recordings, the work is often reviewed with scarcely no mention of the performer’s role or contribution, and in many instances, the names of performers are left out altogether.

205 Ida Svingen Mo, “Tora Augestad: Multifomatert,” *www.ballade.no* (2012). My translation from the Norwegian. “I den moderne musikken er komponistene stjernene. Utøverne er langt mindre viktige. Men jeg tror dette er i ferd med å snu. Utøverens oppgave er å formidle komponistens intensjon til publikum. Nettopp fordi komponistens intensjon ikke alltid er like tydelig i samtidsmusikken er oppgaven så spennende.”

206 Susan McClary, “Terminal Prestige: The Case of Avant-Garde Music Composition,” *Cultural Critique* no. 12, Discursive Strategies and the Economy of Prestige (Spring, 1989): p. 66.

corresponding to the musical discourse. Considering that practice and score exist in two different media (performance and writing), a difference that gives rise to endless interpretative challenges (and opportunities), it is easy to resort to the originator of the text as an oracle to inform the performance practice. These close links between performer and composer can be seen to express several things. They show that the practice is closely related to intentionality, and that it is largely governed by the hierarchical relationship between composer and performer, where the work and its creator often comes first.²⁰⁷ It also points out that the works rarely make it into the musical canon during the composer's lifetime, the lack of distribution leads to a life in seclusion, and of the composer's control over the performances and thus the performers (Ashby's first point).

Shared ownership and authorship of performance

Collaboration between composers and performers is by no means a new phenomenon: musicians played contemporary music regularly up to World War I, the emergence of modernism or of "tradition" with its "canon," represented the first great break in this tradition. There are other models of collaboration between composer and performer than the hierarchical model sketched out so far: Kanno suggests

that the crucial element to its success is the idea of shared ownership. Composer-performer collaboration works well when the two individuals come out of their respective creativity niches and become "musicians" to share the creative purpose.²⁰⁸

She further points out that this is dependent on the "acceptance of the ideas that music never gains any permanent existence, in spite of notation, performance, recordings ... hence that no one exclusively owns any music."²⁰⁹ Her view of music as a shared activity of music-making as opposed to work-centered aesthetics is naturally present in musical practice. The vigorous energy invested by all parts in the musical ecosystem is vital for contemporary practice to survive.

207 The emphasis in our culture on text over performance has been discussed by Goehr, *Imaginary Museum*, and others.

208 Kanno, "As If the Composer Is Dead," p. 176.

209 Ibid.

However, the strong presence of the composer is hard to avoid, perhaps particularly due to his double presence, both through the intentionality in his work and in actual living person, something Ashby addresses:

One can only wonder if the passage of time and the eventual passing of these “author-gods” from the scene will make a difference in interpretation and reception. Their presence actually resides in two places: in their physical or media appearance, and in the authorial consistency of their work as a whole (itself a modernist characteristic, and only the first of these will really disappear along with the author-god’s bodily presence).²¹⁰

This is a rather pessimistic view that shows a one-sidedness in the conditions for change. There is a vast range of attitudes from composers towards performance issues, and it seems to me that proactive performers naturally claim “authorship of performance,” consequently creating a healthy balance inside the confines of the work concept. Pianist Peter Hill describes a type of composer who regards his creative act over when a score is finished, and who trusts the performer to then take over in the process:

My experience of working with a large number of composers has been that they exhibit a bewildering range of attitudes to the score which they have supplied to the performer. Some seem almost superstitious about avoiding assisting with the preparation of performances, answering queries with ‘Do whatever you think best’. This attitude is not one of carelessness, but is akin to that of painters who have an instinctive feeling for when a canvas is finished and no more paint should be applied. The composer’s work is complete, and in a sense already in the past. Further revisions, even in the form of advice to players will be made from the outside, and therefore risk being false to the original creative impulse. Furthermore the composer may no longer be as committed as the performer ... In the performing arts, the completion of a score (or script) is only a stage in the developments of the work; it must now take its chance, acquiring insights and additional meanings through the work of others.²¹¹

An interesting observation in the writings by performers of contemporary music, is that they almost in unison stress the processual and collaborative work with music, thus destabilizing the hierarchical relations.²¹² The example

210 Ashby, “Intention and Meaning in Modernist Music,” p. 30.

211 Peter Hill, “‘Authenticity’ in Contemporary Music,” *Tempo*, no. 159 (1986): p. 6.

212 See Mieko Kanno, “Timbre as Discourse: Contemporary Performance Practice on the Violin” (PhD diss., University of York, 2001), Östersjö, “Shut up ‘N’ Play!.” Lüneburg, “A Holistic View of the Creative Potential of Performance Practice in Contemporary Music,” and Irvine Arditti in Paul Archbold, “Performing Complexity: A Pedagogical Resource Tracing the Arditti Quartet’s Preparations for the Première of Brian Ferneyhough Sixth String Quartet.” (2011), http://events.sas.ac.uk/uploads/media/Arditti_Ferneyhough_project_documentation.pdf. Accessed 3 November 2013.

of Kanno brings to the heart of the debate the common denominators between performers and composers of *music-making* and being *musicians*, giving an indicator that, in the physical, material and practical world of practice, the reality is far away from the division lines and categories found in theory and philosophy. Nevertheless, as a performer in the field of contemporary music, it is my experience that the regulative consequences of the work-concept, coupled with the double presence of the composer, is steadily present within the performance practice. One of my aims in this dissertation is to try to grasp some of the mechanisms underlying these relationships through writing from my practice perspective. This I will attempt to do by discussing and dissecting the binary oppositions of composer/performer, work/performance through looking at their consequences in musical practice. The two extreme positions are illustrated by Lydia Goehr's two models: "the perfect performance of music," taking the "of" (as in *of the work*), seriously, and "the perfect musical performance" which celebrates "the so-called 'lower' actions of the human, the ephemeral, and the active ... It also resists the temptation to think of performers mechanistically as 'automatons', or 'transformer stations'."²¹³

2.5 Two performance approaches: *Texttreue* and *Werktreue*

Having discussed different perspectives on intentionality in the previous section, it might now be interesting to perform an experiment with two extreme outlooks on the subject of intentionality in relation to interpretation. Two different models of interpretation emerge: at one end of the scale, the model built on the *intentional fallacy*, the term used in literary criticism describing the problems occurring in the assumption that a correct interpretation of a work should be based on the intentions of the artist/composer (expressed outside the artwork). The second model is built on authorial intent, the performance tradition, and the composer's reflection on his work and performance, and also takes into account his biography and history. In this context, I will call the latter model, *Werktreue*, as the concept of the work can be seen to comprise all these elements. The first model is a more objective model, a critical interpretation, reading the score as an autonomous text, viewing the score as the sole source of interpretational information. In this context, "the author is dead," and I will

213 Lydia Goehr, "Conflicting Ideals of Performance in an Imperfect Practice," in *The Quest for Voice: On Music, Politics, and the Limits of Philosophy* (Oxford: Oxford University Press, 1998), p. 149.

try to follow Derrida's dictum that "there exists nothing outside of the text" (lit.: there is no outside-text; il n'y a pas de hors-texte).²¹⁴ This model directs the fidelity towards the score as text; I will thus apply the term *Texttreue*.²¹⁵ The fact that a substantial part of what is being interpreted in the graphic scores (*Projection I* and *Intersection IV*), is actual written text, (Feldman's instructions for performance), makes this term even more relevant here. The concept of the musical work (now in relation to *Werktreue*) is by any standard unmanageable, and moreover object to interpretation of its inner and outer limits. To be true to the text, (in a musical context, the score—what is actually notated by the composer), can be compared to the New Criticism movement, which excluded the authorial intent if not expressed within the text. In musicology, the term *Texttreue* has in some instances been equated to *Werktreue*, and has even been seen as a requirement for *Werktreue*: "Indeed we can say that *Werktreue* has normally been thought to entail *Texttreue*."²¹⁶ The way I operationalize the concepts of *Werktreue* and *Texttreue* in this chapter about Feldman's music may therefore not be in line with how the terms would be applied in other contexts, it might not even be consistent with how I use them in other chapters in this dissertation.

These two positions are naturally extreme, but, as musicians often tend to choose a position close to the former (*Werktreue*) without reflecting at length about the alternatives,²¹⁷ I want to explore the two different models of interpretations approaching Feldman's two works in order to test these theories in practice and performance.

214 Jacques Derrida, *Of Grammatology*, trans. Gayatri Chakravorty Spivak (Baltimore: Johns Hopkins University Press, 1998), p. 158.

215 The pianist Alfred Brendel preferred the term *Texttreue* instead of *Werktreue*, as it concretizes the object towards which the faithfulness is directed. "*Werktreue* is at best marginal and suggestive; *Texttreue* by comparison is rather more concrete." Alfred Brendel, *Alfred Brendel on Music* (London: JR Books, 2007), p. 30.

216 Bruce Ellis Benson, *The Improvisation of Musical Dialogue* (Cambridge: Cambridge University Press, 2003), p. 5.

217 The basic work of musicians naturally includes reflections about interpretation, but my remark here points to the "mainstream" practice within Western classical music, which is to a large degree based upon the teaching practice found in masterclasses and apprenticeships, producing interpretations more often emerging from an inherited performance practice than a critical (re)reading of the score.

2.5.1 *Projection I: Texttreue* interpretation

This interpretation aims at a performance of *Projection I* based on textual content only, that is, the information exclusively found in the score, as both graphic signs and written instructions. The underlying idea is “the death of the composer.”

Feldman writes in the preface of the score:

Timbre is indicated: \diamond = harmonic; P= pizzicato; A=arco. Relative pitch (high, middle, low) is indicated ... Any tone within the ranges indicated may be sounded. The limits of these ranges may be freely chosen by the player. Duration is indicated by the amount of space taken up by the square or rectangle, each box ... being potentially 4 icti. The single ictus or pulse is at the tempo 72 or thereabouts.²¹⁸

I read the instructions in the preface of the score, which give quite straightforward facts about tempo (ca. 72), playing techniques (*pizzicato*, *arco*, or harmonics), and duration (the amount of space taken up by the rectangles). Timbre usually describes the quality or characteristics of a musical sound and is often used synonymously with tone color. Feldman, however, prescribes specific performance techniques related to each timbre in this piece—*pizz.*, *arco*, and harmonics—as three specifically different tone colors, almost treated like three different instruments.

It is up to me to choose the pitches and kind of sounds I want to play within the prescribed techniques: “Any tone within the ranges indicated may be sounded. The limits of these ranges may be freely chosen by the player.”²¹⁹ To try to get an idea of how and what to choose, I look at the score and the title. The title *Projection* can suggest a number of things: it could be the act of projecting the sounds into the acoustics of the hall and to the audience or the condition of being projected (the performer’s intention, personality, and feelings). It could mean the projection of an image on a surface or a screen, and it could also mean a prediction of something in the future based on present knowledge. The score itself looks like a chart or an architectural drawing. The small boxes denoting duration, and the horizontal lines dividing the registers, are drawn in solid lines, the vertical lines are dotted. In itself, the image of the score looks quite abstract—squares and lines that winds up and down, seemingly at random, creating no regular patterns. The visual impression of the score is pointillist;

²¹⁸ Feldman, *Projection 1*.

²¹⁹ *Ibid.*

it looks airy, with the predominant feel of openness and emptiness in most boxes. I take the indeterminacy regarding range and tone literally, and explore all sonic, registral and timbral possibilities in my practice. The mental image of projecting something onto this maze makes me choose an abstract sound world, including sounds with properties associated with noise. I choose to designate a range of a tenth starting from the open C-string. The squareness of the visual image makes me want to play the piece rather strictly in tempo, although I appreciate the remark “tempo 72 or thereabouts”, which offers me the opportunity to introduce *rubato*, when the phrasing calls for it or where the physical actions require time for the big leaps in register, for example in square nine. The score also brings to mind scoring of electronic music, with its linearity and lack of noted nuances. With this in mind, I aim for sustained notes bowed evenly and without *diminuendo* for the entire duration when prescribed in *arco*, and I try to start the note without a clear attack. As the score contains no dynamics, I try to do this spontaneously during performance, letting the character and timbre of each sound influence the dynamic direction. There are no instructions whether one should perform from the score, or realize it (decide pitches and write them down) beforehand. I experimented with different versions, and chose to play from the original score, as the sound-images the score evoked in me became inextricably linked to the visuality of score.

The sounding result of this experiment can be found on video #2.



2.5.2 *Projection I: Werktreue* interpretation

In order to perform a *Werktreue* interpretation—based on the intent of the “non-dead” composer—of *Projection I*, I have to look at what the work consists of in this context. To what should we be true? Foucault wrote:

What is a work? What is this curious unity, which we designate as a work? Of what elements is it composed? Is it not what an author has written? Difficulties appear immediately. If an individual were not an author, could we say that what he wrote ... could be called a “work?” ... And what about the rough drafts for his works? Obviously. The plans for his aphorisms? Yes. The deleted passages and the notes at the bottom of the page? Yes. What if, within a workbook filled with aphorisms, one finds a reference, the notation of a meeting or of an address, or a laundry list: is it a work, or not? Why not? And so on, ad infinitum. How can one define a work amid the millions of traces left by someone after his death? A

theory of the work does not exist, and the empirical task of those who naively undertake the editing of works often suffers in the absence of such a theory.²²⁰

Feldman did leave a plethora of traces, through his scores, writings, speeches, and public appearances. This can very well be taken into account in understanding his oeuvre, as well as in interpretation of particular works. In my search for guidelines in my *Werktreue* interpretation of Feldman's music, I have taken into consideration historical accounts and different approaches to analyzing Feldman's music, as well as statements by him and others.

In 1950, while composing *Projection I*, did the 24-year-old Feldman intend what he wrote, and did he write what he intended? Thirty years later, he said,

Notation is an aspect of style. And I find that if you use a certain type of notation, it cannot help but develop into a certain style. And the style of my graph music was super for the time it was written. At the time I wrote it, I didn't know that it was going to be style.²²¹

If we want to perform the work according to Feldman's intentions, we have to ask: "intentions at which point in his life?" Is the authorial intent of a composition the interpretation of a work that the author had in mind when creating the work? Or when he looks back thirty years later? I shall not attempt to answer that question, but I will look into the approach to *Projection I* with the intention of being faithful to what I perceive was the composer's intentions at different times, based on sources available to me. Feldman wrote in 1983:

The first piece was Projection I for solo cello, which I wrote for the marvelous cellist Seymour Barab. I brought it over and showed him this very primitive notation. It was just again categories of pizzicato sounds, harmonics, and arco and aspects of arco-like ponticello. And then I gave high, middle and low and each box corresponded to a metronome beat. At that time it was 72 which was very slow then. It was endless, the ictus being 72. And then I started to write these pieces. ... Actually I didn't have any kind of theory and I had no idea what was going to emerge, but if I wasn't waiting for that wild rice, I wouldn't have had those wild ideas.²²²

The parameters of tempo, rhythm, and playing techniques seem to be straightforward in *Projection I*. However, the sentence "each box being potentially 4

220 Foucault, "What Is an Author?," p. 282.

221 Cole Gagne and Tracy Caras, "Morton Feldman," in *Soundpieces: Interviews with American Composers* (Metuchen, NJ: The Scarecrow Press, 1982), p. 169.

222 Jan Williams, "An Interview with Morton Feldman," *Percussive Notes* 21/6 (1982-3): 4-14. Cellist and composer Seymour Barab (b. 1921) was founder of the New Music Quartet in Chicago and the Composer's Quartet in New York City, the resident quartet of Columbia University.

icti,"²²³ in relation to duration, is not unambiguous, and can be seen to open up a flexibility of tempo, as *potentially* can mean possibly or imaginably. He also modifies the accuracy of the tempo of 72 by writing "or thereabouts," which, taken together with "potentially," I read as meaning that he wants neither a strict, rigid tempo nor a feeling of the pulse in performance.

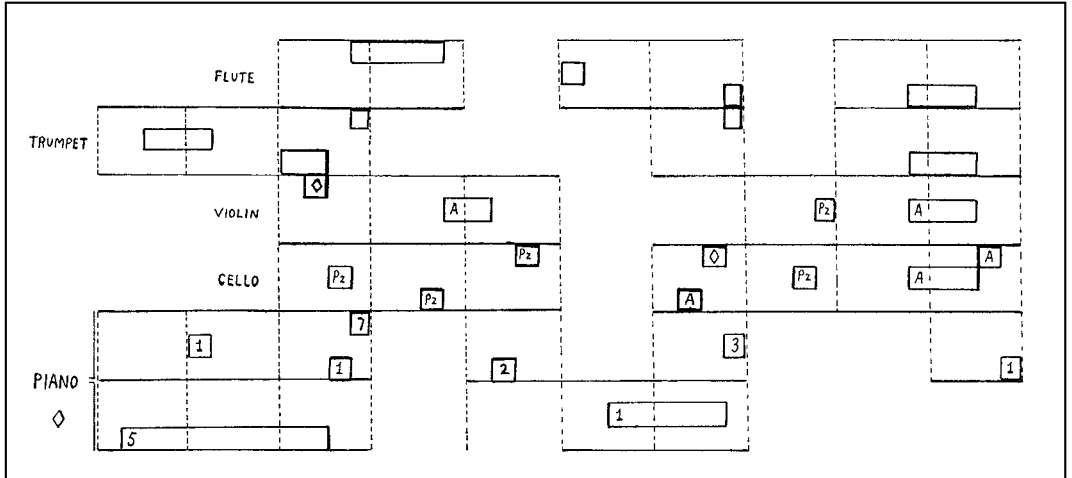


Figure 8: *Projection II* for Flute, trumpet, piano, violin, cello by Morton Feldman. Copyright © 1962. Used by permission of C. F. Peters Corporation. All rights reserved.

The duration of each performed beat is clearly marked by the space of the small squares (see Figure 6 on page 69). As mentioned earlier, Feldman equates the word timbre with playing technique, which means that he designates specific tone-color attributes to each technique (harmonic, *arco* and *pizzicato*) on the vertical axis. In the other *Projection* pieces (II–IV), the same vertical axis is used for different instruments (see Figure 8 on page 93). In performance, I keep this in mind, as I choose to highlight the different techniques, by imagining them as distinctive different sounding voices or even instruments.

There are no dynamic markings in *Projection I*, however, in Projections II–IV, dynamics are prescribed to be soft and quiet throughout. It has been debated whether Feldman deliberately left the dynamics out in *Projection I* or just forgot to put them in.²²⁴ Reading a statement by Feldman republished in *The Boulez–*

223 Feldman, *Projection 1*.

224 James Fulkerson, in Frank Denyer and James Fulkerson, Liner Notes to "the Ecstasy of the Moment" with the Barton Workshop (Etcetera label (KTC 3003), 1997), refers to Feldman

Cage Correspondence, the latter seems most probable: “The two series differ in that the *Projections* are to be consistently quiet, while in the *Intersections* “the player is free to choose any dynamic at any entrance but must maintain sameness of volume”—though “what is desired in both ... is a pure (non-vibrating) tone.”²²⁵ In all the recordings I have listened to,²²⁶ the piece is performed very softly and sparsely, like the other *Projections*, pointing to a consensus among the cellists performing the piece that Feldman just forgot to put the dynamics into the score. This may also be evidence that the performance practice of Feldman’s late music, which is predominantly performed very softly, is being applied to his earlier music. I chose a soft dynamic in line with the statement by Feldman regarding all the *Projection* pieces.

Certain questions immediately arise in relation to deciding the pitches. “Any tone within the ranges indicated may be sounded,” is an exceptionally open instruction. According to the instruction of “any tone,” this freedom should include micro-tonality as well as the whole sonic palette of sounds on a cello, including crush, *sul pont.*, *sul tasto*, white noise and more. And how should I decide upon the three ranges? Feldman was a “piano-composer”; when he talked about range, he referred to 88 tones, which is the range of the piano. A cello has approximately four and a half comfortable octaves against the piano’s seven octaves. Should I use the whole range, or could a freely chosen range be one octave? If we want to choose along the lines we think Feldman might have chosen if he were to perform it himself or compose the piece in conventional notation, we may keep in mind that we know that he was not interested in exploring extended techniques or the non-pitched sound world.

In connection with *Projection II* (1951), for flute, trumpet, piano, violin, cello, Feldman wrote:

My desire here was not to “compose,” but to project sounds into time, free from a compositional rhetoric that had no place here. In order not to involve the performer (i.e., myself) in memory (relationships), and because the sounds no

scholar Keith Potter’s opinion that it is overlooked by the composer, but points to the fact that the score was copied for publishing after he had introduced the free choice of dynamics in his *Intersection* pieces, thus arguing that the absence of dynamics were deliberate.

225 Jean-Jacques Nattiez, ed., *The Boulez–Cage Correspondence*, trans. Robert Samuels (Cambridge: Cambridge University Press, 1993), p. 104.

226 Uitti, F-M. (1992). ART CD 6101. Uitti, F-M. (1995). CD950. Kooistra, T. (1997). KTC 3003. Menzler, H. (2002). MODE 103. Kooistra, T. (2005).MODE 146. Deforce, A.(2009). AECD 0977. Duch, MF (2010). (Version for double bass) +3DB010.

longer had an inherent symbolic shape, I allowed for indeterminacies in regard to pitch.²²⁷

Feldman seeks to avoid memory relationships between the pitches. By notating squares for notes, the “inherent symbolic shape” of conventional notation is eradicated, thus opening up to a sound world (ideally) devoid of compositional rhetoric. Listening to Feldman’s notated music, it is obvious that he is not after symbolic or harmonic pitch relationships. From an open rehearsal of *Projection II* (1951), in London 1966, Peter Dickinson reported:

At first Feldman asked for the sound to be “sourceless” and demanded a perfection of tone once the chosen note had been achieved. He did not object to the players working out their parts in advance but emphasised listening. The pianist was rebuked for playing a close-position minor triad in the middle register, although there are of course no written instructions to the contrary.²²⁸

While practicing, in addition to avoiding the obvious tonal relationships, I also think of Feldman’s wish “to free the sounds from a compositional rhetoric” in choosing pitches. How do I aim at eradicating the melodic and harmonic relationships between the notes? Is it possible to first play one sound, then another, and then another, several tones in succession, with no intentional relationships? Can I play a new note with no memory of the last note? Is it possible for the listener to listen to the notes independently, one by one without any memory of the preceding note? To acquire information of various approaches from musicologists and performers to Feldman’s music, I will look at analyses of his works.

2.5.3 Analysis?

Analyzing Feldman’s early graphic works poses a challenge and above all a question of adequate methods. The absence of pitches or an overarching construction and structure, can easily throw the analyst off, and leave her fumbling for methods. In analyzing *Projection IV*, for violin and piano, of 1950, Ryan Vigil proposes an analytical framework within the aesthetics of appreciating “the sounds themselves,” applying the six terms restriction, exclusion, diversity, saturation, density, and novelty.²²⁹ While recognizing the limitations of any method, including his own, Vigil is able to explore the quality of the sounds

227 Feldman, *Morton Feldman Essays*, p. 38.

228 Peter Dickinson “Feldman Explains Himself,” *Music and Musicians* 14/11 (1965–66): p. 23.

229 Ryan Vigil, “Compositional Parameters: Projection 4 and an Analytical Methodology for Morton Feldman’s Graphic Works,” *Perspectives of New Music* 47/1 (2009): p. 242–3.

by describing intertwined parameters, interaction, non-interaction, surface, and succession of events, aiming at illuminating the quality of the sounds. Catherine Costello Hirata²³⁰ has attempted, like *Vigil*, to develop a methodology to analyze “the sounds themselves” in Feldman’s early music. Hirata looks at the distinction between how a chord sounds *in* context, and speaking to the sound of a chord *and* its context. She investigates the timbral qualities in the individual sounds and foregrounds touch as something central in Feldman’s music, a point emphasized also by leading Feldman performers David Tudor and John Tilbury.²³¹ Feldman himself played so softly that some tones are not audible in his recording,²³² at times so softly that the hammer did not strike the string hard enough to resonate. The decay and silence are evidently important in *Projection I*. The decay of each note is dependent upon the performance conditions, attack, ambience, and acoustics, and determines the tempo and use of *rubato*. He peels off the material to get to the core of the piece: “What is needed in this piece? How much do I take out?”²³³ In this context, the silence takes on a new and significant role,²³⁴ equal to sound: “the quality of silence changes dramatically; as silence emerges from delay and suspension it becomes a musical

230 Catherine Costello Hirata, “The Sounds of the Sounds Themselves: Analysing the Early Music of Morton Feldman,” *Perspectives of New Music*, 34/1 (1996): p. 6–22.

231 See John Tilbury’s liner notes “On Playing Feldman,” to *For Bunita Marcus* (London: HALL, 1993). Tilbury describes an extreme sensitivity of touch, “When Tudor or Cardew played Feldman what you heard and experienced with great intensity was the limb as it performed, the fingerpad—that most erotic part of a pianist’s body—and the resulting sound was raw and thrilling”.

232 His own performance of the solo pieces *Intermission V* and *Extensions III* can be heard on the CD: MORTON FELDMAN (1994) EDITION RZ RZ 1010.

233 Morton Feldman, *Give My Regards to Eighth Street: Collected Writings of Morton Feldman*, ed. Bernard Harper Friedman (Boston: Exact Change, 2000), p. 173.

234 Touching the topic of silence, it is unavoidable to mention John Cage’s silent piece *4’33”* from the same period (1952). The piece is in three movements, the performer is on stage but is completely still, except for the turning of pages between the movements. David Tudor, who premiered the piece, also opened and closed the lid of the piano to mark the division between the movements. The “silence,” now framed by the ritual of performance, consists of all the present environmental sounds, without hierarchies. The status of silence is thus raised and has now become equal to sound. Cage was greatly inspired by Robert Rauschenberg’s *White Paintings* (1952), large canvasses with endless nuances of white. Feldman, a great admirer of Rauschenberg, acquired “Untitled Black Painting” (1952–3), which hung in his New York apartment.

parameter itself.”²³⁵ Feldman wrote, “silence is my substitute for counterpoint. It’s nothing against something.”²³⁶

In his analysis of *Projection I*, John Welsh wrote, “silence is present far more than sound in each of the three performing modes. This strongly suggests that silence is given high regard by Feldman and careful attention must be given to this parameter.”²³⁷ Welsh re-notated and divided the work into six sections in order to facilitate analysis and detect the structure of the work. He then analyzed the occurrence and structure of the three parameters: timbre, duration, and registers. He found that “harmonics and arco generally move together throughout the work (as did the high and low registers). *Pizzicati*, in contrast, generally move independently (as did the middle register).”²³⁸ The analysis is largely descriptive rather than analytical in its declaration of density according to the counting of notes, timbres, and silences in different registers. There is no inquiry into why this is so, nor does Welsh question the validity of using these analytical parameters for this music. In the conclusion, he writes, “As with all of his graphic scores, Feldman here creates a rich diversity of sound through statistical structuring.”²³⁹ Feldman, always fighting formalism, concepts, and compositional methods, could not be further away from “statistical structuring.” His declared method of personal intuition in the compositional process presents a challenge in applying traditional analytical methods to his works. Composer Bryn Harrison rightly claims that, “the perceived problem in the music of Feldman is that the works simply resist analysis ... because of the reliance that Feldman places on intuition.”²⁴⁰ As we have seen, the information elicited from analysis is dependent upon how we view analysis, and the methods we employ. Arnold Whittall’s claim, that “Analysis is interpretation—even a kind of performance, in the sense that analysts explore the materials and meanings of compositions and attempt to communicate their findings, through speaking

235 David Hanner and John Wall, “The Material Experience of Abstraction: Morton Feldman and the Experience of Silence,” in *Music, Metamorphosis and Capitalism: Self, Poetics and Politics*, ed. John Wall (Newcastle: Cambridge Scholars Publishing, 2007), p. 93.

236 Feldman, *Give My Regards to Eighth Street*, p. 181.

237 John Welsh, “Projection I (1950),” in *The Music of Morton Feldman*, ed. Thomas DeLio (New York: Excelsior Music, 1996), p. 23.

238 *Ibid.*, p. 30.

239 *Ibid.*, p. 35.

240 Bryn Harrison, “The Late Works of Morton Feldman” (Unpublished MA diss., De Montfort University, Leicester, 1996), p. iii.

or writing²⁴¹ is a wider definition of interpretation. He points out two extremes, the hermeneutic analysis, offering opinions developed from “attitudes and predispositions which, however well informed, are instinctive rather than consciously and deliberately worked out,”²⁴² and the formalist, calling “on an extensive range of theories about music, and techniques for analysing musical materials and compositional procedures, which are worthy of study in their own right.”²⁴³ Feldman’s works escape the formal analytical approaches because they are not constructed by the inherent principles of those approaches. As Welsh’s study shows all too clearly, to use these approaches results in an analysis that systematizes the unsystematic. This view of analysis is directed towards and rooted in the score. When we know about Feldman’s obsession with sound, its materiality and acoustical behavior in performance, it may be natural to bring the sounding aspect into analysis, as Hirata does, following Feldman’s wish that the sounds exist on their own terms. Could an analytical method be congruent with the way in which the pieces were created? We know Feldman composed at the piano, touching the keys and listening. The listening is central in his universe of sounds. Could an analysis consist of describing the music on a purely sonic level? It would then be an experimental form of analysis, a personal interpretation—“even a kind of performance” (Whittall’s definition of analysis). So, if an analysis can be “even a kind of performance,” can a performance be a kind of analysis? Pianist Catherine Laws addresses this question in “Morton Feldman’s Late Piano Music: Experimentalism in Practice.”²⁴⁴ Although she uses the late work, *Palais de Mari*, of 1986, her theories have relevance for Feldman’s early music. She writes about what she calls “one of the productive dilemmas produced by Feldman’s music: the awareness of measured time set against experiential time, and the impossibility of resolving that duality.”²⁴⁵ The triangular

241 Arnold Whittall, “Analysis,” in *The Oxford Companion to Music*, ed. Alison Latham (Oxford Music Online. Oxford University Press, accessed 3 November 2013).

242 Ibid.

243 Ibid. Taking Whittall’s view of the performative aspects of analysis further, Nicholas Cook discusses the performative qualities of theory in “Analysing Performance and Performing Analysis,” in *Rethinking Music*, ed. Nicholas Cook and Mark Everist (Oxford: Oxford University Press, 1999). Cook says “we need to think about what our theory *does* as much as what it *represents*” (p. 242), and later: “Musicology, in short, doesn’t just reflect practice; it helps mould it.” (p. 243).

244 Catherine Laws, “Morton Feldman’s Late Piano Music: Experimentalism in Practice,” in *The Practice of Practising*, ed. Catherine Laws, Orpheus Research Centre in Music Series (Orcim) (Leuven: Leuven University Press, 2011), p. 49–67.

245 Ibid., p. 63.

relationship of attack, decay, and acoustics is constitutive of the work, and thus crucial in reconstructing the work through analysis. Yves Knockaert claims that,

the performer's task plays an important part in the analysis. To perform Feldman in an "authentic" way, the performer needs to follow the composer's intentions: he or she will therefore not attempt to establish relationships between consecutive sounds, thus avoiding to impose unintended structures onto the listener.²⁴⁶

This is a correct statement, but it nevertheless bites its own tail, as the composer's intention is that the performer follows the "holy trinity" of the sound—its attack, decay, and interaction in the acoustics. The composer's intention is thus transferred to the performer's domain and intention (in a greater degree than in conventionally notated music), which is founded on what Feldman calls "the acoustic reality." Seen in this light, a performative level is essential in analysis of Feldman's works. He wrote:

I think there are three things working with me: my ears, my mind and my fingers. I don't think that it's just ear. That would mean that I'm just improvising, and I'm writing down what I like, or I'm writing down what I don't like. But I think those three parameters are always at work. Not that I write *everything* at the piano. Well, one of the reasons I work at the piano is because it slows me down and you can hear the *time* element much more, the acoustical reality.²⁴⁷

The notion of an "acoustical reality" was inspired by the advice of one of Feldman's heroes, Edgard Varèse, "to consider the time needed for the sound to reach the audience from the stage, and to return to the stage".²⁴⁸ This temporal-spatial awareness is a crucial key to understanding the performance practice of Feldman's music, something that will be discussed further in this chapter.

2.5.4 Between painting and music

A number of writers, including Feldman himself, have written extensively about his close connection to the painters in New York.²⁴⁹ In this section I investigate

²⁴⁶ Yves Knockaert, "Systemlessness in Music," in *Order and Disorder: Music-Theoretical Strategies in 20th-Century Music: Proceedings of the International Orpheus Academy for Music Theory 2003*, ed. Jonathan Dunsby and Joseph Straus (Leuven: Leuven University Press, 2004), p. 77.

²⁴⁷ Morton Feldman, *Morton Feldman Says / Selected Interviews and Lectures 1964–1987*, ed. Chris Villars (London: Hyphen, 2006), p. 52.

²⁴⁸ *Ibid.*, p. 257.

²⁴⁹ See Amy C. Beal, "'Time Canvasses': Morton Feldman and the Painters of the New York School," in *Music and Modern Art*, ed. James Leggio (New York: Routledge, 2002); Jonathan W. Bernard, "Feldman's Painters," in *The New York Schools of Music and Visual Arts*, ed. Steven Johnson (New

whether perspectives from the domain of the visual arts inform Feldman's view of his own artistic practice, as well as his reception.

As we know, Feldman was strongly influenced by the abstract expressionist painters, including Rauschenberg, Guston, Rothko, De Kooning, and Pollock, and some of them were also his close friends. Throughout his career, Feldman used metaphors to create links between the visual and the aural, such as flatness, surface, perspective, color, and light. He described his own work as *between painting* and music:

My obsession with surface is the subject of my music. In that sense, my compositions are really not 'compositions' at all. One might call them time canvasses in which I more or less prime the canvass with an overall hue of music ... I prefer to think my work as: between categories: between Time and Space. Between painting and music. Between the music's construction, and its surface.²⁵⁰

Feldman not only used painting as a metaphor, he also copied the painters' methods, he put graph paper on the wall and walked around it, looked at it



Figure 9: Jackson Pollock's "action painting".

and wrote on it from different angles like a painter would paint a canvas. Jackson Pollock's splattering of paint on the canvas in his "action painting," was an active emancipation from conventional techniques.

Resembling Pollock, Feldman indeterminately threw the notes onto his *time canvas*, trying to avoid musical structures or connection between the notes, thus freeing himself from the traditional composition methods. Here, the music includes indeterminacy both in the act of composition and

York: Routledge, 2002); John Holzaepfel, "Painting by Numbers," in *ibid.*; and Mats Persson, "To Be in the Silence. Morton Feldman and Painting," liner notes to *Morton Feldman: Complete works for two pianists: Kristine Scholz and Mats Persson* (Sweden: Alice label (ALCD 024), 2002).

²⁵⁰ Feldman, *Give My Regards to Eighth Street*, p. 88.

in the act of performance. Thinking of this image, his claim that he did not want to “compose” but to “project sounds in time, free from a compositional rhetoric,” seems persuasive. His ideal was “a totally abstract sonic adventure.”²⁵¹ As performers, how can we interpret this ideal of “a totally abstract sonic adventure”? For Feldman, “the abstract is not involved with ideas. It is an inner process that continually appears and become familiar like another consciousness.”²⁵² He calls this “the Abstract Experience.”²⁵³ Thinking of his infatuation with the abstract expressionist painters, and his description of his music as “time canvasses in which I more or less prime the canvass with an overall hue of music,”²⁵⁴ gives a clear idea of the abstraction he had in mind: a *nonfigurative* sound, an abstract sound, dealing with surface and materiality and not with representation and history.²⁵⁵

2.5.5 A nonfigurative sound—music without instruments?

The aim, then, is to evoke “The Abstract Experience” through performance, or more specifically, through what comes out of the instrument. But *what* comes out of the instrument is inextricably linked with *how* it comes out—the action between body and instrument. So, apart from the obvious metaphorical nature of this ideal, the act of performing something in an abstract way is incongruent with the inevitable physicality involved in instrumental playing. Feldman often spoke of the materiality of painting, the concrete, physical world. In connection with the graphic scores, he wrote:

The new painting made me desirous of a sound world more direct, more immediate, more physical than anything that had existed heretofore. ... The new structure required a concentration more demanding than if the technique were that of still photography, which for me is what precise notation has come to imply.²⁵⁶

Feldman’s desire can be seen as paradoxical, an aspiration for an abstract experience through a direct, physical and concrete world; and this leads to

²⁵¹ Feldman, *Morton Feldman Essays*, p. 38.

²⁵² Feldman, *Give My Regards to Eighth Street*, p. 74.

²⁵³ *Ibid.*, p. 75.

²⁵⁴ *Ibid.*, p. 88.

²⁵⁵ According to Knockhaert, Feldman’s preoccupation with the abstract was taken to great lengths: “He indeed broke up with several of his painter friends when they decided to return to the figurative” (Knockhaert, “Systemlessness in Music,” p. 85).

²⁵⁶ Feldman, *Morton Feldman Essays*, p. 38.

what Hanner and Wall call a “performative contradiction wherein the abstract is simultaneously concrete.”²⁵⁷ If we were looking at the abstract as an idea without any concrete or physical existence, it would be a paradox. But if abstraction could be a phenomenon without reference to a particular object or example, a *nonfigurative* occurrence of sound, then there is no paradox, as the first is part of the second. The abstraction Feldman is seeking definitely has something to do with sound—the materiality and directness of sound rather than an abstract concept.

This can be seen as a sound ideal analogous to the painters’ terminology of abstraction: an ideal sound, not weighed down with the old music history, a freed sound, free of a *compositional rhetoric*, but still a real, material sound, existing in the *acoustical reality*. This was the ideal the young Feldman may have been striving towards when he started experimenting with graph notation.

How can this be translated into sounds and actions? How do I get the string vibrating without the traditional cello sound coming out, something Feldman clearly wanted to eschew:

When you play an instrument, you’re not only playing the instrument; the instrument is playing you. There’s a role to play. And the problem I have with the performer is that my sense of the instrument is not that role-playing aspect. By role-playing I mean the baggage one brings to performing by demonstrating how good the instrumentalist is. They’re not interpreting music; they’re interpreting the *instrument*, and then the music. When Heifetz played Mozart, he was doing Mozart a favour. It was the violin he was playing, and then Mozart.²⁵⁸

Here, again, we see Feldman’s longing for abstraction, a parallel move away from the heavy history and connotations of the instrument. But where does this repeated critique of “unmusical” musicians, who first of all are instrumentalists, come from? The romantic sound ideal in the performance practice in the mid twentieth century—a practice with ample vibrato—may be a contributing factor. Perhaps Feldman is after something that he has not yet heard, and the search for that must include a rejection and critique of the established sound ideal? He says further:

In music it is the instruments that reduce the color. And for me, the instrumental color robs the *sound* of its immediacy. The instrument has become for me a stensil, the deceptive *likeness* of a sound. For the most part, it exaggerates the

257 Hanner and Wall, “The Material Experience of Abstraction: Morton Feldman and the Experience of Silence,” p. 89.

258 Gagne and Caras, “Morton Feldman,” p. 166.

sound, blurs it, makes it larger than life, gives it a meaning, an emphasis it does not have in my ear.²⁵⁹

Again, the instruments are blamed. He criticizes both the instrumental color, and the way the instruments are played by the musicians. The history and baggage that come with the instruments is akin to what Helmut Lachenmann calls the “aura, i.e. the history of the material in wider, extra musical contexts, in all spheres of our social and cultural reality, of our conscious and subconscious awareness, our archetypal memory, both collective and individual.”²⁶⁰ In this way, we cannot see and hear a cello without taking the whole music history related to the cello into account. The cello as object, semantically, metaphorically, and literally—emits an “aura.” When Feldman speaks of the exaggeration of the sound that makes it *larger than life*, he wants to escape the history and connotations, which, in his view, involuntarily accompany the instruments.

One may wonder why Feldman did not explore an extended sound world or even electronic music, domains moving away from the traditional aspects of instrumentalism. In electronic music, all the aspects of the sound can be controlled, and the unpredictable human factor in performance is eliminated. But electronics did not interest him:

I’m not happy with electronic sound—the physical impact to me is like neon lights, like plastic paint, it’s right on top, whereas I like my paint to seep in a bit. Part of my musical thinking is to have the sound sourceless, and it’s too identifiable. My pieces fail if one can say: “Ah, there’s a trombone, there’s a horn”. I like the instruments to play in the natural way; they become anonymous. Most new sounds come about when the instrument does not become anonymous, but deals in marginal worlds; and so they are precarious in execution.²⁶¹

Feldman only composed one work with electronic sounds, and he never returned to the electronic medium.²⁶² Although he was critical of performers, his ideal was built upon the historical sound ideal. And although, during that

259 Feldman, *Morton Feldman Essays*, p. 114.

260 Helmut Lachenmann, “Philosophy of Composition—Is There Such a Thing?,” in *Identity and Difference: Essays on Music, Language, and Time*, ed. Frank Agsteribbe et al (Leuven: Leuven University Press, 2004), p. 57.

261 Paul Griffiths, “Morton Feldman Talks to Paul Griffiths,” *Musical Times*, 113, no. 1554 (1972): p. 758.

262 His only electronic piece was *Intersection* for magnetic tape (1951), a piece he repeatedly spoke about unfavorably: “Have you ever tried to get a hold of that particular composition? I have a copy, but I’ve never wanted it realized by others. I’m sure they’ll make it sound more interesting than the piece should sound. I don’t want to be political about it, but I loathe the sound of electronic music” (Feldman in Gagne and Caras, “Morton Feldman,” p. 165.).

period, the instruments and strings were improved and aiming at a general movement towards larger and greater sounds, Feldman went the opposite way, stripping down the sound to its bare core. Detaching himself from the history of sound in instrumental music, his interest and attention was directed towards the specificity of sounds and the material aspects of sound, rather than the semantic meaning they might represent. But by detaching himself, Feldman did indeed inherit the history—as an object for discussion—something to object to. The fact that electronic sounds do not carry a long history of sound production might be one of the reasons electronics didn't speak to him.

Feldman wanted to free the sounds from the will of the performer and the traditional sound production: "Leave the sounds alone, don't push them."²⁶³ He repeatedly spoke of having the sounds sourceless. Since an instrument's characteristics are first revealed through the attack of a note, it is not surprising that Feldman wanted a minimum of attack in his music, to achieve what he called "natural playing," so "they [the instruments] become anonymous." Interestingly, Pierre Schaeffer, in his *musique concrète* (the term was coined in 1948), shared Feldman's aim of stripping the instruments of some of their individual characteristics in order to abstract them from instrumental clichés. Schaeffer worked electronically, by cutting the attacks of the note, a similar method Feldman was aiming at through minimizing the attack in instrumental playing, to allow the sounding of the *natural* and *anonymous* sound. Another statement by Feldman gives us a deeper understanding of what this sourceless sound, could be:

Everything is a found object. I mean, I didn't invent the major 6th. I didn't invent a minor 7th. When I hear these things going, how I use them. Watching these found objects. Everything is a found object. Even something that I do invent is a found object.²⁶⁴

The term "found object" (originating in the French *objet trouvé*) in art, refers to the use of objects, often everyday common ones that are not normally considered art.²⁶⁵ In music, the term sound objects refers to Schaeffer's *objet sonore*, the concrete, everyday sounds he recorded as material for his *musique concrète*. A sound object may come from any source, and, as discussed above, can

263 *Morton Feldman Says / Selected Interviews and Lectures 1964–1987*, p. 28.

264 Feldman, *Morton Feldman Essays*, p. 187.

265 One of the first examples of found objects (he used the term readymade) in art is Marcel Duchamp's *Fountain* (1915). In music, Cage was a pioneer in using found objects, his piece *Credo in Us* (1942), was scored for two percussionists playing on various found objects (electric buzzers, tin cans etc), piano and radio or phonograph.

be manipulated to conceal its origins. When Feldman claims that “everything is a found object,” I think he both points at the physicality and materiality of an object, but more importantly, about how found objects alter the context, how the significance of the seemingly familiar objects change according to the context into which they are applied. In art, placing objects in unexpected contexts results in a destabilization of the traditional concept of what is art and what is not. Feldman evokes this ambiguity when he says: “I prefer to think of my work as: *between categories*. Between Time and Space. Between painting and music. Between the music’s construction, and its surface.”²⁶⁶ Throughout his writing, he consistently tries to escape categories and to acquire a status of *in-betweenness*—it seems a privileged status with some sort of immunity granted.

I do think it is interesting that Feldman and Pierre Schaeffer—at the same historical moment and on different continents—share a common approach to sound but bring it into play with such different aesthetics, styles and methods.²⁶⁷

As we have seen, Feldman wrote that new sounds come about when the instruments “deal in marginal worlds; and so they are precarious in execution.” He is after a marginal, peripheral sound world, the borderline universe of sounds, which presents ambiguity and a sense of peril in performance. When asked if what he is after is a very pure sound, he answered:

But it’s difficult for a musician to play that way. I have yet to hear an easy harmonic played beautifully and without vibrato with a slow bow on the cello. I have yet to hear a trombone player come in without too much attack, and hold it at the same level. I have yet to hear that kind of control. That’s why these instruments are not dead for me: because as yet they have not served my function.²⁶⁸

Feldman is in a sense creating a “new instrument” or performance practice in his passionate search for his sounds. This is as late as 1972, and he claims that instruments have not yet served his function, he sees a future potential, and he puts enormous demands for instrumental control on the performers. His critique of the prevailing performance practice can thus be seen as an incentive to a new practice he was building. By simultaneously rejecting the old practice,

266 Feldman, *Give My Regards to Eighth Street*, p.88.

267 Thinking of sound as something clean and pristine, as independent and almost abstract material in a composition is similar to how sound is treated in *acousmatic* music. *Acousmatic* is sound whose origin is not seen, and the term dates back to Pythagoras’ practice of speaking to his students from behind a curtain, so that they could focus solely on the words and not be distracted by his bodily presence. In 1955, Pierre Schaeffer and Jérôme Peignot were the first to use the term *acousmatique* to describe the listening experience in *musique concrète*.

268 Griffiths, “Morton Feldman Talks to Paul Griffiths,” pp. 758–9.

and keeping its components, he promotes his virtuosity of sound—his love for the instrumental colors sieved through his wonderful instrumentation skills. In his 1986 Darmstadt lecture, he said: “Know thy instrument! Know thy instrument better than yourselves. It’s very, very important.”²⁶⁹ He often talks about the abundance of wonderful instrumental timbres at the composer’s disposal. At the same time, he puts constraints on his practice:

To think of music without instruments is, I agree, a little premature ... But I, for one, cannot dismiss this thought. In creating this indeterminate situation I began to feel that the sounds were not concerned with my ideas of symmetry and design, that they wanted to sing of other things. They wanted to live, and I was stifling them. It is not a question of a controlled or a de-controlled methodology. In both cases, it is a methodology. Something is being made. And to make something is to constrain it.²⁷⁰

“And to make something is to constrain it,” says a lot, both about his attitude towards his compositional practice and the performance practice—the creativity in the making opposed to being restrained and held back, a dialectic permeating his creative practice. This dialectic can also be seen to include Feldman’s performative role as a composer; he often described his compositional process in performative turns.²⁷¹ The conflict of leaving the choice to the performer, out of his realm, was often a source of great qualms:

Earle Brown related a telling anecdote about Morton Feldman’s public struggle with the essentially existential issues of freedom and choice. He recalled a rehearsal where one of Feldman’s graph pieces was being played by a chamber ensemble. In the middle of the rehearsal Feldman stood up from his chair and said in a loud voice “I don’t like what the violinist is playing” to which the violinist defensively replied “Well it says here to play a note in the high register, so I played a note in the high register...” to which Feldman replied “Play a note that I like.”²⁷²

269 Feldman, *Morton Feldman Essays*, p. 193.

270 *Ibid.*, p. 113–14.

271 “My pieces are to some degree a performance. I’m highly concentrated when I work. In fact I found ways to arrive at concentration. One of the most important ways is that I write in ink. So if I begin to work and I see that I am crossing out all the time, I realize in a sense that I thought I was concentrated, but in fact I wasn’t concentrated. So the writing in ink is an inner parameter to how concentrated I really am.” *Morton Feldman Says / Selected Interviews and Lectures 1964–1987*, p. 51.

272 From Greg Reave “Interview with Earle Brown” 1983, audio from www.earle-brown.org, quoted in Paul Scriver, “Morton Feldman the Abstract Artist and the Lens of Criticism,” accessed December 5, 2013, http://paulscrivier.com/downloads/Feldman_Lens_of_Criticism.pdf.

For all his critical writing about performers, we know that Feldman was inspired by performers in his work. Sebastian Claren writes about how the title *Projection* came after Feldman heard the French cellist Pierre Fournier play:²⁷³

... Fournier plays it [Bach] in that way, you understand, inwardly, that was very important as a metaphor. As a young man, I was so lucky to hear a concert one of the few times Fournier came to New York. This was very influential for my *Projection*, ... and I always think when I'm writing for a particular instrument combination, and especially if there is a certain [performer], for which I write, I think about how they project, it is not only about the notes, it is this person playing (the notes). ... In this way, Fournier has also taught me how to project, and how you can go inward and still reach out to the ballpark.²⁷⁴

The description of Fournier performing the music in an introverted manner but still projecting the sound into the concert hall is the incarnation of “the acoustic reality.” Feldman’s reference to a specific performer is very interesting and useful information for performance. Fournier’s style of playing, the heartfelt sincerity and warmth in his playing was coupled with no excess body language; he was known to sit quite still and keep an almost expressionless face while playing, as listening in deep concentration to the music. He played with an introverted expression, but still projected outwards, although with no virtuosic showmanship. It appeared to be music down to the bone, with no extras. This bodily performance-style is close to David Tudor’s style, described by Christian Wolff as fundamentally calm and with an inexpressive posture. The significance of David Tudor for Feldman can hardly be overstated. Cardew captured Tudor’s significance for composers well when he wrote of Sylvano Bussotti’s *5 Piano Pieces for David Tudor*: “The words David Tudor in the title are in no sense a dedication, but rather an instrumental indication, part of the notation.”²⁷⁵ I will return to Tudor and the significance of his performance approach when I discuss *Intersection IV*.

273 Pierre Fournier performed in New York in 1948.

274 Feldman quoted in Sebastian Claren, *Neither: Die Musik Morton Feldmans* (Hofheim: Wolke Verlag, 2000), p.45. My translation from the German. “Fournier spielt sie auf jene Weise, verstehen Sie, *verinnerlichen*, das als eine Metapher war sehr wichtig. Ich hatte Glück, daß Ich als junger Mann Fournier eines der wenigen Male, die er nach New York kam, ein Konzert spielen Hören konnte, es war sehr einflussreich für mein Projizieren, ... und ich denke immer daran, wenn ich für eine bestimmte Instrumentalkombination schreibe und besonders, wenn es ein bestimmter [Interpret] ist, für den ich schreibe, ich denke darüber nach, wie sie projizieren, es handelt sich nicht nur um noten, es ist dieser Person, die [die Noten] spielt. ... Fournier hat mich also gelehrt, zu projizieren, und wie man nach innen gehen und dennoch den ballpark [äusserer Teil des Baseball-Feldes] erreichen kann.”

275 Cornelius Cardew, *Cornelius Cardew: A Reader*, ed. Eddie Prévost (Harlow: Copula, 2006), p. 6.

2.5.6 Performative implications of “the acoustic reality”

Feldman’s dissatisfaction with the interpretations of his early graphic scores was most probably one of the reasons that the graphic scores did not entirely fulfill his ideal for a more plastic and flexible notation. He abandoned it, although he would return to it in some occasions later.²⁷⁶ He was critical of the side effects of the openness of the scores, namely the performer’s liberation:

After several years of writing graph music, I began to discover its most important flaw. I was not only allowing the sounds to be free—I was also liberating the performer. I had never thought of the graph as an art of improvisation, but more as a totally abstract sonic adventure. This realization was important because I now understood that if the performers sounded bad it was less because of their lapses of taste than because I was still involved with passages and continuity that allowed their presence to be felt.²⁷⁷

Here, Feldman has come to terms with, and accepts the bad taste and clichés coming from, the performers when they were “liberated.” However, he now takes responsibility for this by blaming himself for allowing “their presence to be felt,” which is to the fault of the openness of the notation. Still, he is exploring degrees of indeterminacy, and he observes, “the degree to which a music’s notation is responsible for much of the composition itself is one of history’s best kept secrets.”²⁷⁸ It is important to observe that for Feldman, the openness of the notation had nothing to do with improvisation. This is in stark contrast to Cowell’s assumption (discussed above), from a listening perspective, in 1952, that improvisation was a given practice in Feldman’s *Intersection III*.

How can this understanding of Feldman’s extreme focus on sound and his problematic relationship with the instrumental practice at the time give us insight we can use in performance of *Projection I*? Most importantly, I think, is to relate to “the acoustic reality” by listening to the decay of the notes in the current acoustics, something that definitely affects the choice of tempo. Having the metaphor of the non-figurative notion of abstraction in mind while practicing, I try to avoid the typical, classical cello sound, and try to obtain a “pure” sound with a minimum of attack and without vibrato. It also gives me an incentive to search for what Feldman names “marginal worlds,” sounds situated at the

276 Feldman returned to graph notation with the works: *Atlantis* (1959) and *Out of “Last Pieces”* (1961), *The Straits of Magellan* (1961) *The King of Denmark* (1964), and *In Search of An Orchestration* (1967).

277 Feldman, *Morton Feldman Essays*, p. 38.

278 Feldman, *Give My Regards to Eighth Street*, p. 144.

edge of the dynamic range—the slight, small, and very soft sounds. Thinking of Feldman’s metaphors from painting, I try to think of painting with sound, regarding each tone as a specific color with unique textural qualities. I choose a large register on the cello so that I have as many pitches as possible to my sound painting disposal.

From a performer’s perspective, an important question is whether I shall perform from the graphic score, choosing pitches spontaneously, or choose them in advance? From the quotation above, it is clear that Feldman did not mind realization as long as the musicians listened. David Tudor was known to realize the indeterminate scores in advance.²⁷⁹ The term “realization” is used both to describe performance as in realizing the score through performance, and of a performance score made by the performer, which is still a *written* score, something Tudor scholar Holzaepfel calls “second texts.”²⁸⁰ Considering experimental notation, and Feldman’s aim of a “totally abstract sonic adventure,” my opinion is that the *Geist* (spirit) of the piece is best kept by reading the score and choosing pitches in the moment of performance instead of realizing the score beforehand. On the other hand, choosing notes on the spot leads to a danger of intuitively choosing tonal relationships, something less desirable in this context. But the slow pace of the piece and the generous number of silences allow time to choose in the moment of performance. I have tried both solutions in performance, and find that both have qualities the other lacks. However, choosing the pitches during performance contributes to a state of mind that to me resembles abstract painting—gently setting the strings in vibration, brushing carefully with the bow and plucking with the finger, moving from one register to another in an apparent indeterminate choreography of the fingers, hands and arms. The combination of playing as softly as possible coupled with the giant leaps in register is somewhat of a challenge. It requires a preparation of the left hand so that no movement becomes jerky and abrupt, and thus disturbs the flow of the music and the significance of the rests.

To summarize the conscious and measurable aspects of my interpretative choices: I choose a large register on the cello (four and a half octaves) in order to have as clearly diversified ranges as possible. The dynamics are as soft as possible throughout the piece. The treatment of the instrumental sound production requires the utmost sensitivity and intensity in spite of the soft dynamics. I will treat this subject further in the section on performance practice. The

279 See Holzaepfel, “David Tudor and the Performance of American Experimental Music,” p. 65–81

280 *Ibid.*, p. viii.

tempo and rubato are dependent on the decay of the notes, thus the attack of the notes, coupled with the acoustics in the hall (the acoustic reality). I feel free in the *rubati*, conditioned not only by the hall, but also by the density of the notes and change of positions.



The result of the *Werktreue* interpretation can be found on video #1.

2.5.7 Intersection IV: *Texttreue* interpretation

Feldman's instructions for *Intersection IV* read:

Each box is equal to MM 80. Each system is notated vertically as regards pitch: high, middle, low. The player is free to choose any dynamic and to make any rhythmic entrance within the given situation. Numbers indicate the amount of sounds to be played simultaneously (if possible). Sustained sounds, once played, must be held at the same dynamic level to the end of the given duration. All sounds are pizz. unless otherwise notated. ♠ har.; A arco; etc. etc.²⁸¹

The notation in *Intersection IV* is a three-story grid, each box representing the pitch register on a vertical level, and one *ictus* at a horizontal level. The number of notes and prescribed performance technique is denoted with numbers and letters inside the boxes. It resembles tablature, but it is not possible to access the notation intuitively—there is no correlation with what you see and how the fingers should be placed at the fingerboard. It is a highly prescriptive notation, where the rules must be understood, translated, and transmitted into actions. The first question arises in relation to harmonics: are they to be performed *arco* or *pizz.*? Feldman's sentence: "All sounds are pizz. unless otherwise notated" is

not unambiguous, as he may have had the preconception that harmonics are always performed *arco*. I read it as given, and choose to play the harmonics *arco*; this has the advantage of separating the three techniques (timbres) clearly and bringing out their individuality and particular colors.

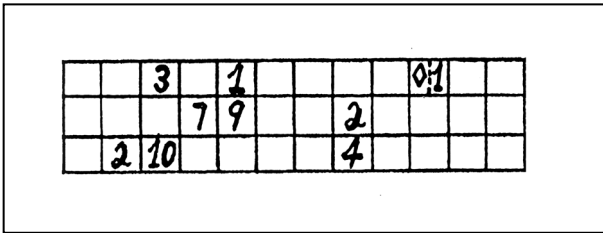


Figure 10: Feldman *Intersection IV*, third system.

On the first system, the letter p appears (unexplained) in a four-*icti* durational low register box. This may have indicated *pizzicati*, but because it is sustained, it is more convincing for me to interpret this as *ponticello*, and thus *arco*. The

²⁸¹ Feldman, *Intersection 4*

process of deciding pitches is largely guided by what is possible physically within the time-window at one's disposal. The texture gets denser in the second system, with seven and eight notes within one *ictus* proving a challenge to perform this score according to the text. For example, when the ten low notes and three high notes appear within a single box in the fourth system (see Figure 10 on page 110), the range of the registers cannot be too far apart in order to perform it at the tempo of 80. The notes need not be played simultaneously (as a chord or cluster), they need

Figure 11: My realization of *Intersection IV*, multitrack version.

only occur within the time frame. The words in brackets, “if possible,” must be taken into account, and the goal of being absolutely true to the score may yield. The decision to be made in that case is what to do as an alternative, if literal performance of the score is not possible? There are two clear options: either reduce the number of notes, or to play *molto rubato*, allowing the time needed to perform the given number of notes. However, in my goal of being true to the text, I take an experimental approach, and I am willing to use all means at my disposal. That includes a digital recording technique, allowing me to divide the piece into several voices and record them separately.²⁸² I wrote out a score with up to 13 voices (see Figure 11 on page 111), choosing pitches within each range of approximately a tenth. Naturally this method will not work in live performance, but as an experiment in realizing Feldman’s written ideal, I will perform this experiment in order to get as close as possible to the text. Dynamics are freely chosen, but must be consistent for each entrance, something that falls naturally, as the piece consists of shorter or longer phrases with silences in between.

The result of the *Texttreue* interpretation can be found on video #4.



²⁸² I used the multitrack recording software, *Protools*, in recording *Intersection IV*. I used a click-track in recording the voices separately.

2.5.8 Intersection IV: *Werktreue* interpretation

Intersection IV is a much denser and virtuosic piece than *Projection I*, the tempo is faster, and the occurrences of the events come more frequently. Feldman has developed and compressed his graphic notation since the *Projection* series; it is now more prescriptive, including numbers and letters. Where *Projection I* had a graphic, airy beauty, *Intersection IV* looks more like a secret chart, with its numbers and symbols. Graphic notation can be regarded as related to *action notation* or the more established term *prescriptive notation*,²⁸³ a method of notation that prescribes the musician's actions or methods in creating sounds,²⁸⁴ as opposed to *descriptive* (i.e. traditional) *notation*, which describes the sounding result in terms of parameters such as pitch, rhythm, dynamics, and articulation. Earle Brown used the terms *explicit* notation for conventionally notated scores as opposed to *implicit* notation, which refers to visual cues that inspire actions.²⁸⁵ According to Mieko Kanno, "prescriptive notation points to a shift in the function of notation from representation to mediation."²⁸⁶ Whereas the visual appearance of the *Projection I* score can be seen directly to inspire the performer to aim for an "abstract sonic adventure," the prescriptiveness of the *Intersection IV* score is more abstract and articulated, using something close to what Behnen names *procedural* symbols:

There are two basic types of symbols used in all scores. They are what I call correlative and procedural types. With a correlative type there is some kind of one-to-one correspondence between what is seen and what is heard ...while the correlative symbol requires only one step to interpret, the procedural symbol requires at least two.²⁸⁷

The correlative symbol creates a link between what is seen and what is heard. In *Projection I*, there is a high degree of correspondence between the way the notation depicts the unfolding of time and the registers, and how it is usually read. In *Intersection IV*, however, the notation method describing the number

283 Charles Seeger, "Prescriptive and Descriptive Music-Writing," *The Musical Quarterly* 44 (1958): 184–95; Mieko Kanno, "Prescriptive Notation: Limits and Challenges," *Contemporary Music Review* 26/2 (2007): 231–54.

284 An example of prescriptive notation is Helmut Lachenmann's *Pression* (1969) for solo cello, where graphic notation, written instructions, and descriptive notation are used in a mix.

285 Reginald Smith Brindle, *The New Music: The Avant-Garde since 1945* (Oxford: Oxford University Press, 1975), p. 130.

286 Kanno, "Prescriptive Notation: Limits and Challenges," p. 231.

287 Severin Hilar Behnen, "The Construction of Motion Graphics Scores" (PhD diss., University of California, Los Angeles, 2008), p. 46–7.

of notes and playing techniques must go through two steps of interpretation before it is performed, and can thus be seen as consisting of procedural symbols, further described by Behnen as "... a procedural symbol signals an entire set or series of actions."²⁸⁸ *Intersection IV* can accordingly be viewed as consisting of more procedural symbols, as the indeterminacy is greater and there are multiple possible interpretations. The work can definitely not be performed from the score, due to both the abstract notation, and the sometimes-extreme density of notes. It must be realized (written out) to be performed. The high degree of indeterminacy in the writing makes the performer's process in realizing this score come close to composition. From the beginning, the score tells the performer to play one note in the high register, and three in the low, within a beat (see Figure 7 on page 70. 7). In order to do that, one must experiment with what is actually possible instrumentally. The next step is to make a musical choice, which is based on instrumental limits and possibilities, and a preference of chords/tones with a non-tonal ("non-figurative") character (in keeping with what we know of Feldman's abstract inclinations).²⁸⁹ As the score gets denser, it becomes more challenging to meet the conditions of performing any given number of notes within three different registers and with three different techniques, and to make it all work in tempo. What is new in relation to *Projection I*, however, is that Feldman allows for freedom in placement within the timeframe. He explained:

When I first did my early graph music, things had to come in a certain time span. Now it didn't have to come exactly in the beginning of the time span, and as you know it can come anywhere, like crossing a street, that's why I called them Intersection, to me time was the distance, metaphorically, between a green light and a red light. It was like traffic, it was a control. So I always controlled the time, but I didn't control the notes.²⁹⁰

To realize the score is a laborious process that unquestionably involves creative faculties on behalf of the performer. The realization means nailing down one possible solution, one fixed version among an infinite number of possibilities. This apparently conflicts with Feldman's initial motivation to free the sounds through a more indeterminate notation: "The new structure required a concentration more demanding than if the technique were that of still photography,

288 Ibid., p. 83.

289 The information acquired from studying and performing *Projection I* is naturally taken into the study of *Intersection IV*.

290 Feldman, *Morton Feldman Essays*, p. 158.

which for me is what precise notation has come to imply."²⁹¹ But the realization becomes like his metaphor of a still photograph—one version of the prismatic image—which is rather the opposite of Feldman's aim. The work is free only as long as it exists in notation, on paper, as an idealistic and beautiful idea of freedom. John Cage rightfully observed that: "On paper, of course, the graph pieces are as heroic as ever, but in rehearsal Feldman does not permit the freedom he invites, to become the occasion for license."²⁹² Cage himself employs indeterminate notation in most of his works from the 1950s, offering the performers different degrees of freedom, but like Feldman he ultimately wanted to keep the performers on some kind of leash: "I must find a way to let people be free without their becoming foolish. So that their freedom will make them noble. How will I do this?"²⁹³

Intersection II and III, the precursors to *Intersection IV*, were written for pianist David Tudor and were extremely challenging, asking for 12 keys or more in a single register, in combination with groups of keys in one or two more registers in a tempo of 158 or faster. Tudor realized the score, and according to Holzaepfel, "Tudor may have undertaken his realization (of *Intersection II*) in hopes of seeing it published as a companion piece to Feldman's score. But this never happened."²⁹⁴ Whether we consider Tudor's realizations as compositions, re-compositions, or interpretations depends on how much creative originality we believe is involved in the act of realizing an indeterminate score.

What we can be certain of, is that realizations on this level require a high degree of creativity from the performer, with an inherent *authorship of performance*. It also clarifies the demarcation between *work as score* and *work as performance*. Adorno wrote: "The musical score is never identical with the work; devotion to the text means the constant effort to grasp that which it hides."²⁹⁵ This statement naturally applies to written scores in general, but these graphic scores are excellent examples of unlimited amounts of possible individual interpretations that could vary to a great degree.

291 Ibid., p. 38.

292 Cage, *Silence: Lectures and Writings by John Cage*, p. 128.

293 John Cage *A Year from Monday: New Lectures and Writings* (Middletown, CT: Wesleyan University Press, 1967), p. 136.

294 Holzaepfel, "Painting by Numbers," p. 169.

295 Theodor W. Adorno, "Bach Defended against His Devotees," in *Prisms. Studies in Contemporary German Social Thought* (Cambridge, MA: MIT Press, 1982), p. 144.

As we can see from the score, *Intersection IV* for cello is also a highly technically demanding piece. For example, on page two (see Fig. 10) the succession of 3 beats in tempo 80, and a demand for 13, 7 and 10 sounds to be played within the timeframe of each beat. The performer's wild card is found in the additional words in the instruction, written in brackets: *if possible*. I think the *if possible* reveals that this can be seen as a notational experiment preceding the performance experiment. It is beyond the bounds of possibility to play the sequence of 13, 7 and 10 sounds within a 3 beats in tempo 80.

As a performer, I need to spend a long time trying out different combinations of notes, and—not least—to decide the order of the notes to be played. I could play the notes in succession, as a quasi-melodic phrase, or perhaps I could play one note repeatedly, when a number is requested in the same register. If I choose to play chords (an almost unavoidable choice when the numbers within the boxes are high), should I break the chords, and if I do, should I break them up or down, and in which order should the different playing techniques, when prescribed within the same beat, occur? There are a tremendous number of assessments and evaluations to be made, and even though I constantly try to think of what I believe Feldman had intended for this, my interpretation cannot escape the influences of my taste, my choices, and my own judgment. It is a process of counting and thinking, experimenting with series of combinations, trying and failing, jotting down music and erasing it before trying again. Sometimes returning the next day to discard the whole thing and start over. In this procedure, I do feel more like a composer than a performer, or perhaps a co-composer, as certain frames of the piece are provided in fairly strict terms.

To summarize my interpretative choices: I choose quite small registers on the cello (approximately one octave) due to the technical and physical requirements: that I am able to play several notes simultaneously over all three registers. In choosing notes and chords, I tried to avoid tonal relationships and progressions, aiming at a more open and ambiguous tonal expression, often using intervals like sevenths, ninths and seconds (see Figure 12 on page 116). I tried to be consistent with the dynamics I choose for each phrase. The general dynamic level is about *mezzo forte*, due to the density of the notes. The density of the notes also strongly influences the tempo and *rubato*, and I choose to play the exact number of notes in the score, and be rather slightly less than exact with the tempo.

The result of the *Werktreue* interpretation can be found on video #3.



The image shows a handwritten musical score titled "INTERSECTION IV" on five staves. The notation is dense and includes various musical symbols such as notes, rests, and accidentals. Performance instructions are written above and below the staves, including "pizz" (pizzicato), "arco" (arco), and "sul pont" (sul ponticello). Roman numerals (I, II, III, IV) are placed below the staves, likely indicating fingerings or positions. There are also some graphical elements like a large 'V' and a '3' with a vertical line, possibly indicating a breath mark or a triplet. The overall style is that of a composer's working draft or a personal score.

Figure 12: My realization of *Intersection IV*.

2.6 Performance practice

2.6.1 Notation as emancipation?

In his short article "Visual sounds: On graphic scores,"²⁹⁶ Christopher Cox suggests four categories of graphic scores: first, those evolving from a fascination with visual arts in the 1950s and 1960s; second, graphic notation in connection with electronic music; third, the use of graphic notation with philosophical and

²⁹⁶ Christopher Cox, "Visual Sounds: On Graphic Scores," in *Audio Culture: Readings in Modern Music*, ed. Christopher Cox and Daniel Warner (New York: Continuum, 2004), p. 187.

political concerns, as a means to eliminate the “hierarchical division of labour that requires performers to subject themselves to the will of the composer;”²⁹⁷ and fourth, the graphic notation in free jazz in the 1950s and 1960s. Feldman’s scores obviously belong to the first category, but the shift from emphasizing musical texts to focusing on action and performance can be seen as a general and significant trait of graphic notation. From this perspective, all occurrences of the phenomenon graphic notation, albeit originating from different aesthetic directions, can be seen to have an aspect of philosophical and political concerns (Cox’s third category), as all include emancipation from the limits of conventional notation and the hierarchical structures embedded in the performance practice. Proof of this is found in the history of graphic notational practice, where musical, notational, and performance experiments were executed in the quest for new relationships between performer, composer, and score, often fundamentally challenging the “work-concept.”²⁹⁸ From this perspective, Feldman’s two early graphic scores can be seen as early examples of the emancipation of the performer. The method of notation is an experiment in the implicit ideology of the emancipation of the sounds, but the aim of the experiment is displaced in practice: as it is the performer who must make the choices, it is the performer who becomes the actual subject of emancipation. Feldman’s critique of the performers is irrelevant in this context; this was an important contribution to the performance practice of new and experimental music in the 1950s, and can be seen as an early forerunner to the *performative turn* in music, when the focus shifted from work and score, towards process and performance. The fact that Feldman did not intend this outcome of his experiment is a historical fact, but this doesn’t change the fact that this outcome propelled the discourse surrounding his oeuvre. Therefore, what is perhaps most interesting is not so much the graphic scores themselves, but what the chain of events that they set off in the musical community—among other composers, performers, and musicologists. The significant body of literature treating this area sees the graphic pieces as triggering important discourses within notation, performance, and analysis, hence the “author-function” introduced by Foucault. That Feldman returned to

297 Ibid.

298 Lydia Goehr discusses the normative functions of the work-concept in her book *The Imaginary Museum of Musical Works*, exploring how it subsequently defined and regulated aspects of classical musical practice. As notation is central to the concept of the ‘work’ in Western classical music, in order to ensure that the work is reproduced in relatively consistent ways, graphic scores that include elements of indeterminacy can be seen as undermining the work-concept.

graph notation for several pieces later, shows that he saw potential in the notation, and did not dismiss the performer's administration of the freedom altogether. In this light, his polemical outbursts against performers can better be taken as incentive to think about instrumental practice differently and to open the ears to undiscovered sound worlds.

The musician's first task in approaching a score is usually to learn the notes. With Feldman's scores, the performer must decide the notes before learning them. The notes cannot be chosen randomly; no matter which method is chosen, it requires reflection on the part of the performer. The performer then practices the notes chosen, and in the process is repeatedly confronted with her own decisions, and the reasoning behind them—that reasoning being rooted in personal taste, the knowledge of Feldman's preferred pitch-relationships, or even previously recorded performances.

In "What indeterminate music determines," the composer David Behrman claims: "... in leaving the player free to make decisions about one element, the composer is directing a psychological measure at him in hopes of making him think twice about what he is doing."²⁹⁹ The thinking twice is the key element here. Feldman's recurring mantra of listening to the sound is a known domain for performers, but the compositional aspects in *do it yourself* by "pick your own pitches" or "build your own piece" is challenging the performer in new ways. Behrman also stresses the responsibility inherent in this notational practice:

Feldman's scores present the player with an "honor system" notation. With no one to check up what he does, the player's incentive for doing his best is (presumably) the pleasure of contributing to a sound world whose transparency is such that the smallest detail remains perfectly audible within it.³⁰⁰

Behrman gives the performers the benefit of the doubt in presuming their intentions are to contribute to Feldman's transparent sound world. If no one checks up on the performers, and they still contribute to Feldman's preferred sound world instead of misusing the freedom given them, the honor system works. The performance of the authorial intent here becomes a question of ethics. The performers have several choices, but according to Behrman, the "right choice" is to follow the composer's intentions, expressed in the score and in the aesthetic context. Otherwise, the honor system is broken. The performer

299 David Behrman, "What Indeterminate Notation Determines," in *Perspectives on Notation and Performance*, ed. Benjamin Boretz and Edward T. Cone, Norton Library: The Perspectives of New Music Series (New York: W.W. Norton, 1976), p. 63.

300 *Ibid.*, p. 73.

is the one that loses her honor if she “abuses” the composer’s trust. Cage’s concern that the performers not misuse their freedom in a foolish way is part of the same rhetoric: “I must find a way to let people be free without their becoming foolish. So that their freedom will make them noble. How will I do this?”³⁰¹

Interestingly, seemingly far from the use of indeterminacy in the USA, European composers started exploring integral serialism in the same period. In a letter to Cage dated 1951, Pierre Boulez writes: “I can tell you straight away, that I didn’t think much of Feldman’s attempt with white squares. Much too imprecise and too simple.”³⁰² He later experimented with leaving certain indeterminate aspects to the performer in his third Piano Sonata (1955–7) where the player may decide the order of movements, the fragments within them, and whether to omit certain passages, and may choose between alternative dynamics and tempos. Feldman, fired back: “Boulez, who is everything I don’t want art to be ... Boulez, who once said in an essay that he is not interested in how a piece sounds, only how it is made.”³⁰³ Boulez shares the anxiety that the performers become too creative in their interpretations, this he wrote to Cage after seeing Feldman’s *Intersection* scores in 1951:

Moreover supposing that interpreters are imaginative, they would then be composers ... Vicious circle. ... Summing up, I think of these Intersections that they are certainly in a path which is exact, but that they let themselves go dangerously to the seduction of graphism alone. Now, we are musicians and not painters, and pictures are not made to be performed.³⁰⁴

The attitudes expressed by these three composers shed light on the strong position of intentionality in contemporary music, discussed earlier. It is interesting to observe how the work concept is an underlying premise for the debate and how the fidelity to factors and codes outside the score is implicit in these statements. They depict the performers as subordinate beings, who need clear instructions and the composer’s guidance in order to be able do “the right thing,” as an ethical imperative, even when no one sees them. Boulez more than reveals a mistrust of performers by asking what would happen if the performers became imaginative? Where would this “vicious” circle lead us? Curiously enough, these might be some of the most important questions posed

301 Cage, *A Year from Monday*, p. 136.

302 Nattiez, *The Boulez–Cage Correspondence*, p. 103.

303 Feldman, *Morton Feldman Essays*, p. 47.

304 Nattiez, *The Boulez–Cage Correspondence*, p. 116.

by Feldman's graphic scores regardless of what the composer might believe or think.

Naturally, the performance freedom embedded in the notation of *Projection I* and *Intersection IV*, is bound to be a conditional freedom, as most of the parameters are fixed. It is paradoxical, though, that composers who choose indeterminate notational practices still hold on to the traditional composer–performer hierarchies. Feldman showed an ambivalent attitude towards his experiments throughout his career, again underscoring his struggle between freedom and control:

... Indeterminate music can lead only to catastrophe. This catastrophe we allow to take place. Behind it was sound—which unified everything. Only by 'unfixing' the elements traditionally used to construct a piece of music could the sound exist in themselves—not as symbols, or memories, which were memories of other music to begin with.³⁰⁵

The unfixing of the elements, or the disassembling of the conventional parameters, is the key to Feldman experiment with freeing the sounds. His yearning for the freedom of the sounds becomes a mantra, "there was a deity in my life, and that was sound. Everything else was after the fact. All 'realization' was after the fact. Process was after the fact."³⁰⁶ His wish for freedom justified the release of pitch. The escape from sound as memories and symbols and echoes of other musics was worth this experiment. The sad truth, though, is that the fixation of pitch removed only one link in the chain. Indeterminacy exists only as the composer's idea and on the page in the score. The moment the performer chooses one pitch instead of another, the composition is determined, and the inevitable pitch relationships occur, as the unavoidable reality of listening to music in time is that one tone follows the other. From this perspective, the compositions are unperformable in the ideal sense, as the only way they would meet the intentions of the composer would be a realization in abstraction, an introvert reading of the score, a utopian ideal when "the sounds exist in themselves—not as symbols, or memories, which were memories of other music to begin with". Another way of viewing the utopian aspect of this ideal is to use the sum of all existing interpretations (as there are an infinite number of possible interpretations of the works) to create a body of "The Abstract Experience."

305 Feldman, *Give My Regards to Eighth Street*, p. 35.

306 Morton Feldman, "An Interview with Robert Ashley, August 1964," in *Contemporary Composers on Contemporary Music*, ed. Elliot Schwartz and Barney Childs (New York: Holt, Rinehart and Winston, 1967), p. 366.

2.6.2 “Introverted virtuosity” and virtuoso listening

As the product of a pianist-composer, writing with a deep understanding of the different aspects of the instrument, Feldman’s music can be seen as highly idiomatic. His relentless exploration of the unlimited range of timbral qualities inherent in the piano opened up a new field of virtuoso piano technique—as opposed to the traditional sense of the virtuoso as *Tastentiger* or *piano athlete* exploiting the strengths of the instrument and showing off the muscles of the piano. Feldman’s intimate relationship with the instrument led him to create numerous compositions for piano; and most performers who have written about Feldman are also pianists.³⁰⁷ His definition of the piano as 88 individual sonorous wonders brought with it a whole range of nuances in the physical relationship between performer and instrument. The way Feldman described the touch of his piano-teacher, Madame Press, is a gateway to this highly sensuous world: “The way that she would put her finger down, in a Russian way of just the finger. The liveliness of the finger. And produce a ‘b’ flat. And you wanted to faint.”³⁰⁸ These tactile qualities and the sensitivity of touch, require new skills and expertise and an in-depth instrumental research into the more neglected domains of instrumental education—the soft sound world, the intense but incredibly soft sounds hidden in the instrument.³⁰⁹ This has wrongly been seen as a reduction of skills, as the ideal can be seen as a removal of the projection of sound and virtuosity into the concert hall. The pianist John Tilbury writes:

Almost all Feldman’s music is slow and soft. Only at first sight is this a limitation. I see it rather as a narrow door, to whose dimensions one has to adapt oneself (as in *Alice in Wonderland*) before one can pass through it into the state of being that is expressed in Feldman’s music. Only when one has become accustomed to the dimness of light can one begin to perceive the richness and variety of colour which is the material of the music.³¹⁰

307 Pianists who have written about performing Feldman’s music include David Tudor, Cornelius Cardew, James Fulkerson, John Tilbury, Mats Persson, and Catherine Laws.

308 Feldman, *Morton Feldman Essays*, p. 194.

309 When I discuss the soft and sensitive performance practice, it is generally related to *Projection I* and only parts of *Intersection IV*, as the latter involves, at times, many notes and moreover has optional dynamic. The principle of “acoustic reality” can, however also be applied to the latter as it almost always pauses between phrases.

310 Tilbury, “On Playing Feldman.”

I agree with Tilbury, here, that it is the opposite of limiting; the ability to project ultra soft sounds, to listen and wait, as long as it takes, are virtuosic and extremely demanding skills.

When David Tudor struggled with Boulez's notoriously difficult second sonata in Paris in 1950,³¹¹ he studied Antonin Artaud³¹² (*Le Theatre et son Double*, 1938³¹³), which proved to have a tremendous influence on his performance practice:

All of a sudden there was a different way of looking at musical continuity, having to do with what Artaud called the affective athleticism ... It was a real breakthrough for me, because my musical consciousness in the meantime had changed completely ... I had to put my mind in a state of non-continuity—not remembering—so that each moment is alive.³¹⁴

This new approach to performance, which he called “aesthetic violence,” after Artaud, characterized the Tudor's performance style from this point on. He referred to the moment as “a definite breaking point,” and from then on, he “began to see all other music in those terms.”³¹⁵ This concept of non-continuity is productive in interpreting of Feldman's early scores. To put the mind in a state of non-continuity is a paraphrase of Feldman's repeated explanations of listening to the sounds themselves with no memory of the preceding note.

Pianist Catherine Laws touches on the same topic when she writes that “practicing Feldman's music opens one to Feldman's alertness to the subtleties of piano resonance, and to the spontaneous, uncertain and dangerous conditions

311 David Tudor gave the first US performance of Boulez's Second Piano Sonata. He had a very short time to study it: “I'd always been well known for my ability to handle complex scores—but this time I found a sort of constant breakdown in the continuity ... I became vitally concerned that it would be full of lapses and holes ... Boulez had written no counterpoints, no second voices, and you couldn't subordinate any voices at all, as there was nothing leading, nothing on which the music centered itself.” David Tudor, “From Piano to Electronics,” *Music and Musicians* 20 (1972): 24, quoted in John Holzaepfel, “Cage and Tudor,” in *The Cambridge Companion to John Cage*, ed. David Nicholls (Cambridge: Cambridge University Press, 2002), p. 170.

312 It was Tudor who brought Artaud back to the US and introduced Artaud's ideas to his colleagues after being introduced to him by Boulez. “But what attracted us to Boulez was not his ideas—we were very excited about Boulez because his work was the result of a crush on Artaud.” Feldman, in Griffiths, “Morton Feldman Talks to Paul Griffiths,” p. 758.

313 In English: Antonin Artaud, *The Theatre and Its Double*, trans. Victor Corti (London: Calder, 1999).

314 Tudor in Holzaepfel, “Cage and Tudor,” p. 171.

315 *Ibid.*

of performativity—conditions that many practicing regimes are designed to minimise.³¹⁶ She speaks of a fine line where the instrument's relation to the acoustics is not entirely controllable by the performer, and, "exactly what constitutes the music here is completely bound up with the material manifestation of the sound, and hence with the performer's touch."³¹⁷ What she calls the "action-perception loop"³¹⁸ in this context, is closely related to Feldman's "acoustic reality" as well as the performative and embodiment aspects of Hirata's methodology, discussed earlier, of analyzing "the sounds themselves."

It is curious that when we leave the historical attributes of the instrument, related to the romantic playing ideal, behind, we encounter frequent mention of performing in a "selfless" manner. The implication of that is that the *self* is involved only if one can play with a good tone and with vibrato. Remove those qualities, and you remove the "performing self." This may be one of the reasons many performers resist playing without vibrato and as *soft as possible*. It can certainly tell us something about the performance practice taught in conservatories in the Western world, where the romantic ideal of a large, projecting, soloistic sound dominates. Feldman wrote about performers:

I think that my earlier, more unconventional notation drew performers who were attracted to the performance freedom inherent to the music. However, with my precise music, the performers are now more involved with me, which seems to annoy them to death.³¹⁹

Being involved with Feldman, means being involved with the apparently "non-expressive" style of playing, close to Philip Corner's description of David Tudor's style:

We can take his virtuosity and intelligence for granted. It's never self-expressive, there's nothing gratuitous, there's nothing extra, it's just this thing getting done. It's not personal in any of the ordinary senses that we talk about personality. It is maybe personality at its most restricted, least outgoing before it becomes impersonal. It's not only playing to the audience, he's not playing to himself either. He's just playing.³²⁰

This attitude of "just playing," without being self-expressive, often described as selfless, can be perceived as one of serving the music as a humble performer or

316 Laws, "Morton Feldman's Late Piano Music," p. 66.

317 *Ibid.*, p. 61.

318 *Ibid.*

319 Gagne and Caras, "Morton Feldman," p. 166.

320 Interview with Philip Corner (1989) quoted in William Fetterman, *John Cage's Theatre Pieces: Notations and Performances* (New York: Routledge, 2012), p. 23.

a transparent medium. This attitude is often held up as a virtue or a goal, as if the “self” is an impediment to the performance of the music. But the selflessness so often mentioned in connection with Feldman’s performance practice, should not be mistaken as self-sacrifice, but rather as investigative and generous attitude towards the greater goal of projecting the marginal sound worlds. This is a hypersensitive virtuosic and idiomatic practice, enormously rich in nuances of dynamics and timbre. Walter Zimmermann’s concept of “introverted virtuosity” strikes me as descriptive of this practice.

“Introverted virtuosity” means that although the highest demands are placed on the performer, only the performer (and perhaps other professional musicians in the audience) realise just how great these demands are. Far from offering an opportunity for crass virtuoso display, they constitute a sort of spiritual exercise.³²¹

For me, as a cellist, one of the challenges in approaching the performance practice in the graphic works was to go deeply into the marginal worlds of timbre and touch to explore obscure timbres on the cello—to scrutinize and practice the unexpectedly large range of soft nuances below *piano*. The next challenge was then to project these marginal timbres so they actually were audible in the concert hall while keeping the dynamic low—an attitude and mode aptly described by the term “introverted virtuosity.” Two main categories emerge from this—touching and listening. The tactility and finesse in touching the instrument can be seen to redefine the cello as a concert instrument. Feldman reintroduces listening as a virtue, which involves listening to the instrument with “new ears,” an expanded sensitivity in listening, in short—virtuosic listening.

2.7 Conclusion

Has the search for Feldman’s sounds in his indeterminate music, the sounds *existing in themselves*, not as symbols, clichés, history, or memory, proved fruitful? Which kind of knowledge has this experiment of trying out two different interpretational approaches offered?

I have discussed my deliberation, reflections, and thoughts in the process of interpreting the works from two very different perspectives. I have tried to

321 Richard Toop, “Shadows of Ideas: On Walter Zimmermann’s Work,” <http://home.snafu.de/walterz/toopwz.html>.

examine and describe my process in working with the pieces, but I shall not attempt to evaluate the sounding result. The performances can be studied in the enclosed videos, and, in musical terms, they can speak for themselves. The two different interpretations of *Projection I* and *Intersection IV* differ significantly, in sound, pitch content, phrasing, *rubato*, and overall character. Do we still perceive the identity of the work across these deviating performances? I would answer “yes” to that question. Despite Feldman’s “freeing” of the pitches, the remaining determinate parameters seem to hold the work together, to an identifiable and recognizable entity. The sequences and chains of notes in different registers become rhythmic occurrences that create recognizable traits, almost like scaffolding that supports the sounds and holds them together to form a work.

Even the *Texttreue* version, multitrack recording of *Intersection IV*, bears resemblance to the *Werktreue* version. Among the available commercial recordings of *Projection I* and *Intersection IV*, I would say that all share a remarkable similarity in spite of the indeterminate aspects. The resemblance between the seven available *Projection I* recordings³²² is stronger than the five available *Intersection IV* recordings,³²³ due to the increasing number of indeterminate parameters in the latter. A discussion of the recordings is unfortunately outside the scope of this chapter.

The *Texttreue*, anti-intentionalist, interpretations proved to be a challenging intellectual experiment, as I strove for a *tabula rasa* in reading the instructions. The obvious fact that no interpretation takes place in a vacuum became increasingly evident over the course of these experiments. My interpretation of the text, however “objective” my goal, will inevitably be conditioned and guided by my previous knowledge and preconceptions. An interesting point is that the “objective” reading of the score became the subjective reading, as I took everything in the score literally including the license to choose after my own heart. This shows the paradox in the situation: the “objective” reading deviates from Feldman’s desire, because he prescribed a freedom he later regretted.

322 Uitti, F-M. (1992). ART CD 6101. Uitti, F-M. (1995). CD950. Kooistra, T. (1997). KTC 3003. Menzler, H. (2002). MODE 103. Kooistra, T. (2005).MODE 146. Deforce, A.(2009). AECD 0977. Duch, MF (2010). (Version for double bass) +3DB010.

323 Uitti, F-M. (1992). ART CD 6101. Kooistra, T. (2005).MODE 146. Deforce, A.(2009). AECD 0977. Apparently, there is a CD recording by Michael Bach by RADIO NEDERLAND, but I was unable to obtain this recording.

Derrida's famous dictum that nothing exists outside the text³²⁴ can also be interpreted as "nothing exists outside a context." In the case of Feldman, his context is hard to leave behind—partly due to his strong historical position and widespread popularity—and so is my own context, experience, and history as a performer. If context is the part of a discourse or a set of circumstances that surround an event, statement, or idea, and if it can influence meaning or effect, then this approach dramatically alters. The context is the framework in which our interpretation takes place. The best model for interpretation, if aiming for a *Texttreue* version of a piece, might thus be to bring the preconceptions that arise from our context, but still approach the work critically as an autonomous text.

As for the *Werktreue* version, might it be seen as an intentional fallacy to take the extensive repertoire of Feldman's utterances and performances into account when interpreting a partly indeterminate score? Trying to follow the specifications and conditions laid out by Feldman and his associates could well lead to inhibition, and limit the creativity for the performer. However, the process of my quest for sources and evidence of what his intention might have been felt suspiciously and strangely familiar. It became clear to me that this was a familiar position, from which I instinctively acted upon the belief that to be true to the work is largely to be true to its creator—the two all but inseparable. This position, embedded in my musical upbringing and reflected in my practice has come to the surface and become more discernible through this experiment. Following the composer's intentions—and what we may believe were his intentions—will never cease to be important in a performance practice. However, to reflect more on where the different intentions are situated, and distinguish between layers of information, can lead to interesting interpretations of works.

The weight of the performance tradition is heavy, as Feldman's music has been now been subject to interpretation for 60 years, the scores are charged with 60 years of performance practice, a practice in several areas containing embodied knowledge and inherited truths. Anyone who wants to play his music must relate to the music's performance tradition, as it appears today, explicitly or not. Leading ensembles and soloists have performed and recorded his works, thus a substantial Feldman-discourse is very much alive. All this knowledge sits in the brain, the ears, and the body—and also in the culture: the community of aesthetic practice. The result of this history is that a performer today cannot look at the score as an "objective" and detached artifact.

324 Derrida, *Of Grammatology*, p. 158.

My experience from the experiment with *Texttreue* and *Werktreue* taught me that the author is not dead in contemporary music, but that he is alive enough to keep some kind of grip on his work. The *Texttreue*-experiment was particularly interesting, in that I experienced a psychological regained freedom that triggered new creative energy in me. The awareness of the issues raised by this experience is something I will bring with me on the practice of other works.

The graph notation, with its indeterminate aspects, clearly changed not only the relationship of performer and score and sound and score, but also the relationship between the performer and the prevailing performance practice. Performers are undoubtedly part of a tradition, with its often-implicit sound and performance ideals. Feldman's graphic scores, and their ideals of creating new sounds and performance situations, force us to take a step back, in order to investigate our tradition and question ingrained habits and instincts. I think the approach of metaphorically "setting the sounds free," helps us as performers to become both more reflective and more responsible, through the psychological effect having our attention diverted from an automated and integrated relationship with the instrument. In investigating Feldman's great fascination with the visual arts, and his metaphor of a *totally abstract sonic adventure*, I have attempted to transfer this concept from the figurative space back to the concrete and material domain of instrumental practice. Feldman was at the center of a community of artistic practice that set off a new movement in performative and compositional aesthetics, and—perhaps against his own intentions—contributed to the liberation of the performer.

In approaching the end, I want to see if I can answer Boulez's questions: what would happen if the performers became imaginative and where would this "vicious" circle lead us?

I think the answer to that has been unfolding from the beginning of time. I believe that performers are imaginative and creative by nature, and that a mutual respect between all actors in the creation and performance of musical works creates the ecology of the musical universe. In the world of musical practice, I think Goehr's two philosophical concepts of "the perfect performance of music" and "the perfect musical performance"³²⁵ need a revision. The word *perfect* is not at home in a performance practice that has abandoned the *Author-God*, a practice dealing with music that allows for infinite numbers of possible

325 Goehr, "Conflicting Ideals of Performance in an Imperfect Practice," p. 149.

performances or versions. The concept is merged into “the perfectly creative musical performance.”

Might we see performance practice as an endless relay race, in which the current performer carries the most current interpretation—one based on all its predecessors? Might we view it as a palimpsest, in which each interpretation bears the traces of all previous ones? Interpretation upon interpretation, a tower of interpretations of the work. Does the sum of these interpretations constitute the performance practice? Susan Sontag wrote in “Against interpretation.”

Our task is not to find the maximum amount of content in a work of art, much less to squeeze more content out of the work than is already there. Our task is to cut back content so that we can see the thing at all.³²⁶

In relation to Feldman’s graphic works, I read this to mean there is something intangible and hidden inside the work, a core identity, slumbering behind the attempted interpretations.

In this chapter, I have examined the notational and historical context of Morton Feldman’s *Projection I* and *Intersection IV*, the challenges the works pose to the performer, and the aesthetical, interpretational and practical consequences following this. I have discussed different positions related to authorial intent, and pointed out the surprising lack of problematization of this thorny issue in the field of contemporary music. To test the notion and degrees of authorial intent present in a score, I have applied the terms *Werktreue* and *Texttreue* in interpretation of the Feldman’s early graphic works. I have looked at different attempts to analyze Feldman’s graphic scores, and have concluded with the evasive nature of the analytical object, revealing the high status of the parameter of pitch in western classical music. Finally, I have discussed the performance practice emerging from Feldman’s early graphic works, by looking at how the graphic scores challenge the performer in new ways and thereby expands the instrumental practice.

By experimenting with graphic notation, far removed from the descriptive notation, Feldman can be seen to “reset” the notation practice. By departing from the established instrumental practice, he also “resets” instrumental timbre, something with serious implications for performance practice, as a new sensitivity and tactility is called for—an “introverted virtuosity.” From this point on,

326 Susan Sontag, “Against Interpretation,” in *Against Interpretation and Other Essays* (New York: Dell, 1969), p. 14.

any sign or symbol can be interpreted and translated into sounding music, and every instrument has a great potential has a richer potential than tradition necessarily prove. In this way, Feldman prepares the ground for later composers. In the next chapter, we shall see how Helmut Lachenmann explores and develops his idiosyncratic version of prescriptive notation in the groundbreaking cello-piece *Pression* from 1969.

This chapter concludes with the words of the wonderful pianist David Tudor, describing the task of the performer:

Music exists as a spiritual reality which will continue to exist after every composer and every page of notes and dynamics are destroyed, and every performer must struggle to make the positive facts of this reality audible to a listener. Otherwise, what excuse has the poor pianist for existing?³²⁷

327 John Holzaepfel, "David Tudor, John Cage, and Comparative Indeterminacy," paper presented at *The Getty Research Institute Symposium, "The Art of David Tudor"* (2001), p. 2.

3 ***Pression***

This chapter is divided into two parts, the first is a study of *Pression* (1969) and the second is a supplement to the first part and examine the revised version of *Pression* from 2010.³²⁸

My performance of *Pression* can be found in video #5.



3.1 ***Pression*—a Performance Study**

Am Anfang war die Tat (Goethe)

3.1.1 Introduction

This chapter examines Helmut Lachenmann's groundbreaking work, *Pression*,³²⁹ for solo cello. Its central question is how to understand *Pression* not as a work (self-) contained in a score, but as a live object, as performance, action, and embodiment. *Pression* is one of Lachenmann's first works introducing the

328 The first section of this chapter was published in the form of an article in 2012 (Tanja Orning, "Pression—a Performance Study," in *Music Performance Research*, 5 (2012): 12–31. [http://mpr-online.net/Issues/Volume%205%20\[2012\]/Orning.pdf](http://mpr-online.net/Issues/Volume%205%20[2012]/Orning.pdf)); the second section formed the major part of a chapter, "Pression Revised: Anatomy of Sound, Notated Energy and Performance Practice," in *Sound and Score: Essays on Sound, Score and Notation*, ed. Paulo de Assis, William Brooks, and Kathleen Coessens (Leuven: Leuven University Press, 2013). Both parts have been revised to form this chapter.

329 Helmut Lachenmann, "Pression" (Köln: Musikverlage Hans Gerig, 1972. Assigned to Wiesbaden: Breitkopf & Härtel, 1980). Lachenmann's *Pression* for solo cello was composed in 1969 but first published in 1972. Five pages of the score can be viewed in the appendix.

concept of *musique concrète instrumentale*, music that emphasizes the way sound is produced rather than how it should be heard, thus reversing traditional hierarchies. This new musical aesthetic employing performative energy as compositional material requires an analytical approach that corresponds to the nature and demands of the music. My analysis thus draws primarily upon perspectives from the field of performance studies, using Erika Fischer-Lichte's concept "autopoietic feedback loop" to describe the relationship between performer and audience and "perceptual multistability" to describe that between performance and score. I discuss the *prescriptive notation* used in *Pression*, which presents actions and gestures as musical material, although their primary purpose is not to produce sound. I address some important ontological implications of the challenge presented by *Pression* to the notion of the work-concept. In short, I use *Pression* as a case study for the investigation of notational, embodied, gestural, and liminal aspects of performance. Throughout the investigation, I draw on my own experience as a cellist who has performed the piece.

3.1.2 *Pression*

Pression (translated as *Pressure*) unquestionably lives up to its title: in this piece the performer is asked to squeeze, press, jerk, slide, hit and stroke various parts of the instrument and the bow. Rather than functioning in a traditional way, the score maps the actions of the performer. *Pression* is one of Lachenmann's first works in the style he calls *musique concrète instrumentale*,³³⁰ an aesthetic direction that, by using traditional instruments in non-traditional ways, avoids classical hierarchical structures such as prioritizing work over performance and compositional traditions over pure sound. This new musical aesthetic calls for a new analytical approach that corresponds to the nature and demands of the music. My analysis will thus draw primarily upon perspectives from the field of performance studies. The central question addressed in this chapter is how to understand *Pression* not as a work (self-)contained in a score, but as a living organism made up of performance, action, and embodiment.

330 The composer introduced the term (in German, *instrumentalen Musique concrète*) in his brief account of *Pression* first published in 1972: Helmut Lachenmann, *Musik als existentielle Erfahrung: Schriften 1966–1995*, second ed. (Wiesbaden: Breitkopf & Härtel, 1996). Most people, including Lachenmann himself, now refer to this aesthetic as *musique concrète instrumentale*. See Abigail Heathcote, "Sound Structures, Transformations, and Broken Magic : An Interview with Helmut Lachenmann." In *Contemporary Music: Theoretical and Philosophical Perspectives*, edited by Irène Deliège and Max Paddison (Aldershot: Ashgate, 2010), 331–48.

My first encounter with *Pression* in performance immediately transformed my perception of musical aesthetics. In 1989, Helmut Lachenmann came to the Norwegian Academy of Music. A student had agreed to perform *Pression* in a master class with Lachenmann. The performance was curiously beautiful, if also very strange: were these whispering, grinding, crushing, and squeaking sounds music? This work appeared to present sound production in every possible way on the cello—every way, that is, except the central one we had been taught to believe was normal: with the bow on the string, producing a beautiful tone. Only one note, standing out in the middle of the piece, was bowed in the conventional manner, and in this context it became something completely new and fresh. In the course of this single performance, my perception of what constituted music had been dramatically changed.

My investigation will begin by reflecting on the highly original and idiosyncratic notation of actions used in *Pression*, known as *action notation* or (to use the more established term) *prescriptive notation* to distinguish it from *descriptive notation* (otherwise known as traditional notation), which describes the intended sounding result. I will then look at the significance of gestures presented as musical material even though their primary purpose is not to produce an audible outcome. I will explore the relationships between performer and audience, and performance and score respectively, using concepts introduced by the theater studies scholar Erika Fisher-Lichte: “autopoietic feedback loop” and “perceptual multistability.” These will be illustrated by my own experiences of performing *Pression*. Before examining its performative aspects, I will look at the historical context of *Pression* and consider some important ontological implications of the challenge it presents to the notion of the work-concept.

My investigation of *Pression* involves both *studying* and *engaging in* performance. I move from practice to theory and from theory to practice, not least because of the importance of remaining aware of my own stance in this research. My study is thus best described as practice-based research: research seeking new knowledge through practice. In conclusion, I will discuss the extent to which this approach has given us new knowledge about *Pression* and has further purpose and potential for development in similar contexts.

3.1.3 Helmut Lachenmann and *musique concrète instrumentale*

Helmut Lachenmann (b. 1935) is one of the most radical and innovative composers of the post-war generation in Germany. After studying with Luigi Nono

and exploring serialism, he developed a distinctive personal style, as he tried to “invent what music could be” through “emptying” what he already knew³³¹ (in this conversation he was playing with the German words for teaching [*lehren*] and emptying [*leeren*]). In this process, he found a new expressivity, a new beauty, which he problematizes in his essay *The Beautiful in Music Today*:

Except for Luigi Nono, leading composers of yesterday have exhausted their resources ... They are celebrating the comeback of the bourgeois concept of beauty ... a form sickening to anyone who sees in art—or in beauty—more than just a masquerade.³³²

He is highly ambivalent about tradition: several of his works engage with historical elements, yet, at the same time, he reformulates his style and renews it in an unequalled manner, developing a personal aesthetic through the late 1960s.³³³ *Pression* was composed in 1969 following *temA* (1968) for flute, voice, and cello, and it is the first work that thoroughly explored his original aesthetic ideas through new instrumental techniques. *Pression* is part of a series of three works—the other two being *Dal niente (Intérieur III)* (1970) for clarinet, and *Guero* (1970) for piano—in which this compositional direction was further cultivated, establishing something radically new that would have a strong impact on the composing world and also become a source of controversy.³³⁴ Lachenmann named this new direction *musique concrète instrumentale*. About *Pression* he says:

In this sort of piece it is common for sound phenomena to be so refined and organised that they are not so much the results of musical experiences as of their own acoustic attributes. Timbres, dynamics and so on arise not of their own volition but as components of a concrete situation characterised by texture, consistency, energy, and resistance. This does not come from within but from a liberated compositional technique. At the same time it implies that

331 Helmut Lachenmann, “‘Musique Concrète Instrumentale’: Helmut Lachenmann in Conversation with Gene Coleman, Monday, April 07, 2008. Slought Foundation and Irvine Auditorium.” <http://slought.org/content>.

332 Lachenmann, “The ‘Beautiful’ in Music Today, p. 21. The original, *Zum Problem des musikalisch Schönen heute*, can be found in Lachenmann, *Musik als existentielle Erfahrung*. The title paraphrases Eduard Hanslick, *Vom Musikalisch-Schönen [The beautiful in music]* (University of Michigan: Liberal Arts Press, 1957).

333 See Ian Pace, “Positive or Negative,” *The Musical Times*, vol. 139 (1998): no. 1859, pp. 9–17 and no. 1860, pp. 4–15 for an excellent account of Lachenmann’s oeuvre and position.

334 Henze criticized Lachenmann’s work for being “musica negativa” in Hans Werner Henze, *Die Englische Katze: Ein Arbeitstagebuch 1978-1982*. (Frankfurt am Main: Fischer Verlag, 1983), pp. 345–6.

our customary sharp-honed auditory habit is thwarted. The result is aesthetic provocation: beauty denying habit.³³⁵

The production and the mechanical properties of a sound are valued above the sound itself. Long-established instrumental performance practice is left behind, and Lachenmann cultivates what had been regarded as extra musical sounds, mistakes, mishaps, and accidents. He purifies the impure, and refines and defines a wide range of noises, drawing, in endless variations, on subtle differences of bow speed, bow pressure, angle of bow, and number of bow-hairs. In Lachenmann's music these sounds do not appear merely as extra-musical sounds or extended techniques but have become the very structural foundations of his composition. As David Alberman puts it, "[t]he techniques, in short, are not optional when playing the music—they are the music. One could not, for instance, transcribe Lachenmann's three string quartets for piano four hands; the music would simply disappear."³³⁶ The actual playing of the instrument, the instrumental practice, has become the compositional material. This can be seen as an extreme idiomatic approach, beyond instrumental idiomatic virtuosity, extended to encompass the specific instrument and musician's actions in the moment of performance. What might come as a surprise in this context is *Pression's* form, which appears to use a traditional structure with recurring elements, themes, and motives.³³⁷

Lachenmann's *musique concrète instrumentale* was inspired by the technique and approach of Pierre Schaeffer's *musique concrète*, which had emerged in France in 1948 as part of a new approach to composition. In contrast with the traditional process where the abstract musical idea was represented in an abstract score which was then manifested in concrete sound through performance, *musique concrète* took what was 'concrete' (recorded sound) and subjected it to a process of abstraction. Schaeffer's approach made the sound itself

335 Helmut Lachenmann, "Pression," <http://www.breitkopf.com/feature/werk/1129>.

336 David Alberman, "Abnormal Playing Techniques in the String Quartets of Helmut Lachenmann," *Contemporary Music Review* 24/1 (2005): p. 48. Nevertheless, Mike Svoboda has prepared a version of *Pression* for trombone (see <http://mikesvoboda.net/compositions-all/articles/pression.html>).

337 I will refrain, here, from structural analysis as there are two excellent analyses of *Pression* by Ulrik Mosh, "Das unberührte Berühren—Anmerkungen zur Interpretation von Helmut Lachenmanns Werken *Pression* und *Allegro Sostenuto*," in *Musik inszeniert: Präsentation und Vermittlung zeitgenössischer Musik Heute*, ed. Jörn Peter Hiekel (Mainz: Schott 2006); Hans-Peter Jahn, "Pression, Einige Bemerkungen zur Komposition Helmut Lachenmanns und zu den interpretationstechnischen Bedingungen," in *Helmut Lachenmann, Musik-konzepte*, 61/62 (Munich: Editions Text und Kritik, 1988), 40–46.

the point of departure, by collecting, classifying, and recording sounds, including “real world” sounds, and treating them as *objets musicaux*. From the core properties of concrete sounds, he would then build structures into a work, thus reversing the traditional process of composition.

New electronic technology presented Schaeffer with tools to control sound parameters such as dynamics, timbre, duration, and pitch. Having fulfilled his aspiration to create a new genre he expressed his skepticism about German classical tradition thus: “...after the war, in the ’45 to ’48 period, we had driven back the German invasion but we hadn’t driven back the invasion of Austrian music, 12-tone music.”³³⁸

Inspired by Schaeffer’s ideas, Lachenmann adapted his technique for use not with electronic *objets musicaux* but with acoustic instruments. He developed a rich palette of sounds, many of them physical and almost mechanical sounds similar to Schaeffer’s real-world sounds. In *Pression*, he uses scordatura (the cello is tuned from top down to F, D-flat, G and A-flat) to prevent the open strings ringing in the familiar fifths, which effectively kills off most of the traditional overtones but at the same time offers new tone-combinations. Lachenmann says, “...composing music means inventing an imaginary ‘instrument’ and showing it through an exclusive and not so easily repeatable context.”³³⁹ For each composition he “builds” an instrument from scratch. He uses Morton Feldman’s piece *The Viola in my Life* as an example: every piece should be “the cello (the piano, the violin etc.) in my life.”³⁴⁰ In *Pression* the cello as the sound source we know is eliminated, and thus, at one level, the cello as a traditional instrument with all its connotations and history is erased through this compositional method. In this respect, we can say that Lachenmann has liberated not only the sounds, but also the instrument and the performer from the weight of the history of the cello.³⁴¹ On the one hand, this can be seen as a strategy similar to Schaeffer’s abstraction of the sound source in order to create something new. On the other hand, the core of Lachenmann’s approach in his

338 Tim Hodgkinson, “An Interview with Pierre Schaeffer—Pioneer of Musique Concrète,” *ReR Quarterly Magazine*, 2/1 (1987).

339 Heathcote, “Sound Structures, Transformations, and Broken Magic,” p. 348.

340 Lachenmann, “Musique Concrète Instrumentale.”

341 If Lachenmann has not erased that history entirely, he has at least negated it, even if it still appears extremely clearly in many of his works. For example, in *Accanto*, his clarinet concerto, a recording of Mozart’s Clarinet Concerto is to be played very softly in the background throughout the performance. Another example is *Staub*, an orchestral piece commenting on Beethoven’s ninth Symphony.

musique concrète instrumentale is the actual revelation of the sound source—the very material qualities and physical energies of the sound. That source is the instrument itself, and the qualities of the sound result from the material conflict between cello and bow, wood and strings. The cello and the bow as physical objects become the heart of the battle. The performer sometimes even hurts the instrument³⁴² with primitive actions such as hitting, rubbing, pressing, and scraping.³⁴³ The sounds result directly from the concrete, corporeal process of executing the prescribed actions with different degrees of intensity. The physical resistance always inherent in this materiality enhances this mechanical aspect of the performance. The role of the cello as a place of action, not only in the familiar places but also at the extremes, like bowing on the string holder and pizzicato in the peg box, further suggests that the cello is taking the form of a mechanical device, offering a wide range of extreme sounds, from barely audible whispering to violent grinding. The act of performing with all the physical attributes and energies of the performer now constitutes the material of the work.³⁴⁴

This new aesthetic direction represents a reversal of traditional hierarchies on two levels, by emphasizing the importance of the resulting sound phenomena over the sound source, and prioritizing the performance over the musical text. By organizing the instrumental sound production and material in this manner, Lachenmann shifts the focus from the score as musical text to the action embodied in performance. This shift in compositional focus calls for a complementary shift in analytical focus. And the focus on the act of performance lends itself to an analysis grounded in performance theory.

3.1.4 Work and performance within the performative turn

The emergence of performance theory and performance studies is interwoven with the so-called *performative turn* in the arts, when, for example, textual theory was replaced by performative aesthetics. It emerged from avant-garde and experimental performance such as the action painting that characterizes

342 During one of my performances of *Pression*, the bridge fell off while I was playing on the lid of the cello by the bridge.

343 Most cellists who perform *Pression* do it on a “second cello,” that is, not their best instrument, due to what Lachenmann describes as “such mistreating of this wonderful instrument.” See Tanja Orning, “Interview with Helmut Lachenmann,” a video recording made in Bergen in 2010.

344 It is interesting to note, in this context, the origins of the word “material” in the Latin, *materialis*, “formed of matter.”

Jackson Pollock's practice throughout most of his later career. Another example is John Cage's *Untitled Event* (1952) which dissolves the work as artifact. The performance itself becomes the object of study, and scholars must negotiate concepts such as embodiment, action, behavior, agency, and, perhaps most of all, liveness.

The performative turn acknowledged the social construction of reality through the suggestion that all human practices are performed and led to the replacement of essentialist conceptions by a more dynamic understanding of the art work:

Some call this a veritable shift of paradigm in the history of humanities—from semiotics to linguistic performance (Austin, Searle), from structuralist to performative poetics (Derrida, Felman, Hillis Miller), from textual theory to performative aesthetics (Fischer-Lichte, Schechner) and from biological to performative theories of gender identity (Butler).³⁴⁵

In other words, a processual approach began to be taken. The work is no longer fixed and stable, but elusive: it takes on different temporal aspects as one looks at its behavior rather than its permanent and structural qualities. The work formerly viewed as an object is now seen in terms of a relational interplay between multiple agents, including performance, performer, work, maker, performance space, and audience. The performative turn in musicology has been theorized by a number of musicologists and philosophers, including Richard Taruskin³⁴⁶ Jonathan Dunsby,³⁴⁷ Peter Kivy,³⁴⁸ Lydia Goehr,³⁴⁹ Stan Godlovich,³⁵⁰ Nicolas Cook³⁵¹ and Erling Guldbrandsen.³⁵² All have, in their different ways, opened up the field. The discussion has been polarized at times, with views of the score as the pure object on one side and the performance or the performer, independ-

345 Erling E. Guldbrandsen, "Modernist Composer and Mahler Conductor: Changing Conceptions of Performativity in Boulez," *Studia Musicologica Norvegica*, no. 32 (2006): pp. 140–41.

346 Richard Taruskin, *Text and Act: Essays on Music and Performance* (Oxford: Oxford University Press, 1995).

347 Jonathan Dunsby, *Performing Music: Shared Concerns* (Oxford: Oxford University Press, 1995).

348 Peter Kivy, *Authenticities: Philosophical Reflections on Musical Performance* (Ithaca: Cornell University Press, 1995).

349 Lydia Goehr, *The Imaginary Museum of Musical Works* (Oxford: Clarendon Press, 2002); "Conflicting Ideals of Performance in an Imperfect Practice," in *The Quest for Voice: On Music, Politics, and the Limits of Philosophy* (Oxford: Oxford University Press, 1998), 132–73.

350 Stan Godlovitch, *Musical Performance. A Philosophical Study* (London: Routledge, 1998).

351 Nicholas Cook, "Music as Performance," in *The Cultural Study of Music: A Critical Introduction*, ed. Trevor Herbert, Richard Middleton and Martin Clayton (London: Routledge, 2003), 204–14.

352 Guldbrandsen, "Modernist Composer and Mahler Conductor."

ent of the score on the other. I will not cover the discussion fully here, but will merely outline some important positions and look briefly at the term.

If performance studies represent a shift from something that “is” to something that allows us “to do”—a turn from essence to appearance: the manifestation of the performance as object—then this affects the epistemology of musicology: the analysis of the principles and procedures of inquiry into music as a discipline. The investigation of music as action and performance requires a different set of perspectives and tools than that needed for a traditional textual analysis. The historical dominance of knowing over doing in musicology since the early nineteenth century—the prioritization of theoretical models over deduction from performance practice—produced analysis predominantly based on theory and text. Our principal attitudes toward music and performance are built hierarchically into our language. Grammar depicts a performance as an appendix to something: a performance *of something*. We can talk about “just playing,” but it is rare to speak of “just performing.”³⁵³ Language invites us to speak of music *and* its performance, with music as the stable text and the unstable performance as its reproduction. (I am writing, of course, about conventionally notated Western classical music, this dualism does not apply to improvised or orally transmitted music for example.) Now that the concept of the artwork is challenged, the ontological view needs to change with it:

There no longer exists a work of art, independent of its creator and recipient; instead, we are dealing with an event that involves everybody—albeit to different degrees and in different capacities. If ‘production’ and ‘reception’ occur at the same time and place, this renders the parameters developed for a distinct aesthetics of production, work and reception ineffectual. At the very least we should re-examine their suitability.³⁵⁴

Fischer-Lichte problematizes the way we structure the parameters of performance, and by doing so, construct meaning through their relationships. She eradicates the boundaries between the maker, executor, and recipient in the moment of performance, and she names this as an *event*, which is now given its own significance.

353 Goehr, “Conflicting Ideals of Performance”; Cook, “Music as Performance.”

354 Erika Fischer-Lichte, *The Transformative Power of Performance*, trans. Saskya Iris Jain (Oxford: Oxford University Press, 2008), p. 18.

3.1.5 *Werktreue*

Since music began to be notated, clearer distinctions between the work and its performance, and between the composer and performer, have emerged, representing multifarious views of the role of the performer. The German term *Werktreue* denotes the performer's fidelity and loyalty to the original text. The concept of the work itself is central here, with the performance viewed as secondary. In this realm, the composition is regarded as fully completed prior to performance, requiring the finished notated score to be interpreted faithfully. The loyal performer becomes transparent or even invisible as he or she is only a medium for the music: "The secret of perfection lies above all in (the performer's) consciousness of the law imposed on him by the work he is performing."³⁵⁵ In this context, it is as though all the information the performer needs is to be found in the score, so there is no need for an individual interpretation, just an execution or a rendering of what is already there.

At the other end of the scale, we see celebrated performers who exploit the works they are playing in order to show off their virtuosity and skill. Goehr³⁵⁶ characterizes these two extreme attitudes as Apollonian, favoring work or Dionysian, which emphasizes the performance. For her, the idea of a *perfect performance of music* is in favor of permanently existing works (works are lasting, but not performances), is Apollonian in its idealization of structure and discipline and its emphasis on *Werktreue*.³⁵⁷ *The perfect musical performance* on the other hand is a Dionysian celebration of an open-ended and spontaneous performance event. Goehr's assertion (shared by some musicologists) that musicians began to take a more subservient role in the early eighteenth century is unsupported by historical evidence, however, which shows *Werktreue* to be a theoretical position rather than a historical reality. Performers' views on theoretical and practical aspects of performance differ notably. For example, the pianist Alfred Brendel, discussing the pedantic aura surrounding the word *Werktreue*, calls it antiquated. He writes:

355 Igor Stravinsky, *Poetics of Music in the Form of Six Lessons* (Cambridge, MA: Harvard University Press, 1970), p. 127.

356 Goehr, "Conflicting Ideals of Performance in an Imperfect Practice," p. 134.

357 The notion of the performance as something ephemeral that exists exclusively in real time has naturally been challenged by the emergence of the recording industry. Now, recorded performances are infinitely repeatable, which opens up new possibilities and areas for investigation.

In any case, the proper meaning of *Werktreue* is at best marginal and suggestive; *Texttreue* by comparison is rather more concrete. ... I have never considered myself to be merely the passive recipient of the composer's commands, preferring to promote his cause of my own free will and in my own way.³⁵⁸

This illustrates the pragmatic relationship that performers have to the text they are working on: the score contains signs that have to be interpreted as the individual chooses. The pianist Leif Ove Andsnes regards himself as an actor, with each work offering him a different role which he tries to bring to life for the audience, "...to personify the composer's ideas through the means he considers suitable, on an aesthetical, technical and personal level".³⁵⁹ Nicholas Cook agrees: "Thinking of the music as 'script' rather than 'text' implies a reorientation of the relationship between notation and performance."³⁶⁰ From this perspective, he proposes an active horizontal view of successive interpretations relating to each other, departing vertically from the composer's original ideas and the text. This relational perspective is congruent with performance practice, in that it follows each work through its performers' interpretations, which in turn inevitably influence each other in today's global musical community. The performer's everyday task of translating the score into sounding music necessarily includes interpretative choices however faithfully he or she approaches the score. The ideal of being loyal to the work and the text is, nevertheless, alive and well in today in performers' communities. In my experience, the ingrained respect for the work-concept, for living and dead composers alike, preserves the hierarchy that places works above performance in Western classical music today.

We can also move the focus away from the work and the performer onto the performance as a product in itself: "...we are in possession, always, of *two* artworks: the work of music, and, given an outstanding or high-quality performance, the performance (product) itself".³⁶¹ Kivy describes the performance as an artwork in itself, viewed independently of the text, which opens up the role of the performer, giving it a new and important dimension and taking it to a new position.

358 Alfred Brendel, *Alfred Brendel on Music* (London: JR Books, 2007), p. 30.

359 Astrid Kvalbein, *I og med musikken* (Oslo: Det Norske Samlaget, 2005), p. 178. My translation from Norwegian.

360 Cook, "Music as Performance," p. 206.

361 Kivy, *Authenticities*, p. 278.

Für Werner Tausbe
PRESSION
für einen Cellisten / for one Cellist

Helmut Lachenmann, 1969

Scordatura:
IV III II I

ca. 66 (Bogen wird zumeist in der geschlossenen Faust gehalten)

Steg
Griff=brett
V I. Saite
pp
I. Saite
sim. + II. Saite
arco stop

Häse aufwärts = rechte Hand
Häse abwärts = linke Hand
mit Fingerkuppe locker-quasi flageolett-
auf der Saite hin und her fahren.

(Steg) Bogen unbewegt stehen lassen
sul IV V (tonlos) Bogen stehen lassen
distinto poss. f f f f
sim. sempre
II mit Daumen nagel gerieben
f gilt nur für Daumen : cresc. evtl. durch Beschleunigung.

(Steg) meno rit. sul IV (tonlos) p f f f

Figure 13: Helmut Lachenmann "Pression" © 1972 by Musikverlage Hans Gerig, Köln 1980 assigned to Breitkopf & Härtel, Wiesbaden, opening, 1972 edition.

In connection with this debate, Guldbrandsen reminds us that these discussions about performativity are based on methodological categories that have circulated for at least the last two centuries. He claims that “categories of performativity are implicit in existing concepts of ‘work’, ‘musical form’, ‘interpretation’, ‘musical meaning’, ‘aesthetic experience’, and ‘tradition’ (all of which are formative concepts that emerged in musicological thinking mainly through the 19th century)”³⁶² In studying works and performance, they will always be interdependent: “performances are necessarily performances of works.”³⁶³

3.1.6 Performing *Pression*

Returning to the central question in the first part of this chapter, that of how to analyze *Pression* not as a work (self-) contained in a score but as a live object—as performance, action, and embodiment, I will start by examining its *prescriptive notation*.

***Pression* as score: prescriptive notation**

Opening the score of *Pression* we are presented with an invention of Lachenmann’s called a *bridge clef* (see Figure 13 on page 142), which has been widely adopted by other composers. The clef depicts a map of the cello, dividing the instrument’s performance-space into three parts: the fingerboard and general area above the bridge, a horizontal line marking the bridge itself, and then the area below the bridge. The perspective is that of the cellist: the tailpiece is at the top of the drawing. The bridge clef represents the physical outline of the string instrument, offering the performer an accurate location for action by adding various figures and symbols such as pictures of bow and hands in addition to traditional notational symbols. The choice of this method of notation—a graphic outline like a map of the cello—opens the instrument up for navigation, depicting the cello as a continent to explore. It is interesting to observe that tablature elements are incorporated into Lachenmann’s traditional descriptive scores in pieces written both before and after *Pression* (for instance, in *Notturmo* from 1966–68 and *Gran Torso* from 1971–72), indicating that the format of a solo piece was ideal for trying out this method of notation.

362 Guldbrandsen, “Modernist Composer and Mahler Conductor,” p. 141.

363 Goehr, “Conflicting Ideals of Performance,” p. 141.

The use of spatial notation with an approximate crotchet value of 66 beats per minute with occasional bar lines gives a clear indication of time and rhythm. This method of notation is named *prescriptive* or *action notation*, and it describes the musician's actions or methods in creating sounds, as opposed to *descriptive* (i.e. traditional) *notation*, which describes the sounding result in terms of parameters such as pitch, rhythm, dynamics and articulation. The latter also contains several aspects of prescriptiveness—harmonics and notation in scordatura, for example—so the distinction is not clearly drawn between the two approaches to notation. But prescriptive notation represents a shift in thinking. According to Mieko Kanno: "...prescriptive notation points to a shift in the function of notation from representation to mediation".³⁶⁴ The purpose of the notation in *Pression* is primarily to indicate actions, rather like an instruction manual, and it is predominantly prescriptive. In 2006, Lachenmann spoke of the limitations of notational techniques:

I normally never write what you'd call "action scores". I don't want to lose control of what should happen. But nor do I have a generally describable conception of how to generate a sound system, as in 12-note music: it depends on the context, which I have to develop in a different way in each piece.³⁶⁵

Rather than a deliberate surrender of control, which in effect would have offered more interpretational freedom to the performer, the use of *action notation* is a response to the lack of available notational tools. Elsewhere, Lachenmann has given a different reason:

If I write down one version, it [every interpretation] would all be the same thing without knowing why. But if each [performer] has a reason to make it longer so as to make it audible, it is fine.³⁶⁶

Lachenmann here indicates that he is looking for the individual conscious interpretations brought forward by the "why," and he suggests that his use of *action notation* requires performers to reflect on their interpretative choices and to adjust the performance to each acoustic situation.

In contemporary music, incongruity is frequently found between the meaning of the signs used in prescriptive notation and the sounding results of the actions indicated. As Kanno writes, "there is a critical gap between the available sounds

364 Mieko Kanno, "Prescriptive Notation: Limits and Challenges," *Contemporary Music Review* 26/2 (2007): p. 231.

365 Heathcote, "Sound Structures, Transformations, and Broken Magic," p. 339.

366 I played *Pression* for Lachenmann, and interviewed him in Bergen on 2 November 2010. This was recorded on video, and is referred to here as Orning, "Interview with Helmut Lachenmann."

on the one hand and the limited vocabulary in notation on the other, and the inadequacy of notation is hard to ignore.”³⁶⁷ Considering that this new aesthetic direction, originating in the music of Lachenmann in the late 1960s, has only existed for 40 years, we must bear Seeger’s words in mind: “...our notation ... is, *par excellence*, a matter of norms determined by the vast aggregate of practice and codified by generations of workers.”³⁶⁸ Right now, we are in the middle of creating this “vast aggregate of practice,” and the performer is invaluable to the composer, both in the realization of the text and as a link in the feedback process that enables the improvement of notational techniques. In the present era, the interdependence of performers and composers is evident; we are in an experimental zone, which requires creativity on both parts. Thus, monitoring the ongoing performance practices of performers and composers alike is fundamental for the development of notational norms. One consequence of the discrepancies between different notational methods is that the performer of contemporary music has had to become more specialized than hitherto, by building an extensive body of experience in performance practice: each work may have its own particularities of sound and notation. Consequently, some classically trained performers become alienated, perceiving the gap between the *old* and the *new* music as nearly impossible to bridge.

Prescriptive notation is not as radical as one might assume, as several prescriptive elements such as natural and artificial harmonics, and instructions for fingerings, bowings, and mutes, have been integrated in the descriptive notation. Prescriptive notation also shares traits with the tablature mainly used for fretted string instruments of the Renaissance, as well as in popular music today. The tablature shows literally where on the “table” to put your fingers to produce a note, and is thus instrument-specific: Lachenmann *builds* a new cello and designs a map for navigating it, so this map cannot be translated to other instruments. Lachenmann has overcome the limitations of tablature in showing durations by simply adding lines to the tones, indicating their ending point.

When I worked with Lachenmann on *Pression*, he wanted the piece to be phrased quite freely in terms of *rubato* and agogic accents, something he demonstrated by his own playing of Schumann’s *Träumerei*.³⁶⁹ According to Lachenmann, every phrase should live its own life, and the time allowed for

367 Kanno, “Prescriptive Notation: Limits and Challenges,” p. 234.

368 Charles Seeger, “Prescriptive and Descriptive Music-Writing,” *The Music Quarterly* 44 (1958): p. 193.

369 Orning, “Interview with Helmut Lachenmann.”

each of these small, unique sounds to emerge, both in terms of resonance and physical execution, was far more important than keeping strict time. Guided by this performance practice, all cellists should perform *Pression* adapted to their instrument, their body, and the acoustic, something that would present us with genuinely different interpretations. Paradoxically, Lachenmann's conception of the distinct qualities of each single sound was crystal clear, leaving little freedom of interpretation to the performer. One example is the perforated sound quality caused by vertical bowing (see start of Figure 14 on page 1474). To produce this grainy sound (every "grain" should be heard), one has to start with a very controlled and slow bow not too close to the bridge. In spite of the score offering instructions only on how to hold the bow and the direction of its movement, Lachenmann was meticulous about the sound he required. The high degree of Lachenmann's specificity in sound details surprised me, because the prescriptive notation he uses is far from precise in its demands for specific sound results of actions, whereas the tempo and rhythm are indicated in concrete and measurable ways. Thus, the score does not provide all the information necessary to perform *Pression* according to what might be called the Lachenmann school or tradition. From this we can deduce that oral tradition and performance practice must be taken into consideration when studying and performing a contemporary work such as *Pression*, which introduces a new aesthetic in instrumental playing. My experience also reinforced my perception that the design of notational language for this aesthetic direction is still in its infancy, since it uses few symbols that are universally understood by performers.³⁷⁰

Prescriptive notational practices can be seen as an invitation to the musician to take an intuitive approach to performance: the player sees the image of what to do and does it, and the action or gesture immediately generates sonic results. A visceral relationship forms between notation and performance. This doing-aspect of the score augments corporeal expression in performance, enabling the musician to produce gestures that could be studied fruitfully in this new light.

370 A further challenge is that the symbols are rarely consistent from one composer (occasionally, even work) to another. However, several of Lachenmann's prescriptive features, such as the bridge clef, action dynamics, and other graphic symbols, have been widely used by other composers. It is worth mentioning that *Pression* was revised by Lachenmann and the cellist Lucas Fels in 2010, describing the different sound qualities and techniques in greater detail. I discuss this further in the second part of this chapter.

1/8-Haarlänge 1/8
 1/2 → 1/8
 1/2 → 1/2
 ganze Haarlänge
 am Fresch
 zwischen Steg und Saitenhalter
 dicht am III Saitenhalter
 f poss.
 molto distinto
 mit Fingerkuppen (wie anfangs)

Klemmstellen zum Fresch hin verlängern
 Klemmstellen zur Spitze verlängern
 Bogen (in der rechten Faust) zugleich steil quetschen und nach rechts ziehen
 Linke greift „as“

am Fresch beginnend mit viel Bogendruck
 ff legato
 pizz.
 memo f
 pizz.
 f

hinterm Steg
 immer dicht am Saitenhalter auf Umspannung
 Bogen ad lib. etwas herauf- bzw. herunter verlängern, Bogen in Faust.

mindestens 80 Sek.
 molto rit.
 pizz. subito
 intensiver Druck
 arco unter den Saiten auf Stegwand
 legno-Schlag V auf Stegfuß
 Steg
 Bewegung verlangsamen
 Schlag auf Corpus

Bogenwechsel ad lib. Dauer ad lib. (ca. 60 Sek.)
 Schlag (plötzlich) aufs Griffbrett und schnelles lockeres Reiben der Saiten an der Aufschlagstelle

Bogenwechsel ad lib.
 I IV
 I IV
 col legno salt.
 I II III IV
 sf

Corpuswand vor Steg
 Stegwand
 Bogen unter den Saiten vor Stegwand
 Pizz.
 Bogenstange von unten gegen die Seite prallen lassen. Tonhöhenänderungen durch Verlagerung der springens den Spitze zum Steg höher bzw. vom Steg weg (tiefer).
 *) Linke berührt leicht die Saiten (quasi flag.) um sie am Klingeln zu hindern.

Figure 14: Helmut Lachenmann "Pression" © 1972 by Musikverlage Hans Gerig, Köln 1980, page 3.

Pression in terms of its gestures and embodiment

The obvious significance of gesture in *Pression* leads us to question the nature of the correspondence between its musical notation and intended gestures. The notation most often correlates directly to physical movement, for example in

long lines pointing up and down and a jagged line indicating the gestures of the hand on the fingerboard (see Figure 14 on page 147). The discrepancy between the notated sign and its meaning necessitates the action inherent in performance to give meaning to the sign. The abstract (descriptive) representation of sound is replaced by corporeal (prescriptive) actions and gestures. Rather than having signs for sounds, we see signs for gestures. Can we then see the gesture as an integral component of the work, linking performance and score?

The execution of the physical gestures in the score of *Pression* creates an important and unique link between the body of the musician and the body of the instrument. In a slightly different context, Fischer-Lichte writes:

Each character is bound to the specific corporeality of the actor who engenders it. The actor's phenomenal body, their bodily being-in-the-world, constitutes the existential ground for the coming into being of the character. It does not exist beyond the individual body.³⁷¹

Transferring this to a musical context, the body of a musician becomes an inseparable part of the music in the moment of performance, through physical and indeed almost choreographic work. When gestures are presented, themselves, as musical material rather than for the primary purpose of producing sounds, this not only requires the performer to take a different role but also represents a break with the concept of the work as an abstract object that is written down in the form of a score and fully realized only through sound. The corporeality of the performer invites him or her to take a central role in interpretation, linking the performer's own unique body with his or her instrument to produce a performance that cannot be replicated by anyone else.

To investigate further the role of gestures in *Pression*, we might consider them in the light of the theories of the philosopher Giorgio Agamben. These refer to Aristotle's categories of *praxis* (action) as an end without means and *poesis* (production) as means towards an end, suggesting a third category: gesture as means without an end. By isolating familiar gestures from their context in films, Agamben opens up new meanings for them:

The gesture is the exhibition of mediality: it is the process of making a means visible as such [author's italics]. It allows the emergence of the being-in-a-medium of human beings and thus it opens the ethical dimension for them.³⁷²

371 Fischer-Lichte, *The Transformative Power of Performance*, p. 147. In the original German, *In-der-Welt-sein*, is clearly inspired by Heidegger.

372 Giorgio Agamben, "Notes on Gesture," trans. Vincenzo Binetti and Cesare Casarino, in *Means without Ends: Notes on Politics* (Minneapolis: University of Minnesota Press, 2000), p. 57.

The gestures at the beginning of *Pression* cover the whole range of the cello: the entire fingerboard is touched, symbolically covering the whole repertoire of cello music. The left hand running up and down the fingerboard is no longer part of a virtuosic performance but just an arm moving on the way to fulfill an action. Large gestures are clearly decontextualized, as they produce hardly any sound. We see the ritual aspect in classical music and perceive echoes of the extravagant gestures in a romantic concerto. The soloist may end a phrase, for example, by lifting the bow with bravura, but all we hear are some scratches or distant white noise, the gesture contradicted by its sounding result. Lachenmann deploys the typical and familiar movements made by cellists for hundreds of years, gestures that thus become a silent enactment of history. "What characterizes gesture is that in it nothing is being produced or acted, but rather something is being endured and supported."³⁷³ The quotation of classical music gestures, including those bordering on clichés, and the display of their content and capacities, produces gesture as means without end. Lachenmann shows us the significance of each gesture: we see it with new eyes. Having recognized that the ritual is now emptied of meaning we can respond to Lachenmann's desire that we should listen with new ears. Through the process of defamiliarization, by importing alien and dislocated sounds and gestures into the concert hall aesthetic, Lachenmann problematizes the notion of beauty and challenges habitual listening.

Although *Pression* clearly explores the potential of gestures that are both physical and musical, Lachenmann does not consider himself an exponent of instrumental music theater where surrealism and theatrical elements can overshadow musical factors, as for example in Mauricio Kagel's *Match* (1964), a tennis game for two cellists with a percussionist as umpire. Nevertheless, in the preface to *Pression* (on the back of the title page), Lachenmann writes:

If possible, this piece should be played by heart, or at least in such a way that (a) the pages do not have to be turned, and (b) the score does not block the view of the cello and the bow.³⁷⁴

This implies that the visual aspect is an important part of the performance, he clearly consciously incorporates gestural aspects as compositional material, the music is not only to be heard but also seen, and the total performance constitutes the piece.

373 Ibid., p. 56.

374 Lachenmann, *Pression for Solo Cello*.

Perceptual multistability

Fischer-Lichte introduces the term *perceptual multistability* to define and analyze the performative field in theater and performance, a term, often associated with vision science, where it refers to ambiguous perceptual experiences in which the viewer interprets the same image in two different ways. Either this can happen spontaneously, or the perception can alternate over time between stable and unstable states. Fischer-Lichte describes perceptual multistability as the constant transition between two orders of perception, presence, and representation: "... [the] oscillating focus between the actor's specific corporeality and the character portrayed".³⁷⁵ The order of presence relates to authenticity and immediacy whereas the order of representation is used when the actor portrays a character by generating a role in the fictive world.

The idea of representation as presenting or reflecting *something* is present in much of the classical music tradition, where the work (i.e. the score) has a high status and the *Werktreue* ideal is strong. It also presupposes the notion of art imitating life, life being primary and art secondary. Thinking of a performance of music in these terms, as though the music were imitating something, an essence or original, is problematic because, since there exists no replica in performance, each process of embodiment differs.³⁷⁶ Nevertheless, the work is represented through its character. In the case of *Pression* the fictive world created by Lachenmann is transmitted through the performer's unfolding and recreation of the text of the score. Fischer-Lichte describes the "presence" aspect of the performer's representation of a work as less predictable than the intentional acting of a role: "Based on self-referentiality, the order of presence allows meanings to emerge over which the perceiving subjects have no control".³⁷⁷ As we have seen, perceptual multistability refers to the way we perceive various degrees of embodiment, and to the fact that our perception can "change direction" during the very act of perceiving. "The perceiving subjects remain suspended between two orders of perception, caught in a state of 'betwixt and between'. The perceiving subjects find themselves on the threshold which constitutes the transition from one order to another; they experience a liminal state."³⁷⁸

375 Fischer-Lichte, *The Transformative Power of Performance*, p. 147.

376 Except of course in recorded performances.

377 Fischer-Lichte, *The Transformative Power of Performance*, p. 150.

378 *Ibid.*, p. 148.

Richard Schechner describes a similar “in-between” quality “as *transitional*, suspended between ‘my’ behaviour and that which I am citing or imitating.”³⁷⁹ He illustrates this point with the example of Laurence Olivier speaking the famous words “To be or not to be” in Hamlet:

The words belong, or don’t belong, equally to Shakespeare, Hamlet, Olivier ... So Olivier is not Hamlet, but he is also not not Hamlet. The reverse is also true: in this production of the play, Hamlet is not Olivier, but he is also not not Olivier. Within this field or frame of double negativity choice and virtuality remain activated.³⁸⁰

This example of the elements in play producing perceptual multistability illustrates complexity in performance.

Performing the character of *Pression*, as given in Lachenmann’s “script,” requires extensive exploration of the physical aspects of producing sounds on a cello. The gestures required to execute the actions encompass the whole instrument, bringing forward specific processes of embodiment: craftsmanship-like, tactile relations between instrument and performer as well as all the tacit knowledge inherent in practice. Each performer interpreting the piece performs an individual and unique *Pression* according to his or her specific body and instrument, distinctly different despite the seemingly precise score. The work comes to life through the diversity of individual performances, but, at the same time, the character of *Pression* is always present and clearly recognizable.

Schechner writes about “performances as experimenting with the boundary between ‘life’ and ‘art,’”³⁸¹ a liminal and fluid state close to Fischer-Lichte’s “betwixt and between” where the opposition between the different states loses importance. Similarly, Fischer-Lichte discusses moments of transition between orders of perception that can transform those who experience them. Such liminal experiences are based upon the “permanent, reciprocal transitions between subject and object positions.”³⁸² She argues that perceivers cannot control this process, but become conscious that they actively create meaning through emergence of these perceptual fluctuations. She looks at the relationship between meaning and effect in these unpredictable modes of perception,

379 Schechner, quoted in, James Loxley, “Performativity and Performance Theory,” in *Performativity* (London: Routledge, 2007), p. 157.

380 *Ibid.*, p. 158.

381 *Ibid.*, p. 159.

382 Fischer-Lichte, *The Transformative Power of Performance*, p. 177.

and analyzes the constitution of meaning as a reciprocal process between performers and spectators, which she names the *autopoietic feedback loop*.

The autopoietic feedback loop

Fischer-Lichte introduces the autopoietic feedback loop as follows:

Whatever the actors do elicits a response from the spectators, which impacts on the entire performance. In this sense, performances are generated and determined by a self-referential and ever-changing feedback loop. Hence, performance remains unpredictable and spontaneous to a certain degree.³⁸³

Fischer-Lichte illustrates this concept with detailed accounts of the history of performance and experimental theater since 1950. Several aspects of the realm of theater have no obvious relevance to music, notably the more direct and even physical interaction between performers and spectators. The most significant discrepancy lies in the use of text and human gesture as carriers of meaning. Theater refers to life, and while music certainly can refer to specific phenomena, generally speaking, most instrumental music has no such aim. Excluding singers, musicians also have a physical instrument through which they perform. Perhaps it is not entirely safe to draw direct parallels between an actor acting a role and a musician playing a score, but the processes of internalization of a script, and performing through and with the body, are common traits. The larger perspective of the relationship between spectator, performer, and (musical) text is apparent in both fields, and the reorganization of these elements presents the opportunity to take new perspectives and make new explorations.

In focusing on performance as event, Fischer-Lichte challenges the traditional subject/object relationship between actors and spectators, thus: "The bodily co-presence of actors and spectators enables and constitutes performance."³⁸⁴ She quotes Herrmann's definition of performance, "played by all for all."³⁸⁵ There is no longer a gap between the audience and the stage; the two parties influence each other. The traditional spectator may have strong feelings or empathy, but observes the work from a distance without interfering. This can be seen as anal-

383 *Ibid.*, p. 38.

384 *Ibid.*, p. 32.

385 Max Herrmann, "Über die Aufgaben eines theaterwissenschaftlichen Institutes," in *Theaterwissenschaft im deutschsprachigen Raum: Texte zum Selbstverständnis*, ed. Helmar Klier (Darmstadt: Wissenschaftliche Buchgesellschaft, 1981), p. 19.

ogous to the behavior of the traditional audience at a classical or contemporary music concert. Even when they are moved, they must listen, as it were, from a distance, so that they do not engage, physically, with what they are hearing or seeing.

In what follows, I will look at the concept of the autopoietic feedback loop through two examples from my experience of performing *Pression*. The first event is described from two perspectives: that of the performer and that of a spectator. This is my own recollection of the performance:

This performance of *Pression* took place at 7 am, during a 24-hour-long festival, Spor, in Aarhus, Denmark, in May 2008. The audience had been up all night listening to music and gathered drowsily around me in a close semi-circle, lying on large pillows on the floor. Performing at this time of day, with a sleepy and lazy energy in the room, influenced *Pression* towards a slower, more tranquil music to the point where my endpin [spike] suddenly slipped from its position, so that I had to use considerable force and balance in order to keep the instrument steady. Whilst I was striving to keep the cello up and the music going, parts of the audience appeared to wake up and straighten their backs. Their attitude seemed to change, watching and listening with sharp concentration, as if the outcome of my struggle depended on them. I felt they were sharing their strength and concentration with me, and I had a strong notion of a direct contribution of positive energy streaming from the spectators.

One member of the audience said:

This was the first time I had sat this close to a musician during a concert, something that made the performance go straight in: I felt almost as though I was the one playing ... She (the performer) seemed like she gave all she had, and she almost mistreated the cello! Due to the excitement I started to sweat. When the endpin started to move ... what drama! First I thought she did this deliberately, but suddenly, when I realized this was not planned, the excitement grew. In this moment, the performance changed from being a good performance to becoming a fantastic performance, when it appeared to be a fight for the music, so to speak. I remember thinking: "will she make it?" To me it seemed that she not only fought to hold on to the instrument, but also to hold on to the intensity of the music.³⁸⁶

This example shows how the unpredictable slipping of the cellist's endpin during the performance forced the spectators to become alert. The performer perceived their concern and energy feeding back to her via the autopoietic loop and energizing her; this in turn gave the spectators a feeling of meaningful participation. This event, producing perceptual multistability, accentuated the presence aspect of the performance, the performer's phenomenal and authentic

386 Allan Gravggaard Madsen, private email correspondence, 2010. My translation from Danish.

being-in-the-world with her body and instrument. The embodied performance in this instance overshadowed the concept of the work and the character of *Pression* portrayed by the performer—according to the order of representation within its fictive world.

In another performance of *Pression*, a moment occurred that changed my perception of the piece in relation to the order of representation. The performance was given for an audience uneducated in contemporary music. A short way into *Pression*, when the first small, squeaky, untraditional sound occurred, a man burst out laughing. In one way, as a performer, I found this a relief: someone was at last daring to express a spontaneous response to this strange and, to some, provocative music that negates all conventional playing. Such spontaneous reactions are very rare in classical concert music. Typical audiences at classical concerts are well behaved and very seldom respond to performances spontaneously, as individuals or a group, in the way we find at performances of jazz and popular music, something that Fischer-Lichte discusses.³⁸⁷ The laughter also influenced me in another way: I wondered if the spectator's reaction might include an element of embarrassment, or perhaps a feeling of insecurity as to how to grasp this music. Feeling his embarrassment for a moment brought me out of my concentrated presence, so that I momentarily viewed myself from the outside, as though I played a strange character. The situation produced a Brechtian *Verfremdungseffekt*: an effect of alienation, placing the actor besides rather than in the role. Alienation generates a dialectic relationship within the role as the actor offers opinions concerning the dilemma facing the character.³⁸⁸ In this instance, I found myself scrutinizing *Pression* while performing. It was challenging to restore a state of presence, and I felt as though I was having a real-time dialogue with the piece, prompted by the unarticulated commentary of the laughing spectator.

A central topos in Lachenmann's aesthetic is *Klang-Verfremdung* (in English: defamiliarization effect), similar to Brecht's alienation effect, aiming at questioning the habitual and self-evident by placing familiar elements in unfamiliar contexts and vice versa. Lachenmann explains:

Instrumental musique-concrète signifies an extensive defamiliarization of instrumental technique: the musical sound may be bowed, pressed, beaten,

387 This could be one of the reasons that there is little research in classical music on relationships between audience and performers illustrating the autopoeitic feedback loop.

388 Richard Schechner, "Performativity," in *Performance Studies: An Introduction* (London: Routledge, 2006), pp. 123–69.

torn, maybe choked, rubbed, perforated and so on. At the same time the new sound must satisfy the requirements of the old familiar concert-hall sound which, in this context, loses any familiarity and becomes (once again) freshly illuminated, even unknown.³⁸⁹

The aesthetics introduced by *musique concrète instrumentale* challenge the archetypical sound image of a cello: no traditionally beautiful, resonating cello sounds are presented; they are completely erased, only to be replaced by a whole new repertoire of sounds and gestures.

***Pression* amplified and recorded**

In a concert in which I had programmed works for cello and electronics, I chose to use amplification, in collaboration with the composer and performer Natasha Barrett, since Lachenmann allows for amplification in the preface.³⁹⁰ In *Pression*, sounds are produced using a variety of actions from a number of places on the cello. In order to pick up the very softest sounds, we attached two DPA microphones to the cello:³⁹¹ one on the lower side of the bridge, a second underneath the fingerboard, and a third, a contact microphone, underneath the tailpiece. Normally one microphone centered between the *f*-holes near the bridge would suffice for amplification, because this is close enough to where the sound is produced in most classical music. Barrett studied the score and projected the sound through four loudspeakers surrounding the audience. She interacted with me as an equal duo partner, in truth exerting even more influence than I did on the sound output through the speakers. This amplified performance of *Pression* was radically different from the acoustic version: the sound events were magnified so that we could hear every little detail including the smallest nuances of color that would otherwise be perceptible only by a listener close up to the cellist. *Pression* became a different piece in this performance, because amplification changed its sound aesthetics, the projection of sound creating an artificial sense of detachment, as the loudspeakers became, themselves, sounding instruments.³⁹² The direct relationship between the gestures and the sounds, so central for this work, became distorted. This transposing of sound from

389 David Ryan, "Interview with Helmut Lachenmann," *Tempo*, 210 (1999): p. 21.

390 "The cello may be electrically amplified *ad lib.*" He has since regretted this statement, as he told me in February 2010. See Orning, "Interview with Helmut Lachenmann."

391 Microphone manufactured by DPA Microphones, Allerød, Denmark.

392 Transferring the sound output from cello to speakers also points toward the aesthetic of electronically generated noise music.

instrument to loudspeaker reminds us of Schaeffer's use of electronic media to reinforce the removal of sounds from their source in *musique concrète*.

The experience of hearing *Pression* as a sound recording only, without its visual aspect, is completely different from witnessing a live performance. The curious listener who turns up the volume in an attempt to hear its almost inaudible whispering is in danger of physical pain when the soft white noise is violently interrupted by loud grinding sounds: for this reason it could be described as being unsuitable for the recorded medium.³⁹³ While in some ways *Pression* suffers when sound is isolated from its gestures and the mechanical source of sound production, this can give it new impact and meaning. The undertaking of producing a CD of *Pression* brings powerfully to mind the words of Walter Benjamin: "In even the most perfect reproduction, one thing is lacking: the here and now of the work of art—its unique existence in a particular place."³⁹⁴ The medium of recording has transformed the work into a different state. It is removed from the instrument, converted into a new format, and presented through a new medium: loudspeakers or headphones. The change of medium magnifies the music on one level, as the microphones bring the smallest of sounds to our attention. Mechanizing the music in this way, however, has far-reaching consequences in terms of what is lost, what lasts and what comes into existence, as it metamorphoses into something new. Making a CD recording could be seen as a critical re-reading of the work, which appears as a result in an altered state emphasizing particular elements that would be imperceptible in a live performance. The listener may perceive that the "here and now" authenticity to which Benjamin refers, so dependent on the physicality of performance, has been lost when action is amputated and its correlation with sound removed. Regardless of what we gain from the process or output of recording, *Pression's* live, performative, and visual aspects are paramount since work and performance are irrevocably interwoven.

393 Lachenmann is aware of the visual aspect: "The idea of energy remains the most important thing for me. That's why my music is sometimes difficult to understand when listened to on CD without having had the experience of a live performance." Heathcote, "Sound Structures, Transformations, and Broken Magic," p. 334.

394 Walter Benjamin, "The Work of Art in the Age of Its Technological Reproducibility," in *The Work of Art in the Age of Its Technological Reproducibility and Other Writings on Media* (Cambridge, MA: The Belknap Press of Harvard University Press, 2008), p. 21.

Since it was composed 43 years ago, *Pression* has been played and recorded so frequently that it has become a classic work.³⁹⁵ Increasing knowledge among performers of the other works of Lachenmann that move in the same aesthetic direction has aided the cultivation of its own performance practice.

3.1.7 Coda

The first part of this chapter has aimed to investigate *Pression*, first by placing it in a historical and musicological context, and then by looking at aspects of notation, performativity, action, gesture, embodiment, and amplification. In addition, analysis of its notation of gestures, interpretation of the score, and meeting with the composer have all enabled me to perform *Pression* as a conglomerate of all these elements.

Although Fischer-Lichte's concepts of perceptual multistability and the autopoietic feedback loop originate in the field of theater, I think they can be useful for studying music from the perspective of performance theory by exploring the different meanings of and for, and the relationships between the performer, musical text, interpretation, embodiment, and instrument. They have the potential for offering the performer tools for perceiving and acting consciously and intentionally when they embody the musical work, interpreting it within a range of degrees of freedom. They illustrate possible shifts of perception as we experience a live performance—performers and spectators alike—freeing us from traditional hierarchies and allowing us to create our own aesthetic experience. Agamben's gestural theory opens up a new dimension of gesture analysis in which gestures are separated from their context. This could prove a fruitful direction particularly for the study and performance of contemporary music. There are several kinds of relationship between performance and notation that could be explored further, for example, the *Werktreue* ideal versus approaches to the score as text, script, instruction manual, or guide.

395 To my knowledge there are 13 commercial recordings of *Pression* performed by Werner Taube and Michael Bach (LP ABE ERZ, 1990), Michael Bach (cpo, 1992), Pierre Strauch (Accord, 1993), Taco Kooistra (Attacca Babel, 1993), Walter Grimmer (col legno, 1994), Lucas Fels (Montaigne Auvidis, 1995), Benjamin Carat (GRAME, 1998), Wolfgang Lessing (Wergo, 2008), Martin Devoto (Blue Art, De Bach al ruido, 2008), Michael M. Kasper (Ensemble Modern Medien, 2009), Michael Svoboda, trombone, (Wittener Tage für neue Kammermusik, 2011), and Lauren Radnofsky (Mode, 2012). In addition, there were seven videos of *Pression* performances available at www.youtube.com as of January, 28 2014.

My discovery of performance studies has been revelatory to me as a performer. At last we have a perspective that is congruent with the performance practice we share, “a link between the creative process of performing and the critical process of analyzing performances.”³⁹⁶ The most striking realization for me, having gone through this process of studying and performing *Pression*, is that, contrary to the common assumption that it represents a radical break with tradition, it appears to be a remarkably idiomatic work in the way it treats the instrument. The direct, physical experience of touching, holding, rubbing, striking, and caressing the cello seems most natural, and the actions appear to have been designed to produce sounds easily. There are no “extended techniques,” as the sound emerging from Lachenmann’s new instrumental practice has become the structuring material of composition. A performative element as the central compositional parameter, that is, the performer’s actions in the moment of performance, offers new possibilities of analysis as well as a psychologically different approach to a musical work. It includes performers in a respectful manner and invites us to venture on our own exploration: to draw on our entire repertoire of experience and skill and to *embody* the music from within, creating a unique performance.

3.2 ***Pression* revised: Anatomy of sound, notated energy and performance practice**

3.2.1 Introduction

As we have seen, *Pression* for solo cello by Helmut Lachenmann was a groundbreaking work when it first appeared in 1969. Introducing Lachenmann’s *musique concrète instrumentale*, with a radical approach to instrumental sound production, the piece explores a primarily non-pitched sound world—extremely rich, beautiful, and violent. *Pression* has become a modern classic, with regular performances worldwide and several recordings. The notation is highly experimental, predominantly symbolizing the actions and energy prescribed to produce the sound rather than traditional parameters like pitch and rhythm.

³⁹⁶ Schechner, “Performativity,” p. 10.

A revision of *Pression*³⁹⁷ appeared in 2010. Certain notational elements in the 1972 edition, which included elements of freedom for the interpreter, have been standardized in the new version, revealing certain conventional or even conservative tendencies not present in the original version. In this second part of the chapter, I examine the revision and compare it with the original, reflecting upon the development of performance practice in the course of *Pression*'s 43 years of existence. I use data from my interview³⁹⁸ with Helmut Lachenmann as well as drawing upon my own experience as a cellist studying and performing the piece. Central questions are: What is new in the score and what is omitted, compared to the former edition? What might these more conventional tendencies in notation imply, and how do these tendencies reflect general changes in performance practice during the last 40 years? I also make some observations about the performance practice of *Pression* that may be particularly interesting for performers.

3.2.2 Notated energy

When considering the characteristics of the performance-orientated score of *Pression*, it is instructive to compare Lachenmann's notational practice with that of the British composer Brian Ferneyhough. Lachenmann's scores are aesthetically far from the complex scores of Ferneyhough, who lists three criteria for how a reformulated approach to notation/realization may throw light on the capability of the contemporary closed-form "work" to renew the aesthetic foundation:

(1) an adequate notation must demonstrate its ability to offer a sound-picture for the events for which it stands. Without this direct link in terms of a specified, decodable repertoire one is forced to abandon one of the most essential tools of the analytic function to the arbitrary orchestration of external factors.

(2) an adequate notation must be in a position to offer all essential (as defined by the a priori given sign systems in which every notational statement is

397 Composed in 1969, *Pression* was first published in 1972. The work was revised in 2010, and has been republished twice, first in Lachenmann's manuscript hand in 2010 and then in a computer-engraved version based on this edition in 2012. The copyright date is the same for all three editions (1972). In this chapter, I refer to the first published version as the 1972 edition and the computer-engraved version as the 2010 edition because it contains the 2010 date in the score, despite the actual publication date of 2012. When I need to distinguish it from the 2010 handwritten edition, I make that clear.

398 Orning, "Interview with Helmut Lachenmann."

embedded) instructions for a valid reproduction of those sounds/actions defined as constituting (as ensemble) the text of the work ...

(3) an adequate notation must (should) incorporate, in and through the conflation and mutual resonance of the two elements already mentioned, an implied ideology of its own process of creation.³⁹⁹

In my opinion, the prescriptive notation in *Pression* does not meet Ferneyhough's first two requirements. The "sound-picture" hardly exists (in the way required in score analysis); we could rather speak of a "practice-picture" or "action-picture," as the notation depicts actions and their performance. Every interpretation of the piece differs to such a degree that it is questionable to talk about a "valid reproduction." The "implied ideology of its own process of creation" is nevertheless the essence of *Pression*, not addressing Ferneyhough's two first points, but rather reflecting Lachenmann's effort to defamiliarize techniques and sounds so that listeners must radically question their habitual listening. What does this say about Lachenmann? He is utopian in his search for what music should mean and in his view of its role in society. He differs from Ferneyhough in that, rather than idealizing text and sounds—as Ferneyhough does—Lachenmann idealizes practice. Ferneyhough legitimizes his own practice through these criteria, but at the same time he considers performance as a common, inherited practice of how to interpret notation. Conversely, Lachenmann creates a new, embodied common practice where notation plays the role of mediator. To illustrate this, a drawing of a hand on the lid of the cello in the score does not imply a sound but use of the body.

Ferneyhough looks at "the social role of notation as a point of intersection of disparate fields of interest (*a common denominator*). Notation as *fuse*."⁴⁰⁰ A "common denominator" could be the correlations between score and sound or the mediating function of the score, linking the text and the sound. In *Pression*, the absence of these common denominators gives the work-concept an ontological challenge. This is a clear example of a situation in which we speak of the work as text and the work as sound as two separate and complete works of art. This does not necessarily mean that the performer is given great freedom, but that the freedom exists implicit in the "implied ideology of its [Pression's] own process of creation," Ferneyhough's third criterion. I will come back to the topic of freedom for the performer in the discussion of performance practice, below.

399 Brian Ferneyhough, *Brian Ferneyhough: Collected Writings*, ed. James Boros and Richard Toop (Amsterdam: Harwood, 1995), p. 5.

400 *Ibid.*

3.2.3 Looking at the revised score of *Pression*

Pression was composed in 1969, published in 1972 (see Figure 15 on page 162), and revised in 2010. The new edition was prepared by the composer himself, in dialogue with renowned cellist Lucas Fels, with whom he has worked for many years. A handwritten manuscript by Lachenmann was published in July 2010 (see Figure 16 on page 162), and the computer-engraved version in July 2012 (see Figure 17 on page 163)—both editions were prepared for the cello lectures of the Darmstadt International Summer Courses for New Music. When citing the revised version, I refer to the computer-engraved version unless stated otherwise. When comparing the two newly published scores, it is interesting to note the visual difference between them. In the handwritten score, the calligraphic writing is clear and clean, quite similar to the printed letters, especially with regard to the layout and inner proportions. Still, as the human hand offers a more nuanced and subtle picture than print, Lachenmann's handwriting reflects the gestural notation and graphic signs in a more lively way than the printed letters, thus offering new information about the music. However, the great number of handwritten instructions and the fainter print in the score makes the music more difficult to read than the computer-engraved version. "Editing" has been described as "the critical investigation of a text and its readings in order to establish the likelihood of their truth within a piece's historical context."⁴⁰¹ Looking at this revised text (score) of *Pression*, I will reflect upon *Pression's* trajectory in time, showing a relationship with the living performance practice today.

The new edition presents us with detailed performance instructions in German and English, as well as an English translation of all the text found in the score. The different techniques are well explained and have now been given suggestive names like *Morse-Abschnitt* (Morse-section) and *Gepresste Aktionen* (pressed actions), offering a clear direction for interpretation. However, the name *Schweinestall* (pigsty), introduced in the handwritten 2010 version (bar 27), is omitted in the computer-engraved version. In the 1972 version, nearly all the instructions were placed in the score in the course of the piece, whereas now, the central techniques and sound ideals are explained in the performance instructions, a common notational practice today.

The most significant change in the score is the addition of dotted bar lines throughout the piece. The first edition had quite a few dotted bar lines, mainly

⁴⁰¹ James Greer, "Editing," in *The Oxford Companion to Music*, ed. Alison Latham.

Scordatura:
IV III II I

ca. 66 (Bogen wird zumeist in der geschlossenen Faust gehalten)

Hölse aufwärts = rechte Hand
Hölse abwärts = linke Hand

mit Fingerkuppe locker-quasi flageolett-auf der Saite hin und her fahren.

Bogen unbewegt stehen lassen

(Steg)

arco stop

sim. + II. Saite

I. Saite

distinto pass.

f

sim. sempre

II mit Daumen nagel gerieben

f gilt nur für Daumen

cresc. evtl. durch Beschleunigung.

V (tontos)

Bogen stehen lassen

sul IV

Figure 15: Helmut Lachenmann "Pression" © 1972 by Musikverlage Hans Gerig, Köln 1980 assigned to Breitkopf & Härtel, Wiesbaden, page 1, 1972 edition.

quasi sul pont

arco stop

Bogen unbewegt stehen lassen

I. Saite

quasi sul pont

arco stop

Bogen unbewegt stehen lassen

II. Saite

Hölse aufwärts = rechte Hand
Hölse abwärts = linke Hand

mit Fingerkuppe locker-quasi flageolett-auf der Saite hin und her fahren.

mit Tonkorpokuppe locker-quasi flageolett-auf der Saite hin und her fahren.

I. mit Daumen nagel gerieben
f gilt nur für Daumen
cresc. evtl. durch Beschleunigung.

V. Saite

quasi sul pont

arco stop

Bogen unbewegt stehen lassen

II. Saite

quasi sul pont

arco stop

Bogen unbewegt stehen lassen

Figure 16: Helmut Lachenmann "Pression" © 1972 by Musikverlage Hans Gerig, Köln 1980 assigned to Breitkopf & Härtel, Wiesbaden, page 1, handwritten edition.

für Werner Taube
Pression
für einen Cellisten

Helmut Lachenmann, 1969/2010

The image shows a page of a musical score for cello. At the top, it is titled 'für Werner Taube' and 'Pression für einen Cellisten' by Helmut Lachenmann, 1969/2010. The score is divided into two systems. The first system starts with a tempo marking of ca. 66 and a 2/4 time signature. It includes various performance instructions such as 'Bogen unhörbar aufsetzen', 'sul pont. (tonlos)', 'al pont. (helles Rauschen)', 'arco stop', and 'distinto poss.'. There are also dynamic markings like 'ppp flaut.' and 'distinto poss.'. The second system continues with instructions like 'Bogen bei IV aufsetzen', 'tonlos bei IV', 'quasi rit.', 'meno', 'espressivo', and 'plötzlich mit Fingernägeln'. The score is annotated with technical details: 'SAITEN HALTER', 'STEG', 'GRIFFBRETT', 'scordatura: I', 'SATTEL', 'Hälsen aufwärts = rechte Hand', and 'Hälsen abwärts = linke Hand'. The notation includes various rhythmic values, slurs, and dynamic markings.

Figure 17: Helmut Lachenmann “Pression” © 1972 by Musikverlage Hans Gerig, Köln 1980 assigned to Breitkopf & Härtel, Wiesbaden, page 1, computer engraved 2010 edition.

in the more rhythmic sections, but the piece is now fully sectioned into bars. The original metric division lines are kept in an unfolding spatial notation showing the approximate length of a quarter note, but what is new is that time signatures are added. Bar lines are distributed in a logical manner according to musical organization; for example, gestures often start at the beginning of a measure. Dividing *Pression* into measures might appear to be merely a pragmatic issue, as the quarter-note division lines already existed and the bar lines help the structure of the visual layout. The preface to the 1972 edition reads, “a division line represents a quarter-note value if not expressly indicated otherwise,”⁴⁰² which, in theory, should have had the same significance as a specific measure showing the same division lines. Nevertheless, the openness of the unbarred, unmeasured notation is lost in the new version, which measures and divides the music into (closed) units. In the first edition there were few bar lines stopping the line of the imagination and the line of sound; the music just went on and on, uninterrupted. The bar lines in the new version introduce a standardisation that changes our perception of the music, even if only on a psychological level. Luciano Berio did a similar thing in 1992 when revising his

402 Lachenmann, “*Pression for Solo Cello*,” p. ii.

flute sequenza, using standard rhythmic notation after it was first published in proportional notation in 1958. He originally wanted to give some rhythmic flexibility:

I wanted the player to wear the music as a dress, not as a straitjacket. But as a result, even good performers were taking liberties that didn't make any sense, taking the spatial notation almost as a pretext for improvisation.⁴⁰³

So why did Lachenmann change the measureless unfolding of the music? Was he, like Berio, not satisfied with the interpretations? Changing such an important aspect of notation certainly suggests that he has concerns. His decision to add bar lines is a definite move towards notational standardization, towards a more conventional and normative view of the function of a score, moving away from the experimental and ambiguous realm that leaves greater liberty for the performer.

3.2.4 Looking in more detail

I now move to look at the revisions and changes of the 2010 edition in more detail, including some of the remarks Lachenmann made to me in Bergen when I played *Pression* for him in 2010.

At the very beginning, three beats are added to the first unpitched (*tonlos*) bow sound before the left hand starts moving (see Figure 15 on page 162).⁴⁰⁴ When the left hand starts sliding, the quality of the sound changes to *quasi sul pont* [sul ponticello] and bright noise. Measure 5 introduces “action dynamics,” an important notational invention by Lachenmann⁴⁰⁵ is introduced in the new edition, signified by dynamics in quotes showing the intensity of the action rather than the resulting volume, which can be soft: “I hear the incredible intensity and not the result.”⁴⁰⁶ This introduces a new parameter, energy, now disconnected from the actual sounding dynamics. There are a number of subtle changes in the wording; for instance, the thumbnail now “wipes” instead of “grates” or “rubs.” In measure 12 there is a change of technique: before, it was thumbnail through bow hair, now it is thumb on bow hair (*Daumennageln*

403 Theo Muller and Luciano Berio, “‘Music Is Not a Solitary Act’: Conversation with Luciano Berio,” *Tempo*, 199 (1997): p. 19.

404 I will refer to measure numbers in this chapter. I have numbered the measures myself.

405 Action dynamics, are not applied in the 1972 edition, although they were used in *Notturmo* for small orchestra and solo cello from 1966–68.

406 Lachenmann, “Musique Concrète Instrumentale.”

durch Bogenhaar to Daumen auf Bogenhaar), something that enhances the friction and produces more sound. In measure 17, a new symbol is introduced, indicating that the strings are dampened with the chin, as both hands are occupied holding the bow. This prevents the open strings from sounding and focuses the attention on the perforating dry sound from the vertical bowing. Measure 19, in which the hairs of the bow are divided into different sections while vertically pressing the bow back and forth, is now marked with a jagged symbol indicating great bow pressure and a very slow bow. This symbol has become a common notational sign symbolizing various degrees of pressed strings or crush. When I played for Lachenmann in Bergen he told me:

You should play very dry and slow so you hear every grain of the sound, like a flutter tongue. Before you begin, you must have pressed down the bow. The region around the bridge is taboo for these sounds; begin further away from the bridge. In measure 22, slow glissando on the C-string, use only a half millimeter horizontal bow.... In measure 23, slow bow behind the bridge. Stop the bow on the string! Don't take away the bow.⁴⁰⁷

This is crucial information about his performance aesthetic; for string players, every pressed or crushed sound in his music is to be performed extremely slowly and controlled with continuous resistance, so that every grain is resonating. Each sound in his non-pitched sound world has specific properties and qualities that need to be explored. He insists on beautiful phrasing and great care in every sound, and he is meticulous about the beginning and ending of each note, in the same thorough manner one aims to achieve in classical performance practice. The particular care with which each little sound is made—the placement, energy and phrasing—are definitely an extension of this tradition. In this way, the musicianship and several parameters of the interpretation of music are very old-fashioned. This confirms Lachenmann's dialectical relationship with the past; while exploring cutting-edge instrumental practice, he also promotes the performance practice of romantic music with *rubato* phrasings and expressive sounds, an approach to performance practice that stands in great contrast to the alienation performers can feel in approaching a score like *Pression*.

Measure 22, the introduction to “Largo feroce”—“broad, fierce” (called *Pigsty* in the handwritten 2010 edition), named for the screaming quality of the sound, is changed from fingertips to nails on string, to make a more audible upbeat to the next section. This section (measure 27) has been notated in much greater

407 Orning, “Interview with Helmut Lachenmann.”

immer nahe am Saitenhalter!
fff poco pesante
 Bogen nicht absetzen!
 (Kinn)

Largo feroce
 V am Saitenhalter gepresst, minimale Bogenverlagerungen auf den Saiten
fff quasi legato
 Bogenwechsel ad lib., immer im Bereich der unteren Bogenhälfte (Frosch ↔ Bogenmitte) gepresst [mindestens 60 Sekunden]
 Schlag mit flacher Hand aufs Griffbrett, gefolgt von...

Bogen auf Stegfläche unter den Saiten
 Schlag mit Bogenstange durchs Bogenhaar auf Stegfuß
sf *mf* *molto espressivo*
 Stegfläche
 (Kinn) (*)
 Schlag mit flacher Hand auf Corpus

...wischenden Ab- und Aufbewegungen von der Anschlagstelle weg auf allen vier Saiten

Figure 18: Helmut Lachenmann "Pression" © 1972 by Musikverlage Hans Gerig, Köln 1980 assigned to Breitkopf & Härtel, Wiesbaden, measures 25–29, 2010 edition.

mindestens 60 Sek.
fff
molto rit.
 arco unter den Saiten auf Stegwand
 legno-Schlag-V auf Stegfuß
 Bewegung verlangsamen
 Schlag auf Corpus

fff *lunga possibile*
 intensivster Druck
 Bogenwechsel ad lib. Dauer ad lib. (ca. 60 Sek.)
 Schlag (plötzlich) aufs Griffbrett und schnelles lockeres Reiben der Saiten an der Aufschlagstelle
 Schlag auf Corpus

*) Bogen mit Haaren normal strichend auf Corpus bis herauf direkt unter die Saiten verlagern

Figure 19: Helmut Lachenmann "Pression" © 1972 by Musikverlage Hans Gerig, Köln 1980 assigned to Breitkopf & Härtel, Wiesbaden, page 3, system 3, 1972 edition.

detail than earlier (see Fig. 18), indicating the order of the strings and specifying the technique and desired result. This is at variance with Lachenmann's 2006 statement:

If in my cello piece *Pression* I decide that within 60 seconds the bow has to move gradually from the first to the fourth string behind the bridge with fortissimo pressure, I get a wealth of sounds that would be impossible to predict, and which could not be written down. This isn't chance, it's a clearly understandable result of what the player has to do at a certain moment in this piece.⁴⁰⁸

408 Heathcote, "Sound Structures, Transformations, and Broken Magic," p. 339.

(helles Rauschen) → II

mp

Der Daumen der linken Hand wird, direkt am Bogenhaar, wechselnd von unten gegen die jeweilige Saite gedrückt. Er gibt sie im angegebenen Rhythmus frei, um den Klang der leeren Saite („al ponticello“) durchzulassen.

2/4 3/4

3

0

(*ppp*) die Lautstärke der leeren Saiten bestimmt sich durch die Bogengeschwindigkeit

Figure 20: Helmut Lachenmann “Pression” © 1972 by Musikverlage Hans Gerig, Köln 1980 assigned to Breitkopf & Härtel, Wiesbaden, measures 59-60, 2010 edition.

Steg II Saite
immer sehr geräuschhaft (viel Bogen)

→ III

ppp *)

sim.

pp

Linken gespreizten Daumen dicht am Bogen von unten immer gegen diejenige Saite pressen, auf welcher der Bogen streicht.

*) diese Töne entstehen durch momentanes Lösen des linken Daumens von der betreffenden Saite. Dauern genau einhalten. Lautstärken durch Strichgeschwindigkeit.

Figure 21: Helmut Lachenmann “Pression” © 1972 by Musikverlage Hans Gerig, Köln 1980 assigned to Breitkopf & Härtel, Wiesbaden, page 7, system 1, 1972 edition.

The “Largo feroce” in measure 27 is performed with an extremely slow and pressed bow, very close to the string holder. The emphasis is on the frozen and mechanical character of the gesture, obtained by keeping the bow on the string in the bow changes. In measure 28, when the flat hand hits the fingerboard, rubbing it frantically up and down, the gesture is now described in words, the image of the hand from the first edition is removed, and the graphic sign for rubbing fast is replaced by a written-out rhythm (see Fig. 18 and 19).

In measure 33 (*legno saltando*) the new edition adds “quasi a tempo,” hinting at a more rhythmic section after having worked in a more horizontal sound world

of noises and gestures. The new edition shows all *col legnos* as triangular note heads, which are easier to distinguish than in the first edition where they were filled-in diamonds. Measure 40, starting a section with rapid changing bow techniques, now says *poco rubato* to allow time for each sound to sound out.

Lachenmann refers in this section to the performance practice of Schumann and Schubert, which encourages *rubato* phrasings in order to shape the music.⁴⁰⁹

In measure 41, the *fermata* while circling the bow is new and welcome, giving an opportunity to sustain the sound in this virtuosic section. In measure 42, one note is added to the *bow-hitting* figure. In the handwritten 2010 version, Lachenmann added a G clef (omitted in the final version) in quotation marks to indicate that he wanted pitches when performing this technique. He demonstrated his invention of producing distinctive pitches by hitting the bow on the side of the bridge, the pitches determined by the location of the bow on the bridge, the quantity of bow hair as well as the speed and weight applied, by playing the *Star Spangled Banner*!⁴¹⁰

In measure 47, bowing on the string holder, the instruction “*kein Brummtton*” (“no humming sound”) is new, reflecting the now common technique of playing on the string holder with considerable pressure, producing a deep humming sound. The dynamics are changed from *ppp* to *p* in measure 49, and “*quasi Echo*” gives us another musical pointer, an echo of the previous rubbing on the lid. In measure 54 “*arco stop*” is new, reinforcing Lachenmann’s performance aesthetic of clear beginning and ends, keeping the bow on the string. The *Morse-section* starting in measure 59 already suggests by its name the style of playing. Short and long tones are called for—abruptly stopped by dampening the open string with the thumb from underneath the string. This technique is a mirror-image of conventional playing; when one wants a tone one has to release the pressure on the string, in contrast to stopping the string. This is the section in which the new version (see Fig. 20) alters the notation the most; the actions of dampening or release of the string are notated (traditionally) on one extra staff, as opposed to the old version where only the releases were notated (see Fig. 21). The earlier notation was perfectly clear and understandable, but not presented in a standard way.

In measure 83, a fermata is added to the first “normal” note in the piece. Here, the “*am steg*” (*sul ponticello*) from the first edition is changed to “*arco*

409 Orning, “Interview with Helmut Lachenmann.”

410 Ibid.

ordinario”, making it easier to blend the following unison. At the open D-flat string (the cello is tuned to F, D-flat, G and A-flat), the words “*unmerklich hinzunehme*” (“start imperceptibly”) are added. This might indicate that the introduction of the second voice has been too obvious in performances. Measure 84 is marked “*Largo appassionato*,” giving strong indications of an intense and grand playing style.

This point is reached two-thirds of the way through *Pression*, and the “normal” note of the piece stands out, listened to with the “new” ears Lachenmann calls for; never was a normally produced tone on a cello so loud, substantial and fat with timbre. This is the climax of the piece, bringing the unison D-flats together in a loud dynamic and letting them divide into a micro-interval, producing beats before reuniting and then dissolving into the beginning of the coda. Measure 92 is more precisely described by notating the pitches of the harmonics that result from the sharp pull described as “*quasi Pfiff*” (“like a whistle”).⁴¹¹ In measure 100 the fermata after *lasciar vibrare* (let it ring) is removed; the sound from the harmonics needs time to die before going on, so in my opinion this is a strange omission.

3.2.5 Towards a more normative notation

In general, there are far more words of explanation in the new score and, in particular, more detailed performance instructions with interpretational indications. In the first edition, the visual graphic realm of the clefs contained most of the information—for example, where to play on the fingerboard or the string holder. Now, words are added, and some drawings of hand-hitting (bars 28 and 29) are removed. I miss the hands, the direct message about action on the cello, the instinctive and immediate correlation between what you see and what you do. The drawings of the hand implied body, not sound, and omitting them is an interesting movement from a prescriptive notation, which emphasizes embodied aspects, towards a more descriptive notation, which makes the sounds abstract through normative symbols. Dividing *Pression* into measures is perhaps the most drastic change in the revision, although perhaps more on a psychological than on a structural level. Introducing action dynamics, giving the performer valuable information about the energy input expected, is a great advantage in the new edition. “Action dynamics” has become an established term, and has

⁴¹¹ *Quasi Pfiff* is omitted in the manuscript edition but reintroduced in the subsequent printed edition.

been adopted by many composers. The added details of the order of strings in measure 27 (*Pigsty*), the written-out rhythm in measure 28, and the specification of the harmonics in measure 92 are examples of moments when the composer wanted something more specific than he had experienced. These are among the moments that deviate the most from the original, which is evident when listening to recordings and concerts, and this points to a wish on the part of the composer for a more “valid reproduction,” to borrow Ferneyhough’s term discussed above.

The re-notation of a few central places is probably due to the development of notational techniques in the course of *Pression*’s existence. Symbols for pressed bowings (crush), *col legno* and more, together with the now widespread performance practice of these techniques, have been largely standardized in the contemporary music community since the work was first composed in 1969.

We can, however, trace a movement towards a more normative and conservative notational practice in the revised score. This is apparent in the added bar lines, notated rhythms, and additional systems, notated in a more traditional manner, that replace or are added to the more graphic sections. It is a movement towards a more accurate and standardized notation, towards something that is more steady and verifiable than it was. For decades, Lachenmann has been in the forefront of developing notational technique, so the changes in the score reflect the development of notational potential in his earlier works as well as a more general development and common understanding of this kind of notation. The score now meets contemporary standards for notation, and thus it has the advantage of conveying more information about the composer’s intentions. This makes it more accessible for performers who do not have the advantage of close knowledge of the performance practice associated with Lachenmann’s work to interpret the score. The changes can also be seen as a natural reaction to the general improvement in performance practice of contemporary music. As performers become more able to execute complex scores, they want more detailed instructions, both to enable them to penetrate more deeply into the work, and to help them understand the composer’s intentions.

In my opinion, the first edition was somehow more crude and primitive than the new one. In the very beginning of the new edition, for instance, the instruction to hold the bow in the fist is omitted; one might ask why it was there in the first place? It did not facilitate playing; it must have been more of a visual element, emphasizing the primitive aspect of the mechanics of the cello as sound production tool, grabbing the bow as one would a saw. The new edition

is more mature and nuanced—some of the edge has worn off. In this way, the revision takes advantage of improvements in performance practice, as well as Lachenmann’s maturation as a composer.

As a pioneer in these new instrumental techniques, Lachenmann has travelled worldwide with his works for years, willingly demonstrating his *modus operandi* to orchestral musicians. He has an increasing number of dedicated and influential performers: soloists and ensembles happy to perform his works, operating as “agents” to spread the knowledge of his aesthetics. Key performances, recordings, and festivals have established a strong performance practice associated with Lachenmann’s music. His recognition as a central post-war European composer, coupled with his extensive travelling when he has works performed, has brought the level of knowledge about his music and performance style to a surprisingly high level.

3.2.6 Performance practice and freedom

In this section, I look at performance practice in general terms as well as more specifically in terms of Lachenmann’s music. I also briefly discuss the concept of interpretational freedom for the performer in relation to this practice.

The quality of performance practice of new music has rapidly increased in recent decades, due to global communication and, more importantly, the recording industry. Previously “unplayable” repertoire is slowly becoming commonplace, and the general instrumental and technical level is rising steadily. Too often regarded as a predominantly intellectual and ideological composer, Lachenmann turns out to be curiously pragmatic and knowledgeable when it comes to the execution of his music. He has developed new playing techniques and has cultivated them further, having become more specific after having experienced hundreds of performances of his own music. As an accomplished musician and pianist, he has an intimate knowledge of all the instruments for which he composes, approaching every instrument in a material, concrete, hands-on manner. When I played *Pression* for him, he demonstrated to perfection every technique in the score on the cello. It might be seen as a paradox with regard to his use of notation, but for Lachenmann there is *one* right crush, *one* right pitchless sound, *one* right *col legno*, and so on. On the one hand, we might despair at the inadequacy of normative notation in this field and the underdeveloped nature of notational language in expressing subtle nuances. The score appears to be much more mechanical and rigid than the music is supposed to sound. On

the other hand, the limitations imposed by the score can be liberating for the performer.

Discussions about degrees of freedom for the performer increased in frequency in the 1950s and 1960s. Composers gradually left more freedom to the performer, and new notational forms emerged, such as indeterminacy and open form. The procedure itself became central, and the performer was more often seen as a co-creator of the work than as a loyal performer realizing the composer's intentions. At the same time, many composers wanted to keep strict control over certain aspects of the execution of their pieces, resulting in two contradictory movements: *Werktreue* (fidelity to the work and faithfulness to the original) was opposed to the freedom of the performer. Degrees of freedom in interpretation on micro- and macro-levels depend on a multitude of factors, including the composer's instructions and historical traditions, and will always be regulated by the current performance practice (explicitly and tacitly). When I speak of freedom in the interpretation of *Pression*, I refer primarily to the elements in the piece that are notated in an ambiguous fashion, preceding normative notation: the symbols for gestures, the approximately notated rhythms and sound-instructions, all of which leave space for personal interpretation. But does a new notational sign offer greater freedom? If it does, is this a legitimate freedom? Does it open new doors, and in that case, which doors does it open? I think the revision of *Pression* helps us to answer some of these questions. Looking at the direction towards more standardized notation in the piece, I think the original was not meant to give performers a new freedom; the score was rather to be taken very literally. How different is this really from the performance of classical music? The insights from our study of the revision can be useful in retrospect in interpreting the experimental scores of the 1960s. The concept of freedom within interpretation is a large and as yet little explored field. There are many unsettled elements, and much remains to be done, offering great scope for future research.

3.2.7 Personal reflections

As a performer, despite the increased precision of the 2010 version, I greatly prefer the 1972 version. This version displays the piece for me with the implicit wildness of the gestures reflected in these naked, nuclear sounds. I would rather respond to the image by moving my hand according to a wild visual pattern than read a rhythm, having to analyze it in my head before my arm

executes what I read. I believe this is due to a notation that gives more direct access to the music, less of a “detour” via abstract signs. My body recognizes the symbols of movements faster than the brain processes an abstract symbol and translates it into coherent action. This visceral dimension, the response of the body rather than the intellect, connecting eye, mind, and body, offers a more direct, instinctive route for the performer.

In terms of performance practice, I consider the most radical aspect of *Pression* to be how exceedingly idiomatic the piece is, in the way it grows out of the close physical relation between cello and cellist. In experimenting with, and practicing, the music, performers must delve deeply into the relationship they have with their instruments. The result is the opposite of defamiliarization; it is a serious embodied and sonic experience demanding a self-reflecting position and conscious contribution. It is a welcome and rare chance for musicians to turn their instruments inside out, reconceptualizing their technique and sonic repertoire, and fundamentally questioning classical performance practice in the process. Deconstructing the beloved cello and rebuilding it not only changes our practice but also creates a new one.

The aim of this chapter has been to investigate *Pression* from a performer’s perspective and to look at the performance practice by investigating the revision of the work. An important part of this undertaking has been to look at the experimental notational practice, experiment and discuss how this challenges the performer in new ways. The development of prescriptive notation and extended techniques in Lachenman’s music starting in the 1960s, sets the scene for the next chapter’s investigation of the Klaus K. Hübler’s remarkably complex cello work *Opus breve*, of 1987.

4 **Radically idiomatic instrumentalism in *Opus breve* by Klaus K. Hübler**

An investigation of performance practice in complex contemporary music

4.1 **Introduction**

Opus breve (1987)⁴¹² for solo cello, by Klaus K. Hübler, is notated on three staves, decoupling the hands in a complex *parametric polyphony*⁴¹³ of independently performed actions; the score pushes the boundaries of the performer and instrument to the extreme. The score is densely written, with multiple overlapping layers and cascades of nested irrational rhythms throughout. There is an explosive abundance of material, more than a human can grasp, much less execute in compliance with the score according to the classical performance practice.⁴¹⁴ In spite of the meticulously crafted notation separating the

412 Klaus K. Hübler, *Opus Breve Für Violoncello* (Wiesbaden: Breitkopf & Härtel). Composed in 1987 and published in 1988. Parts of the score can be viewed in the appendix.

413 The term *parametric polyphony* was introduced by Brian Ferneyhough, describing his work *Unity Capsule*: "In that piece the overt multi-stranding of articulatory qualities was pretty much carried on the surface as a sort of formal carapace, so the ultimate sound result was clearly synthetic in nature." (in Brian Ferneyhough and James Boros, "Shattering the Vessels of Received Wisdom," *Perspectives of New Music* 28/2 (1990): p. 24. Another descriptive term is parametric layering, as the performance actions are presented as layers in the score.

414 What I regard as the "classical performance practice" is discussed in Chapter One, and in this context is related to what Franklin Cox calls The "High Modernist Model" of performance

performance parameters, the notation resembles tablature or prescriptive notation, in that there is little correspondence between what is seen on the paper and the sonic outcome. The work cannot be accessed without interpretation and performance: the sum of the three staves emerges only in the performance of the prescribed actions.

Hübler's approach is idiomatic, in the sense that he uses the physical instrument for which he composes as his starting point, exploring its tangibility and the way it is played with all of its mechanics and acoustic properties. This can be seen as a continuation of Lachenmann's *musique concrète instrumentale*, in which the emphasis is on the concrete way sound is produced and the energetic aspect of sound in the confrontation between the instrument and the performer's body. In the process of bringing the physical reality into composition, the relationship between performer and instrument is scrutinized. In approaching these scores, performers are required to become self-reflective and critical, questioning and confronting their habitual performance practice. The physicality, including the performer's interface with the instrument—the actual playing—has become the compositional material. The instrumental practice is now an explicit parameter, and thus a new dimension of performer interactivity has become a part of the composition. This creates a new form of idiomatic performance practice, which now sets the entire performative machine in motion. In *Opus breve* there is a shift in focus from the score as musical text to the action embodied in performance. This new approach calls for a complementary shift in performance practice, one that retains the performative ethic but leaves the historical performance ideal of the *Werktreue* behind.

In this chapter, *Opus breve* provides a case study for discussing the transformation of a linear and transparent model of performance practice, in which the *Werktreue* is central, into a more complex model in which a struggle between performer and score, and even a breakdown of the performer's control, is part of the aesthetic. I will argue that the composer's and performer's aesthetics are not in agreement, and I will explore the unsolvable ethical dilemmas this disagreement causes for the performer. While composers deploy ambiguity as a compositional idea, it is often criticized and avoided in a performance practice that predominantly still cultivates linearity and transparency.

practice. See Franklin Cox, "Notes toward a Performance Practice for Complex Music," in *Polyphony and Complexity, New Music and Aesthetics in the 21st Century*, ed. Frank Cox and Wolfram Schurig Claus-Steffen Mahnkopf (Hofheim: Wolke Verlag, 2002), p. 70–132. Cox's model is discussed further below.

I will investigate the relationship between the performer and the score by a two-way process, first delving into the score and discussing issues reflecting Hübler's "radically idiomatic instrumentalism,"⁴¹⁵ then going outwards to the context and history of this aesthetic direction. The first part of the chapter will thus focus on *Opus breve*, and in the second half I will explore and discuss different aspects of the performance practice in complex music generally,⁴¹⁶ and also in relation to improvised music. Finally, I return to *Opus breve*, and attempt to summarize some elements I consider central in the performance practice of this music. A major premise underlying this chapter is that this is a field in the making, there are no established methods or historical conventions to form the basis for a unifying practice.

The experience gained by my personal odyssey with *Opus breve* will inform my investigations in this chapter. My relationship with the work has changed over time. Over the last four years I have spent a great deal of time practicing the work, reading and writing about it, and not least, performing it on numerous occasions. When I started practicing *Opus breve*, it appeared as an impressive, intimidating and ferocious score. Although it has become dear to me, and has my favorite chord-sequence in the end, the extreme level of difficulty raises my pulse and puts my body on red-alert: to perform *Opus breve* always require an explosive strength and a tremendous concentration.

In the videos included with this dissertation, I play *Opus breve* in several versions: first, I perform an interpretation of the score that attempts to follow every instruction in the text (video #6), and then I play a freer version, but still following the score (video #7). This is followed by two improvisations—I let the score inspire me, both through its strong visuality, and through the rich sound worlds it generates (video #8 and #9).

The main questions addressed here are: What does "radically idiomatic" imply in this context? How does the *Werktreue* ideal (fidelity to the work) affect performance ethics when it comes to such works, and which kinds of strategies must one develop in order to practice and perform complex music that clearly



415 This is Richard Barrett's term, used to describe decoupled notational practice. See Richard Barrett, "Standpoint and Sightlines (provisional) 1995—Beyond 'Postmodernism,'" in *Diskurse zur gegenwärtigen Musikkultur vom 1994: 13 Beiträge vom 9. internationalen studentischen Symposium für Musikwissenschaft in Giessen 1994*, ed. Nina Polaschegg (Regensburg: ConBrio, 1996), p. 26.

416 Complex music is a broad term, and open to interpretation. In this chapter, it always refers to music within the aesthetics of the "New Complexity."

cannot be realized in full compliance with the score, according to the classical performance practice? What are the aesthetic implications of the struggle between performer and score, and how do the ideologies behind the compositions and the complexity of this discourse reflect the performance practice of this music?

I use the term *complex contemporary music* in this chapter to describe an aesthetic notational and performance direction emerging in the 1970s and associated with the term “New Complexity.”⁴¹⁷ Described by composer Christopher Fox as a “complex, multi-layered interplay of evolutionary processes occurring simultaneously within every dimension of the musical material,”⁴¹⁸ the New Complexity is represented in works by composers Brian Ferneyhough, Klaus K. Hübler, James Dillon, Richard Barrett, Liza Lim, and Michael Finnissy, among others. Although the music that falls under this umbrella term is highly individualistic, and the composers come from different backgrounds and nationalities and have different intentions and styles, their music shares traits such as the use of micro intervals, highly complex rhythms, rapid changes and fluctuations, and—perhaps their strongest common characteristics—the employment of a notational intricacy that leads to dense and complex scores. The extremely high demands this music makes upon its performers is an important part of this aesthetic direction, and the focus of my investigations in this chapter.

4.2 Klaus Karl Hübler

German composer Klaus K. Hübler’s (b. 1956) relatively small but original oeuvre has been overlooked to a certain extent, perhaps because of his sudden withdrawal from composition due to serious illness between 1989 and 1995.⁴¹⁹ A student of Brian Ferneyhough, Hübler has had his works performed in

417 Richard Toop coined the term New Complexity in his article “Four Facets of ‘the New Complexity,’” *Contact* 32 (1988): 4–8, in describing the works of Brian Ferneyhough, Michael Finnissy, James Dillon, Chris Dench and Richard Barrett. Ferneyhough is regarded the father of this aesthetic direction, and, like Finnissy, he had his works performed in the 1970s. A majority of the composers associated with the New Complexity originally came from Britain. The term was associated with Darmstadt, as Ferneyhough coordinated the composition courses there between 1982 and 1996.

418 Christopher Fox, “New Complexity,” in *Grove Music Online*.

419 The literature on Hübler is scarce. He was left out of the *New Grove II* (an article was added to the online edition in 2010) and does not have an entry in Wikipedia. He composed approximately 30 works before falling ill at the age of 33. He resumed composing in 1995, but

festivals throughout Europe, and he has been awarded several prizes.⁴²⁰ Between 1981 and 1989, he explored an idiosyncratic polyphonic notational system, which facilitated the independent organization of performance actions. He used his decoupled notational approach for the first time in *'Feuerzauber' auch 5musik*⁴²¹ (1981), for three flutes, harp, and cello, and he composed a series of solo works⁴²² in which he applied the decoupling of the physical actions: *Cercar* (1983) for trombone,⁴²³ *Grave e sfrenato* (1985) for oboe, *Opus breve* (1987) for solo cello and *Reißwerck* (1987) for solo guitar. The decoupled notation culminated in his third string quartet *Dialektische Fantasie*⁴²⁴ (1982–84), in which each individual instrument is notated on up to five staves. Although clearly drawing on the general advancement in notational and instrumental aesthetics,⁴²⁵ he was a pioneer in systematically developing the decoupled notation technique. According to James Avery and Franklin Cox, Hübler has been a major influence for younger composers such as Richard Barrett, Aaron Cassidy, Wieland, Claus-Steffen Mahnkopf, and Cox himself.⁴²⁶

has not pursued the radical instrumental aesthetics involving the decoupling of performance techniques.

- 420 In Darmstadt, "The Kranichsteiner Musikpreis for composition was, unusually, awarded to a single composer, the 32-year-old German Klaus K. Hübler ... the decision seemed just, since the short programme of Hübler's compositions suggested a serious, individual talent in the field characterized briefly as the New Complexity. Such works as, notably, *Arie dissolute* 1987) for viola and nine instruments, offer something emotionally quite different from the music of Hübler's teacher Ferneyhough." Keith Potter, "Reports," *The Musical Times* 129, No. 1749 (1988): p. 618.
- 421 Klaus K. Hübler, *'Feuerzauber' auch Augenmusik. Study in//about Phantasmagoria* (Wiesbaden: Breitkopf & Härtel, 1981).
- 422 Hübler did not use decoupled notation in *Sonetto LXXXIII del Michelangelo* (1986) for solo piano and *Finale und kurzes Glück* (1989) for solo trumpet, although the technical demands of both pieces are very high.
- 423 In *Cercar*, Hübler separated the layers of breath impulse, slide, harmonics, and mute.
- 424 Klaus K. Hübler, *String Quartet No. 3, Dialektische Fantasie. 1982/84* (Breitkopf & Härtel, 1985). Wieland Hoban has analyzed the quartet in "Instrumentengeister in Zwangsjacken: Klaus K. Hübler's Drittes Streichquartett," *Musik & Ästhetik*, no. 15 (2000): 27–43.
- 425 Several composers used multiple-stave notation, amongst them, Brian Ferneyhough, Mauricio Kagel, Heinz Holliger and Aldo Clementi. Apart from specifying which string to play on, Aldo Clementi's four-stave score *Lento* (1994), for cello solo, is purely descriptive in its notation.
- 426 James Avery and Franklin Cox, "Hübler, Klaus K.," in *Grove Music Online. Oxford Music Online*. (Oxford University Press). Cox wrote the following in a private email: "*Opus breve* was very important for me as a composer, and opened the door to being able to compose my *Recoil* [solo cello] and *Shift*, for five cellos." Both Hoban and Cassidy employ a decoupled notational technique, the latter writes about how his piece *Metallic Dust* (1999) for amplified bass clarinet,

4.3 *Opus breve*

Hübler composed the cello solo *Opus breve* in the course of two weeks, in January 1987, and dedicated it to his former cello teacher Folkmar Länging.⁴²⁷ The work was premiered by Frances-Marie Uitti, in London, on November 13, 1988.⁴²⁸ As its title reflects, it is a short work, consisting of only 11 measures (3 pages) and lasting approximately one and a half minutes in performance. Avery and Cox call *Opus breve* “one of the most difficult [works] ever written for the cello,” and note that it “has received more than 200 performances in its first two decades.”⁴²⁹

4.3.1 Notation

The score is divided into three staves, which constitute separate musical, rhythmic, and technical layers (see Fig. 22). The lowest staff represents the left hand’s actions on the fingerboard. The four lines of the middle staff represent the four strings, and the rhythms notated indicate the movements between the strings. The top one-line staff indicates the to-and-fro rhythmic motion performed by the bow, sometimes coinciding with the change of string, which is then shown by a common staff drawn through the two staves, but more often prescribed independently of the change and notated separately. The bow parameters are notated above the upper staff, describing point of contact as well as bowing techniques. Though not designated in a separate staff, these effectively function as a fourth layer. In other works by Hübler, for example in his third string quartet, this bowing layer is written on a separate staff (see Fig. 23). There are four dynamic parameters: the markings on staves 1–3 indicate the intensity of the percussive finger attack, the intensity of the bow pressure and the speed of the bow motion, and the fourth denotes the overall sonic result.

The idiosyncratic mixture of *prescriptive* (tablature or action notation) and *descriptive* (result-oriented or traditional) notation facilitates the independent treatment of the performance actions. This *parametric polyphony* or

was inspired by Hübler’s Third String Quartet and *Opus Breve*, as well as Cox’s *Shift* for five cellos.

427 “Folkmar Länging was a cello teacher but I was not very successful with playing, therefore I wrote him *Opus breve* for a special event. My cello was behind me at the corner when I was writing...” Klaus K. Hübler, private email correspondence August 15, 2013.

428 Ibid.

429 Avery and Cox, “Hübler, Klaus K,” *Grove Music Online*.

Folkmar Längin zugeeignet
Opus breve
für Violoncello

Klaus K. Hübler (1987)

Edition Breitkopf 9045

© 1988 by Breitkopf & Härtel, Wiesbaden
Printed in Germany

Figure 22: Klaus K. Hübler “Opus breve” © 1988 by Breitkopf & Härtel, Wiesbaden, page 1.

Figure 23: Klaus K. Hübler “Dialektische Fantasie” © 1985 by Breitkopf & Härtel, Wiesbaden, page 43.

multi-parametric notational practice can be seen, on one level, as a continuation of the serialist conception of separating parameters, although it does not treat the performance parameters in serial structures. The parameters in question are unlike those of the serialists, as they are not traditional musical parameters—pitch, rhythm, articulation, and tempo—but technical ones: they indicate the separated playing techniques such as bow position, type of bowing, bow speed, bowing rhythms, and left-hand articulations. The serialist attitude to parameter is now applied to the physical aspects of performance—this has occurred within a context of several directions of innovation that have taken place over the past 40 years, including microtonal composition, work with recorded sound, conceptual composition and more. What is new with Hübler is that he breaks down every component in the instrumental practice, he identifies and names separate parts of the instrumental practice that have not previously been considered on their own, but only as heard together in a merged entity. He explores sonic details from the corners of instrumental practice, only

reached by his hyper-detailed notation and combination of earlier uncoupled performance actions. Idiomatic boundaries are thus challenged, extended, isolated, and renamed, something that will be discussed further under 4.4 *Radically idiomatic instrumentalism*.

The *parametric polyphony* discussed in this chapter is predominantly located at the level of composition and performance. The question of the extent to which this is perceived by the listener is quite another issue, and will not be discussed in depth in this chapter.

Several of Hübler's contemporaries explored similar notational techniques, but Hübler expands the number of parameters to include very detailed performance actions. Notated in this way, the physical actions of traditional playing techniques are sorted and divided into small, individual entities—components that can be combined in infinite ways. Hübler has refined the notational palette. Like an alchemist, he draws out and distinguishes more ingredients and colors from the instrumental practice. These ingredients are disentangled from the unified, classical techniques. Each becomes a color in a painting—a piece in a game with intricate but precise rules; every musical layer is to be performed as precisely as possible, in all its detail in combination with the other layers in Hübler's aim to open up "a completely new perspective on the instrument."⁴³⁰

4.3.2 Approaching the score

Opus breve prescribes cello techniques that are outside of the established norms, and thus fall into the category of extended techniques, a term generally applied to instrumental techniques that are unconventional, unfamiliar, and unorthodox, often including extra musical sounds and novel effects. As established norms change over time, and what is regarded normative varies within musical contexts, the term creates a constructed distinction between which techniques constitute the standard and which extend beyond that border. As the term and its definition are dependent upon the cultural context, a more apt description of Hübler's techniques is that they extend beyond those used in pre-twentieth-century notated music. In her dissertation, "Timbre as discourse," violinist Mieko Kanno writes:

⁴³⁰ As described in Klaus K. Hübler, "Expanding String Technique" p. 233, trans. Franklin Cox, in *Polyphony and Complexity*, ed. Claus-Steffen Mahnkopf, Frank Cox and Wolfram Schurig, *New Music and Aesthetics in the 21st Century* (Hofheim: Wolke Verlag, 2002).

It may be argued that so-called extended technique adds further parameters and thus challenges the identity of that particular instrumental sound. Although it challenges the normative boundary of the timbral spectrum of the instrument, it must be said that what the extended technique explores is all derived from *within* the spectrum of the instrument.⁴³¹

In a way, it is self-evident that all instrumental techniques already exist within the potentiality of the instrument, but classical music's treatment of extended techniques as "otherness," as spicy special effects deviating from what is considered the norm, makes it an engaging topic in discussing performance practice. The way Hübler expands string technique emerges from within the instrumental practice, he does not introduce specific new techniques, it is rather that his unconventional combinations of relatively conventional techniques must be said to result in novel sounds.

Several new combinational techniques emerge from the continuous transitions between tone and noise in *Opus breve*. Different degrees of pressure applied with the left hand, in combination with different bow-speeds, produce a multitude of sound qualities, ranging from unpitched sounds to *flautando* whisperings. The left hand techniques include tapping of the fingertips, harmonics, and half-harmonics. Tapping, or "hammer-on" as it is called, produces two pitches, one either side of the stopping point. A half-harmonic occurs when the finger is pressed slightly harder than a harmonic, but does not reach the fingerboard. Both the harmonic and the fundamental will sound when the finger is placed on a natural harmonic, whereas a multiphonic will occur when placed between harmonics. In addition to these, Hübler prescribes several degrees of left-hand finger pressure on stopped notes.

Hübler makes extensive use of the wood of the bow, in *col legno* alone, as well as in transitions and combinations with *ordinario*, *sul pont*, and *sul tasto*. A bow technique in frequent use is *arco battuto* (It. *battuto* means beaten), notated by wedge-shaped noteheads. Also novel is the use of the parameters that control the bow—velocity and pressure—as agents of dynamic nuance. The fast transitions back and forth between *sul pont*, *ordinario* and *sul tasto* create great timbral variations. He also makes extensive use of a tremolo between *col legno* and *ordinario* (measures 4, 6, 8, 10) (see Fig. 22). The instructions for performing this technique are unclear, and there are different options, depending on the bow's proximity to the string during the action. If the bow is more or less

431 Mieko Kanno, "Timbre as Discourse: Contemporary Performance Practice on the Violin" (PhD diss., University of York. 2001), p. 76.

thrown onto the string while turned between hair and wood, the effect is a percussive, uneven texture, whilst staying on the string while switching between the materials gives a softer, more subtle sound.

Viewed separately, the left hand stave is written in descriptive notation, with pitches, rhythms, and frequent trills and glissandos. The radical new aspect that arises from the decoupling is that the left hand becomes rhythmically autonomous. The fingers of the left hand play a rhythm that differs from both the bow's back-and-forth-movements and the rhythm of the string transitions; together, they form a three-part rhythmic polyphony. Assigning different rhythmic functions to the separate performance actions is a prerequisite for the experience of the polyphonic strata in the sonic domain, as each rhythmic stratum filters the others when they all take place simultaneously. When the top one-line stave showing the rhythm of the bow's back-and-forth-movements is filtered through the string transitions and the left-hand actions, the left-hand's voice loses its fundamental pitch-creating function as we know it from traditional performance practice. The sound that comes out is scattered fragments of the left hand's voice. The function of the bow is like that of a camera, which sweeps over the left hand from different angles and perspectives, not unlike the way photographers make use of different perspectives in a movie. From an aural rather than notational perspective, it is interesting to think of correlations between visual and aural perspectives. Composer-pianist Finnissy writes:

I teach a film techniques and musical composition course at Sussex University ... We talk a lot about correspondences between the controlled observation of camera work and how you control the ear when you decide on a certain course of events in music. You can speed things up and slow them down and you can do perspective because, as in cinema, there are long, medium and close-up shots in music.⁴³²

Sometimes the bowing creates a "long shot"—taking in every note in the left hand; sometimes it's a close-up on one or two notes. And sometimes notes get left on the bow's "cutting room floor." The widespread use of bracketed rhythms speed the music up and down, as if shifting gears. The linear perception of the unfolding of musical time is challenged, as there are several possible perspectives on or entrances to the work. Percussionist Steven Schick has written about the contrast between the real-time of performance and the long, laborious learning-process:

⁴³² Henrietta Brougham, Christopher Fox, and Ian Pace, eds, *Uncommon Ground. The Music of Michael Finnissy* (Aldershot: Ashgate, 1997), p. 6.

An artificial skin of practical considerations must be stretched tightly across the lumps of a living, breathing piece. Performance reinflates the piece, fine tuning its formal gyroscope, revivifying polyphonic structures, and packaging the intellectual energy of the score into meaningful physicality. Performance, then, is a real-time explosion of the rich complexity of a work: what took months to learn takes only minutes to play.⁴³³

The metaphor, *real-time explosion of the rich complexity*, captures the performance experience of unleashing the multidimensional forces of the piece. Schick's perspective as a performer is an important contribution to the discourse of complex music, which is largely dominated by composers and theorists.

Hübler writes the metronome mark *eighth-note ca. 42*. It is interesting to find the qualifying "ca." in the relation to such an exact division of the units of the measures, and I interpret this as an allowance for *rubato* in phrasing the music. Every measure in *Opus breve* has a new time signature except for measures 5 and 6, which have the same signature. What, then, is the function of the time signature with such diverse measure lengths? The first three and last three measures each seem to create a unit, an independently framed musical moment as a purely graphic entity, in the middle of the short piece, measures 4–8 (see Fig. 24, 25) seem to create a more connected unit. There are no nested irrationals (tuplets) across measure lines, but they frequently occur within the measure. In the first measure, there is an emphasis of the downbeat, a double stop with a mordent, like the beginning of a Baroque *gigue*. The bow plays two 16th-notes against the left hand's three. The measure proceeds with tremolos and trills, creating a feeling of tension and urgency from the very beginning, a characteristic trait of the piece. Already on the second eighth-note, there is a chord, bringing the hands together for the first time. There are six strong chords in the first measure, interspersed with virtuosic passages with hectic unsynchronized activity in both hands (see Fig. 22). This juxtaposition of the vertical (chords) and horizontal (textural) layers roughly constitutes the musical material of *Opus breve*. The vertical layer, represented by the solid chords, often using four fingers (e.g. measures 1, 7, 9, 11) (see Fig. 22, 24), permeates the piece. The horizontal layer (see measures 5 and 6) (see Fig. 24) consists of ambiguous, fleeting passages, often with trills and glissandos of varying density and intensity. Although to the ear these passages are fleeting and horizontal, they are like a desperate etude for the performer. They consistently involve three or four

433 Steven Schick, "Developing an Interpretative Context: Learning Brian Ferneyhough's Bone Alphabet," *Perspectives of New Music* 32/1 (1994): p. 134.

fingers of the left hand, which constantly glides or jumps to new positions. Max Nyffeler's apt metaphor, when describing performance of Hübler's music, is a "... centipede, who is aware of its thousand feet and no longer know which foot he should move when."⁴³⁴

In a sense, Hübler has orchestrated the cello; he treats it almost like a keyboard instrument, with four-finger chords throughout the piece. Between the chords, one or more fingers of the left hand are almost always engaged in a glissando, producing a sound in constant flux. The structure of *Opus breve* is built around these chords that appear between the fleeting ambiguous areas with a frequently textural character. The chords serve as markers—like structural columns, keeping the piece together and defining the sonic space in an almost architectural fashion. The visual representation bears likeness to traits in Baroque scores with fast black passages, trills and tremolandos leading to gestural chords, often with grace notes. This is not surprising when we know that Hübler studied musical rhetoric in Renaissance and Baroque music.⁴³⁵

While Hübler treats the cello as a chordal (keyboard) instrument, he undermines the very same function in the remaining material. By leaving the limitations of the well-tempered-keyboard way of thinking, Hübler explores, challenges, and expands the sonic and microtonal world. By dissolving the diatonic paradigm, he allows a new world of sounds to break free, with subtle transitions between pitch and non-pitch, sound and noise, and sound and silence. This sound world requires a its own set of instrumental techniques and musical expression. It is not new, though: we know this world from Lachenmann, Ferneyhough and numerous contemporary composers, as well as performers within freely improvised music.

There is no hierarchy of the staves in spite of the significance intuitively given to the descriptive left hand staff. When the sum of the two bow-arm staves, representing rhythm and string position- and crossings, are applied to the left hand's performance, the sonic outcome is far from what you expect when you read the score the first time. What we hear is predominantly ambiguous and unstable aspects of sound; non-tempered pitches and gestures in constant flux. The technique of trills moving in double stops produces a rich but unpredictable sound with microtonal and timbral variations. In his Third String Quartet, *Dialektische*

434 Max Nyffeler, "Bis Das Instrument Seinen Geist Offenbart: Klaus K. Hübler Im Gespräch," *MusikTexte*, 20 (1987): p. 5.

435 Avery and Cox, "Hübler, Klaus K," *Grove Music Online*.

The musical score is a complex, multi-staff composition. It begins with a section marked 'onda s.p.' and 'sempre sim.' with a 6:5 time signature. This is followed by a section with a 7:13 time signature and 'simile' markings. The score then moves through sections III and IV, featuring various woodwind and string parts with dynamic markings like 'p', 'mf', 'f', and 'ff'. A section with a 7:5 time signature is also present. The final section is marked 'f sempre' and includes a 9:5 time signature. The score concludes with a section marked 'I II III IV V' and a 9:5 time signature. The manuscript includes numerous performance instructions, dynamic markings, and time signature changes throughout.

Figure 25: Klaus K. Hübler "Opus breve" © 1988 by Breitkopf & Härtel, Wiesbaden, page 3.

Fantasia (1982–84), Hübler develops his tablature notation further, in order to obtain non-tempered pitches. In this work, the notation defines the distances of different left hand positions employed at positions where the width between the fingers would be different. He also prescribes the distance between the fingers to remain constant in glissandos, resulting in unstable intervals⁴³⁶—something that can be seen as a disfiguring of traditional cello technique.

Opus breve has several gestural figures involving rhythmical string crossings. A pattern of 64th-note quintuplets in string crossings is repeated, in measures 1, 2, 3, 6, 8 and 10 (see Fig. 22, 24, 25). In measures 2, 6, and 10 (see Fig. 22, 24, 25), the order of strings are identical, as well as the following two notes, creating a recognizable feature and hint of symmetry, even with different material in the left hand each time. On one level, these can be seen as traces of the compositional techniques, and it also represents a visual level in the score. The clear rhythmic character of the quintuplet also makes it an audible feature in spite of different information in the other staves. The direction of the phrases, in terms of contour and pitch seems predominantly to move upwards, the first and last measure being obvious examples. This reinforces the feeling of desperate urgency, the effort put in, only to start a new attempt in the next measure.

The repeated use of sudden shifts in register between the chords demands time to travel for the hand and arm to the right position. The space between the chords in measure 9 allows time for the shifts, but in the last measure, conditioned by the idiomatic limits, some time has to be taken in order to reach the chords. A significant detail is the individual dynamics (intensity of bow pressure), frequently changing for each tone in the chords, in measures 7, 9 and 11 (see Fig. 25) some even with *crescendo* or *diminuendo*. The time factor required to execute these chords with subtle dynamics as well as big leaps in register and complicated fingerings, points at a performance practice allowing some *rubato* with a space for shaping and phrasing. If we look at the first chord in measure 7, (see Fig. 25) the dynamics from the bottom are *f*, *p*, *mf*, *f*, and the overall dynamic is *p* with *crescendo* to *f*. In addition, the contact point of the bow moves from *ordinario* to *sul ponticello*. There are no instructions regarding breaking the chord, but to me as a performer, with all these instructions in mind, the

436 Clearly inspired by Hübler, the American composer Aaron Cassidy has further developed notation based on left hand finger placements among other physical actions, collaborating with musicians such as The Jack Quartet aiming at an instinctive and visceral link between score and performance.

most musical solution would be to break the chord in order to emphasize the bottom and top notes, a practice not unlike the breaking of chords in Baroque music to stress certain harmonic implications. In the last 5 measures, there is a condensation of the chords. *Opus breve* ends with chords alone in measures 7, 9, and 11 (see Fig. 25). This may be an echo of the last chords of Bach D-minor prelude for cello, though here at a much faster speed.

4.3.3 Practicing *Opus breve*

On our first glance at the score, we see a dense surface with signs and phrases, characters and figures. As a performer, I see great potential in this multifaceted score. Reading Hübler's notation is like walking into a three dimensional room. Everything in *Opus breve* is also always something else, because the notational language creates a psychologically prismatic vision where the linear perspective is lost.

As the practice strategies have great significance for the interpretation, the piece poses many questions and challenges regarding methods for practice. I therefore want to begin this exploration of the piece by describing and discussing certain practicing methods I used in learning the piece. I also draw on other performer's experiences in practicing complex music, in an attempt to describe a performance practice of this music.

Practicing without the instrument

The first steps in practicing *Opus breve* included getting familiar with the surface of the score: Hübler's style of writing, and his information system of signs, text, and symbols. The notation acts as mediator between us and the music; my task as a musician is thus to interpret the text and translate it into actions. A method I found particularly helpful in the start of the learning process was thus to practice away from the instrument,⁴³⁷ scrutinizing the score, marking different parameters with colored pencils, and looking for related difficulties in other parts of the score. Finnissy describes this stage as "trying to dissect the music plus gaining initial psychological and emotional impressions"

437 A questionnaire distributed to friends and colleagues involved in the performance of complex music, by oboist Roger Redgate, showed that respondents spent an average of 20–30% of their time working away from the instrument, with one performer spending as much as 60%. See Christopher Redgate, "A Discussion of Practices Used in Learning Complex Music with Specific Reference to Roger Redgate's *Ausgangspunkte*," *Contemporary Music Review* 26/2 (2007): p. 147.

and, “marking out the territory for the eye.”⁴³⁸ In my view, the advantage of working with the music without the instrument is that my imagination is not limited by the idiomaticism of the instrument.

Approaching rhythm

The first parameter I identified was the rhythm. I worked the rhythms out, located the main beats (eighth-notes) and subdivisions within the nested irrationals. I plotted the score into the notational software *Sibelius*, which proved a great help for learning the rhythms. The software could not be used for learning pitches, as the material in *Opus breve* consists predominantly of microtones⁴³⁹ and transformations of sounds, outside the realm of this specific software.⁴⁴⁰ Unable to make a digital representation of pitch and timbre, I matched simple melodies to the rhythms, easy to sing and thus remember.⁴⁴¹ Learning the complex rhythms by ear became a very different experience from reading the score. Learning by listening echoes the oral transmission of unnotated music, in which music is learned orally, from peer musicians or in a master--apprentice relationship. Franklin Cox emphasizes the great advantages of digital representation in practicing radical complex music, as the performers, he says, lack “ideal interpretations” or, often, even one other interpretation of the piece. Cox recommends using computer models and what he calls their “quasi-oral training”: “the piece can become fixed in the inner ear: if one makes a mistake, one can recognize that it is a mistake, in contrast to the sort of pure willfulness and often abstractness found in many performances of radical complex music.”⁴⁴² Although Cox recommends abandoning the computer model “long enough” before performance, he places great trust in the digital representations of

438 Michael Finnissy, “Biting the Hand That Feeds You,” *Contemporary Music Review* 21/1(2002): p. 77.

439 The microtones are not specifically notated, but occur from the glissandos and unstable left-hand positions.

440 Franklin Cox proposes computer-assisted methods as an important training tool in complex music, “providing clicktracks of all degrees of complexity; in specific, it refers to ‘perfect’ models of the pitches and rhythms of a piece, usually made with a sequencing program and a synthesizer.” Frank Cox, “Notes toward a Performance Practice for Complex Music,” in *Polyphony and Complexity: New Music and Aesthetics in the 21st Century*, ed. Frank Cox and Wolfram Schurig Claus-Steffen Mahnkopf (Hofheim: Wolke Verlag, 2002), p. 110.

441 This was advice given to me by percussionist Håkon Stene.

442 Cox, “Notes toward a Performance Practice for Complex Music,” p. 116.

works, emphasizing aspects of correctness and faultlessness before even considering human intervention and interpretation.

Percussionist Steven Schick, on the other hand, proposes the human ear as the supreme judge of accuracy. In learning Ferneyhough's *Bone Alphabet*, he preferred to tape himself and let his ear evaluate the result: "I could generate poly-rhythmic graphs of least common multiples or use computer models if I wanted (I didn't), but, in the end, human ears would judge the performance, so human ears should guide the learning process."⁴⁴³

In one of the rare books devoted to practicing contemporary music, *Performing Twentieth-Century Music: A Handbook for Conductors and Instrumentalists*, Arthur Weisberg calls the practice of intellectually understand the rhythmic intricacies, but interpreting and adapting them to a performative reality, "educated faking":

Sometimes knowing where the notes fall is not enough to be able to play them. ... Faking in this context applies only to rhythm; it is educated faking because the rhythm is completely understood intellectually, though the inner units are too fast to count. ... We can take some comfort from recognizing that not only does the performer find the units too fast to count, but the listener and even the composer do too. This is not to condone inaccuracy, but one must realize that there are limits to human perception.⁴⁴⁴

Weisberg's approach is pragmatic, but not unproblematic. We know that the limitations of human perception are not fixed and determined. Weisberg further observes:

The more one tries to place them [the rhythmic units] exactly, the less flowing they will be: instead performers should make an interpretive decision in response to their understanding of the composer's intent. Some composers want the rhythm to be exact, and others want more flow. A musician needs to know the various compositional styles to make an intelligent choice.⁴⁴⁵

He trusts in the performer's ability to assess the style of the work and the composer's intentions. But as I have discussed in the previous chapters, aesthetic understanding and "the composer's intentions" are far from fixed entities, so his trust is problematic. A method within Weisberg's "educated faking" is to

443 Schick, "Developing an Interpretative Context," p. 141.

444 Arthur Weisberg, *Performing Twentieth-Century Music: A Handbook for Conductors and Instrumentalists* (New Haven: Yale University Press, 1993), p. 34–5.

445 *Ibid.*, p. 36.

treat the rhythms spatially. “The point is that the notes need only be placed in a general relation to the normal quarters and still produce acceptable results.”⁴⁴⁶

In practicing Claus-Steffen Mahnkopf’s *Trema*, percussionist Jonathan Hepfer initially rewrote the piece in simpler “helper rhythms”⁴⁴⁷ to learn the “objective rhythmic skeleton” which he, after some time came to regard as a symbolic gesture.

Much of the material ... benefits from a sense of poetry, rubato and lyricism, which inherently eradicates the rigour of my method of learning. Over the course of time, the once meticulous rhythms melted into pliable versions of themselves, always putting the expressive component of the music in front of the ‘correctness’ of the text.⁴⁴⁸

With this in mind, he reflects upon the possibility of making a shortcut in practicing, but concludes, “I feel that this working method is simply a gesture of interpretive humility and is meant as a measure of respect for the composer.”⁴⁴⁹ The expression “interpretive humility,” communicates a recognizable example of performers’ ethics, a subject to which I will return later in this chapter. In practicing *Opus breve* the computer model provided the “helper rhythms,” as it revealed the outcome of the rhythmic polyphony between the three staves—though not in a written form, but only orally.

Parallel to listening to the computer model, I practiced *Opus breve* with a main pulse (related to Weisberg’s spatial method); I marked the main beats and tried to curl the music around the beats as accurately as possible. In the course of this

446 Ibid.

447 Weisberg discusses the issue of simplifying the rhythms, in order to facilitate performance: “Musicians often wonder why composers do not avoid misunderstandings by providing all of the rewritten rhythms, since many of these rhythms have little chance of being performed correctly in their original versions. Unfortunately, many composers do not know how to rewrite. But in other cases the choice of notational form is a matter of aesthetics and style. Composers who are more interested in rhythmic accuracy than in other musical parameters will favor rewritten rhythms. The aesthetic approach, by contrast, would favor ... its original version, which has an elegant and flowing look to it. The problem is that many musicians will not know how to play it. ... Enlightened composers may give both versions—first to show the style and the second (usually placed as a cue above the first) to show how to play the measure.” Ibid., p 36. The complexity versus simplicity and visibility versus user-friendliness in appearances of scores, is an ongoing discussion in the field of new music. I once attended a rehearsal with the Arditti Quartet, where they rewrote a half movement from intricate and changing time signatures to straight 4/4 in order to facilitate reading.

448 Jonathan Hepfer, “Claus-Steffen Mahnkopf’s *Trema*—an Interpreter’s Experience,” in *Die Musik von Claus-Steffen Mahnkopf*, ed. Ferdinand Zehentreiter (Hofheim: Wolke Verlag, 2012), p. 273.

449 Ibid.

process, I switched to learning the speed of each tempo-unit within the tuplets, as I found that this made much more sense musically, and was more suitable in terms of aurally transmitting the internal tempo changes. These internal speed changes are described by cellist Anton Lukoszevieze in his work with *Opus breve*: “I also analyse the complex rhythms, with a metronome/calculator but don’t give too much of a fuck about that in the end, as I am not a machine, but an intuitive being. They are just like gear changes in a car.”⁴⁵⁰ To think of the subtle tempo fluctuations caused by tuplets as gear changes, is common in learning complex music.⁴⁵¹ By memorizing the speed of each tempo-unit (by using a metronome or software), a kinesthetic memory of the pulse can be settled.

A global method

For string players, the most radical break with the classical performance practice is the decoupling of the right and left hands. Though this is a common practice for pianists and percussionists, string players devote their whole training creating a unity between the hands. Sound and gestures in the classical repertoire arise from a fusion between the two hands, working down to the smallest fine motor, muscular, and sonic detail. Separating the hands by giving them individual tasks and rhythms, was initially challenging. Breaking this powerful bond between the hands, and thus freeing them from their interdependence, creates a new world of technical and sonic possibilities, and Hübler explores these.

The score has three staves and one layer of bow-positions on top, constituting a total of four technical layers. I found the method of practicing one layer at the time important in the beginning, to sort out and decomplexify the actions; but as the single layers did not make sense separately (the rhythms of the left hand are so complex, and far from the sounding result), I discovered that I needed to combine the hands at quite an early stage. One combination technique is to practice both hands simultaneously, while keeping the mental focus on only one

⁴⁵⁰ Anton Lukoszevieze, private email correspondence, September 12, 2013.

⁴⁵¹ This practice is described in the Arditti Quartet’s process of learning Ferneyhough’s Sixth String Quartet: “In some cases, it is sometimes simpler to use a different note value as the pulse. Irvine Arditti discusses rethinking a passage with alternating tempi.” In Paul Archbold, “Performing Complexity” (2011): p. 7. Steven Schick observed: “In rehearsal Ferneyhough clearly expressed his desire that the performer not translate polyrhythmic composites into shifting tempi. He felt that polyrhythms seen as shifting tempi imply a reorientation of the overall metrical point of view. And, of course, there is a big difference between changing meters and changing speeds. Nevertheless, as a stage in the learning process, this technique can be very valuable.” In Schick, “Developing an Interpretative Context,” pp. 139–40.

hand, treating it almost as a Cantus Firmus.⁴⁵² By doing this, you allow the hand that is not in focus, to move less exactly and accept mistakes. The most important thing is to keep going. The demands are accordingly higher for the hand in focus. Then you swap hands and do the same. After a while, the level of perception increases, and one is able to concentrate on more aspects.

I expanded this method slowly to include all the parameters from the start. This method departs from the classical method I was taught, when one adds one element at the time. To try to grasp all the parameters (pitch, dynamics, articulation, finger—and bow pressure) at the same time, and do it extremely slowly at first—activates all your senses in practice and is gestural and almost choreographic in its nature. When you are moving with the instrument in the right state, the body and mind will remember. It is as if you engrave them, or plot them in slowly into the memory. You program the body, the muscles, the reflexes, and the mind. The gestures will become literally embodied—incorporated into the body. Schick emphasizes the advantage of involving physical gestures in the memorizing in an early stage rather than being the last step in the process:

I could more quickly embed the material I was learning in the realm of physical gesture. As a result, from the first instant the piece became a theatrical arena where physical gesture was not the simple by-product of performance, but an integral part of a growing interpretive point of view. The instrument became a kind of stage for the enactment of, in Ferneyhough's words, "a theatre of the body."⁴⁵³

The nature and number of the instruments in a percussion set-up and the sheer distance between them, leads to larger movements and gestures than on a cello, but the same physical principles apply in learning the music through gestures.

I practiced in this way as if I was learning the music *by heart*, which makes the body and mind learn the music on several levels. An utmost important aspect of this "global method" is never to force the tempo early in the process—never play faster than allows the senses to be fully present. The chunks have

452 I am grateful to Håkon Stene for making me aware of the "Cantus Firmus" method. Percussionist Steven Schick also recommends this method, as "casting one line of a polyrhythm as strongly foreground in nature against which other rhythmic lines act ornamentally in varying degrees of rhythmic dissonance to the original." In "Developing an Interpretative Context," p. 137.

453 Ibid. Ferneyhough's words, "a theatre of the body" are from an unpublished interview with Arun Bharali (November 1992). Percussionists naturally use large gestures due to the number and size of instruments, as well as the distances between them; still, the same *realm of physical gesture* applies in learning music on a cello.

to be reiterable: the player must thoroughly grasp what she does with each. Repetitions executed without full understanding are in vain. So the first step is to find out *what to do*. The paradox is that the notation is deliberately evasive; its aim is precisely to escape full understanding—a particular interpretation. The ambiguous notation presents a triple difficulty: one doesn't know exactly what the notation implies, how to execute it, or how it will sound. Friedrich Gauwerky calls *Opus breve* "an extreme example of action notation" and continues, "[this is] almost perfectly precisely notated music, but you don't know which kind of sounds will emerge from the actions."⁴⁵⁴ As a performer, he says, it is "a most unusual situation at the beginning of the work on the piece. In a sense one has to be some kind of a machine: following the instructions one simply has to do something without being able to have a sound-imagination ... But this applies only for the very first period of the work, very soon you find out which sounds emerge from the prescribed actions. Then the ear becomes more and more important and one builds a score consisting of sounds in the mind: in the end, we are musicians, and listening with the control of the ears is most important"⁴⁵⁵ The feeling of uncertainty and ambiguity related to *Opus breve* makes it an opaque piece for the performer, visually, psychologically, and physically. It has enormous amounts of energy, as if the piece is never standing still; it moves continuously, always on the way somewhere else.

I was surprised how effective this "global method" worked for me in this complex music. It was as if I ventured the three-dimensional notation from within instead of dissecting the score into bits to be slowly rebuilt. The whole, forming complex relations and assemblages, proved to be greater than the sum of its parts. The gestures became a focus in this practice, gestures such as the outer framework, which included all the rich details, and gestures such as the global unifying value emerging from the body.

To inscribe the work into the muscle-memory requires different repetitive practice methods. I did this, still using the "global method," in small time-units, from gestures lasting one eighth-note, slowly expanding to a whole measure. This proved to be very intricate and detailed work, which brought me forwards

454 Tanja Orning, "Interview with Friedrich Gauwerky." September 28, 2009 Cologne.

455 Ibid. Of Hübler's *Opus breve*, Gauwerky has said "*Opus Breve* (1987) is probably the shortest work for cello solo that I have performed. Nevertheless, it is one of the works which I have studied the longest time." My translation. "*Opus Breve* (1987) ist das wohl kürzeste Werk für Violoncello solo, das ich bisher aufgeführt habe. Nichts desto Trotz ist eines Werke, mit denen ich mich die längste zeit beschäftigt habe", in the liner notes to Klaus K. Hübler, in *Friedrich Gauwerky: Cello solo* (ALBEDO 013, 1999).

slowly. The concentration required in this method is profound, as I try to involve all the parameters at once rather than focusing on one aspect at the time. In the course of the meticulous and slow work of combining the elements in *Opus breve* into a coherent performance, I played through the piece several times, every day, extremely slowly, gradually speeding up, but always trying to keep the awareness of the multi-dimensional feeling.

“Play-through method”

A different plan from aiming at mastering one part before proceeding, is a method Séverine Ballon used in practicing Ferneyhough’s *Time and Motion Study II*⁴⁵⁶ (1973–76), perhaps the most complex work written for cello (see Fig. 26). Ballon talked about the importance of playing through the piece from day one in the process:

Every day I tried to play through. In the beginning you play four measures through, then you play six measures through, and everyday you play a few measures more. I tried to get used to not playing everything right, of course you play ten percent or twenty percent of what is written, but just to get this ability of going through, and get this ability of not playing perfectly, but try to go on. So, then every day you play better. It was really important for me to always play through. ... Almost every day I played through. And every day you get completely depressed because you play like you miss so many things. But you have to get used to playing through. Of course you have to miss things.⁴⁵⁷

In Ballon’s description, I recognized my own, more intuitive version of this. Parallel to the painstaking process of learning *Opus breve* “properly,” I had played the entire piece every day, either peering at the score in an attempt to penetrate the surface, or allowing contours, surface material and texture to inspire me. Applying the “play-through method,” I had deliberately to let go of the control I tried to obtain through the slow “global method,” as I was by no means technically ready to play the piece at tempo. Letting go of control and playing something that felt approximate instead of precisely accurate made me feel uncomfortable at first, as if I was violating the step-by-step process I was undertaking. Then I decided to think about it in a different way: I was using the slow “global method,” but doing the “play-through method” as a parallel process, and I could regard them as two different perspectives to inform my practice rather than as a binary either–or. An unreserved acceptance of making

456 Brian Ferneyhough, *Time and Motion Study II* (Edition Peters, 1978). At the time of the interview (1977), the work’s premiere had not yet taken place.

457 Tanja Orning, “Interview with Séverine Ballon,” 17 April 2012, Oslo.

Figure 26 is a detailed musical score titled "Time and Motion Study II" by Brian Ferneyhough. The score is written for a string quartet and is characterized by its extreme complexity and idiom. It features multiple staves with dense notation, including numerous slurs, accents, and dynamic markings. The score is divided into sections labeled "Sequence I" and "Sequence II". Key annotations include "A tempo (.60)", "Agliaete rubato p. 60%", and "Return to tempo (p. 2)". A large "stop" arrow is positioned at the bottom of the score. The piece is titled "Adagio maestoso" and includes tempo markings such as "p. 32", "p. 42", "p. 46", and "p. 52". The score includes various performance instructions, such as "Take bow rapidly", "Express various bowed notes", and "Vertical transitions between strings on long note and fingerings indicated in small proportions". The notation is highly detailed, with many notes and rests, and a complex rhythmic structure. The score is presented in a traditional layout, with the staves arranged vertically and the annotations placed around them.

Figure 26: Time and Motion Study II by Brian Ferneyhough. Copyright © 1978 Used by permission of C. F. Peters Corporation. All rights reserved.

mistakes became an outright necessity in order to implement the “playing-through method.” And this acceptance does indeed compromise the more common methods that involve a high level of control. Practicing from these two different perspectives provoked in me an avalanche of reflections and questions about what is correct and incorrect, accurate and inaccurate, in control and out of control, in this context.

In my experience, the “playing-through method” also drew upon my improvisational skills, as I did not control in detail the gestures and sounds, my creativity had to come up with something that more intuitively could link the visual picture with sound I created. I explore this more fully in 4.4.2: Improvising *Opus breve*.

Reading the multiple stave score of *Opus breve*, the concentration oscillates between the systems, screening for the visual and musical emphasis, and the polyphony requires a new approach to reading the score. Linearity is dissolved, and the score is closer to a web or image containing trajectories in many directions. The purely visual aspect, the visual representation of a score, is rarely discussed in relation to performance practice. The so-called “too-muchness,”⁴⁵⁸ or overload of visual information in these scores also leads one to question the actual cognitive capacity to remember, the ability to prepare what is played. During reading, the eyes following the score simply cannot take in all the information in the note picture. Is it possible to read a score differently than the linear way from left to right? In New Complexity scores, the visual information contains something beyond the individual layers. When Ballon talks about playing through the score from day one, she is drawing upon a set of her resources that are not exclusively cerebral and rational. She responds to the graphic visuality of the score in an emotional and instinctive way, rather than purely technical. The notation creates psychological images and figures that instinctively trigger performance actions. This is also of interest because we know that many composers within the New Complexity often were inspired by visual images.⁴⁵⁹

The visual relationship to the visceral and instinctive, is a connection I would like to investigate further. This also points to the complex music’s sonic kinship

458 Brian Ferneyhough, Brian Ferneyhough: *Collected Writings*, ed. James Boros and Richard Toop (Amsterdam: Harwood, 1995), p. 117.

459 A striking example is Ferneyhough’s seven-piece cycle *Carceri d’Invenzione* (Imaginary Prisons, 1981–86), inspired by the dungeon etchings of Piranesi.

with a lot of improvising music that originated in the 1960s and 1970s. I will return to this point in 4.4: *Radically idiomatic instrumentalism*.

Relearning *Opus breve*

An astonishing piece of evidence that hardwiring the piece into the body had penetrated beyond the outer layers emerged when I was returned to relearn *Opus breve* after some time. I began to review the analytical process again, which strangely enough felt foreign and distant. However, when I took up the instrument, my fingers remembered where they were going, my body had retained what my conscious mind had forgotten, reminding me of Antonin Artaud's words: "There is a mind in the flesh, but a mind quick as lightning."⁴⁶⁰

If I concentrated hard, my fingers would not have remembered, but when I let my fingers and hand go "their own way," it all came back, slowly but surely. Everything was stored in the body in a physical memory of executed actions—the body revived the gestures, the fingers remembered the grips and the arm recalled the position shifts. It is as if the fingers had their own brain, as Saramago writes about in his novel "The Cave":

Indeed, very few people are aware that in each of our fingers, located somewhere between the first phalange, the mesophalange, and the metaphalange, there is a tiny brain. The fact is that the other organ which we call the brain, the one with which we came into the world, the one which we transport around in our head and which transports us so that we can transport it, has only ever had very general, vague, diffuse and, above all, unimaginative ideas about what the hands and fingers should do. ...⁴⁶¹

In relearning *Opus breve*, it felt long gone from the conscious mind, but was just below the surface of the body's memory; it resided in the small brains of the fingers, elbow, and arms.

4.3.4 Transcribing *Opus breve*

Although the score of *Opus breve* is meticulously notated, and all the poly-rhythms can be calculated, the search for the exact meeting points between the left and right hands, the actual sum of the three staves, is far from

⁴⁶⁰ Antonin Artaud, *Antonin Artaud, Selected Writings*, ed. Susan Sontag (Berkeley and Los Angeles: University of California Press, 1976), p. 111.

⁴⁶¹ Jose Saramago, *The Cave*, trans. Margaret Jull Costa (Harcourt, 2003; originally published in 2000 as *A Caverna*), p. 66.

straightforward. I decided to create a rationalization of the score, following the practice of violist Barbara Maurer, of Ensemble Recherche, who given the premiere of Hübler's *Aria Dissolute* for viola and chamber ensemble, in 1986. In preparing the piece for performance, she transposed the viola part to a performer's score. She wrote:

In my opinion of the piece there was no other way than calculating the rhythm of one hand into the rhythm of the other hand, so that they are just one (obviously much longer and more complicated) rhythm. Then you can insert the bowing in the right places. That's what I did, including that in my pieces in a lot of passages the left hand wasn't even clear, so that I had to try it out separately and then write down the pitches that were most close to the suggestions.⁴⁶²

Transcribing the three staves of *Opus Breve* into one staff was very challenging, especially deciding precisely where the bow-rhythm would coincide within the glissandos and polyrhythmic structures of the left hand, and thus fix the accurate left hand positions. One can measure with reasonable precision which chord or note will coincide with the action of the bow, although one would have to apply micro-tonality for precise notation. The ambiguity lies in the constant movement of the hand and independent finger movements between the chords. The rationalization of the score was problematic—it almost seemed like a violation of the moving gestures to nail down the specific chords inside the glissandos in order to make them concrete. Executing the now firmly notated pitches proved to sound very different from chords emerging as a result of the coinciding of the rhythm of the bow and the left hand during glissandos in the original score. The purpose of the rationalization was to facilitate the reading but ended up simplifying the music and even changing it.

The idiosyncratic character of the piece was effectively lost and killed in transcription, and many subtleties were futile to notate, so I went back to the original score and attempted to develop a method of reading it during practice. This experience of the score's resistance to transcription persuaded me of the necessity of Hübler's notational practice. The heart of the piece rests in the ambiguity of the notation, which is close to tablature, giving instructions for where place fingers rather than how to sound. The limited benefit of the transcription proved to me that the notation conveys more than it is possible to articulate at first glance.

The psychological significance of a score's appearance is emphasized by pianist Marc Couroux, who criticized Peter Hill's rationalization of Xenakis's *Evryali*:

⁴⁶² Barbara Maurer, private email correspondence, January 15, 2011.

“Notational idiosyncrasies, however out of touch with a performative reality they might be (and this reality is often illusory anyway, based in an unquestioned, inherited performance practice) contribute to the power of a piece.”⁴⁶³ Rationalization can be a helpful and necessary tool in studying a piece, but with the ever-changing relationship between performer and score in mind, it is important always to go back to the original to be open to new dimensions. Reflecting upon the failure of the rationalization, there appeared to me to be two incompatible ways of considering a score: one based in the need for a stable and particular text that transmits accountable and reliable information about what to do, and another, where the score is viewed as a text full of ambiguity and potential, open to embracing many different interpretations and readings. The challenge of the ambiguity for musicians will be discussed in relation to performance practice later in this chapter.

4.3.5 Music on the margins

There are actions in *Opus breve* that are almost inaudible, for example when the left hand presses down a chord without the bow playing. This border between sound and silence—the shadows, silences, and echoes moving in the periphery of perception—is a layer rarely discussed in musicology. Nattiez writes of the significance of silence: “Music is ... an alternation of sound and silence and (from one period to another) a particular way of filling silence.”⁴⁶⁴ Although pauses and fermatas have been used to good compositional effect throughout music history, we have seen in the past century that composers have increasingly made use of transitions and transformations between sound and silence, variations, grey zones on the edge of perceptibility. They challenge the threshold of the audible, the boundaries between sound and silence, as well as between tone and noise. The transformation of sound and the variations of silence problematize the constructed distinction between sound and silence, a subject conceptualized in its purest form in John Cage’s “silent” work 4'33”.

Examples of almost silent actions in *Opus breve* are in measures 3, 4 and 5 when the left hand presses down chords in silence and the bow has a rest. When the left hand has trills alone, the hammering of the fingers increases the sound

463 Marc Couroux, “Evryali and the Exploding of the Interface: From Virtuosity to Anti-Virtuosity and Beyond,” *Contemporary Music Review* 21/2–3 (2002): p. 60.

464 Jean-Jaques Nattiez, *Music and Discourse: Toward a Semiology of Music*, trans. Carolyn Abbate (Princeton: Princeton University Press, 1990), p. 118.

(measures 4, 5, 10). When the bow stops and the left hand continues, the notion of the decoupling is reinforced as the left hand lives its “own life,” frantically hammering on the fingerboard or pressing chords down, yet hardly sounding. The intensity of the percussive finger attack produces more bodily energy than actual sound, energy associated with the concept of *action dynamics*, a kind of dynamics given in quotation marks to denote the performance energy and not the sonic outcome, introduced by Helmut Lachenmann in relation to his *musique concrète instrumentale*.⁴⁶⁵ Another similar technique is changing the bow between the strings without horizontal bow movement. The sound produced is on the verge of nothingness whereas the action is “visually loud.” The significance of the visual aspects in performance is something Hübler cultivates in his third string quartet. There are long stretches of “dumb music,” marked with a thinner print where the “player should perform the given bow-and hand-position as silently as possible, whereby an almost mechanical precision should be aimed at ... The absurdity of these silent passages ... is to be realized with seriousness.”⁴⁶⁶ In this almost mute music, Hübler foregrounds the performance actions, the physicality, the theatre of music making and sound production. The nearly absent instrumental sound coupled with the acute presence of intense instrumental action, shifts our perception, we now *see* the performers, and we see what we normally hear. The effort and tension with which the musicians have to play nearly inaudibly, is the same inner energy that is required to play loudly.

In *Opus breve*, the technical difficulties in the almost inaudible passages create a tension, a mumbling speechless energy of losing language, whispering hidden areas and escaped voices. When these soundless objects, the in-betweens are acted out, there appears to be more than one piece of music hidden inside of *Opus breve*.⁴⁶⁷ There is certainly more to the eye than we can hear and there is more to the ear than we can see in *Opus breve*.

465 The term *action dynamics* was introduced in *Notturmo* for small orchestra and solo cello from 1966–67 giving the performer valuable information about the energy input expected.

466 Hübler, String Quartet No. 3: *Dialektische Fantasie*. 1982–84.

467 This is also confirmed by the notable difference between the two available commercial recordings of *Opus breve*, performed by Frances Marie Uitti (in *Arie dissolute / Sonetto LXXXIII del Michelangelo / Reißwerck / 'Feuerzauber' auch Augenmusik / Cercar / Opus breve / Kryptogramm für neun Musiker / Epiphyt* (WER 65242, 1996), and Friedrich Gauwerky (*Friedrich Gauwerky. Cello solo: ALBEDO 013, 1999*). There is also a forthcoming one by Franklin Cox.

4.3.6 *Augenmusik*

The obvious discrepancy between Hübler's meticulous notation and the sound result has been associated with the term *Augenmusik* (Eye Music) or with paper music—elaborate notation which portrays the music visually but when performed is unnoticed by the listeners.⁴⁶⁸ Hübler plays with the term in naming his earlier work "*Feuerzauber*" *auch Augenmusik* (1981), and in his third string quartet, there are long stretches of "dumb" music, played almost inaudibly, but still meticulously noted in the score. Jan Kopp states that there is a "listener–player dilemma"⁴⁶⁹ in *Opus breve*, in that listening to the sonic outcome does not reveal in any way the intricate layers of notation. The human ear and mind instinctively aim at creating coherence in listening—listening for patterns, structures, and recognizable traits.⁴⁷⁰ Following this argument, no sound can truly do justice to the notation, regardless of its complexity. Ian Pace, on the other hand, argues in a review of Franklin Cox's performance of the work that the rich and unstable sound world of *Opus breve* clearly points to a complex notation: "This short piece (*Opus breve*) which Cox played twice at different tempi, contained a wealth of intricacies which make me want to wade through this labyrinth more times. I would have thought that this was the apex of complexity..."⁴⁷¹

For the musician, the surface of the text is crucial; it contains the information system, the semiotics, text, signs, and prescriptions for the necessary actions. Polemical discussions about the nature and necessity of notation have always surrounded the music of the New Complexity. A common criticism of this music has been that the scores are the epitome of theoretical constructs and intellectual fantasies, expressed in a too-muchness and blackness of score writing that is not rooted in a musical performance, implying that the complex writing is

468 The term *Augenmusik* is most commonly used about music from the fifteenth and sixteenth centuries, where the notation can have symbolic meaning or have decorative or cryptographic purposes. It is however also used to describe music from the twentieth century where calligraphic notation is given great significance.

469 Jan Kopp, "Vom Handlungssinn Der Schrift: Die Erfahrung Des Musikers Als Gegenstand Von Komposition," *MusikTexte*, 125 (2010). Kopp problematizes the relationship between notation and sonic outcome in his article. He proposes that a musical work exists simultaneously on three levels: first, as an abstract and formal structure, second, as an acoustic sound phenomenon, and third, as a sequence of physical actions.

470 See Andreas C. Lehmann, John A. Sloboda, and Robert H. Woody, *Psychology for Musicians: Understanding and Acquiring the Skills* (Oxford: Oxford University Press, 2007), p. 111.

471 Ian Pace, "Frank Cox and Brian Ferneyhough," *Tempo*, no. 194 (1995): p. 37.

intended for the eye, for the analyzers and musicologists rather than for musicians. The score of *Opus breve* is certainly an artwork in itself, in its beautifully handcrafted calligraphy. When asked whether the score could be less complicated, Hübler answers:

I believe that such a piece has two components: there is something to hear, but there is also something to read—that is, a sensuous and a pure intellectual component, and this seems to justify to me that things happen that exceed the limits of perception ... This duality is important for me—there is not only the sonic result.⁴⁷²

The aspect of reading the score in live performance is also important to many performers; the score can be seen to represent the composer in the live performance (even in instances when the performer knows the piece by heart). Finnissy says: “But I like the company of the score, its reassuring presence.”⁴⁷³

4.4 Radically idiomatic instrumentalism

The notational aesthetics of Hübler and those who share his ideas have given rise to controversies and debates within the composition and performance communities regarding the performability of these scores. In this section, I will look at some of the questions concerning idiomatic issues, and explore the term “radically idiomatic instrumentalism,” starting with Hübler, and then drawing on other composers and musicians engaged in these debates. I will look, too, to the field of improvised music, where related radically idiomatic approaches can be found, although not stemming from the notational domain.

Hübler criticized the way—as he saw it—composers wanting to renew classical instruments do so by rejecting their historical implications:

Our purpose here is to plead for a manner of composition adapted to the instrument in question. This in no way implies a return to a simplistic pseudo-naïveté; rather, it should promote an expansion of sound and technique that has its roots in the specific resources of the instrument and in its manner of performance. A critical examination of the instrument and a focusing of the innovative

472 Nyffeler, “Klaus K. Hübler Im Gespräch,” p. 6. “Da meine ich, dass so ein Stück doch zwei Komponenten hat: Es gibt etwas zu Hören, aber es gibt auch etwas zu Lesen—also eine sinnliche und eine rein intellektuelle Komponente, und diese scheint er mir zu rechtfertigen, dass auch Dinge passieren, die die Wahrnehmungsgrenze überschreiten.... Diese Dualität ist für mich wichtig - es gibt nicht nur das klangliche Resultat.”

473 Finnissy, “Biting the Hand That Feeds You,” p. 75.

imagination on the concrete potentials of the instrument can be rewarding to the degree that it opens a completely new perspective on the instrument.⁴⁷⁴

Contrary to the impression given by the extremely intricate notation, Hübler's approach is idiomatic in the sense that he uses the physical cello, the way it is played with all its mechanics and acoustic properties, as his starting point. His studies of the cello gave him the tools for a "critical examination of the instrument," while his main innovations lay in the separation of the different playing actions so that they could be combined in countless new ways. Everything he has written in *Opus breve* is playable in a slow tempo. It is beyond doubt very difficult, but nevertheless is possible to execute, though not every single detail can be realized in real time in the prescribed tempo.⁴⁷⁵ Critical examination is also applied to the instrumental practice, which is challenged and stretched in all directions through the new perspective on the instrument. Hübler's aim is to superimpose dialectically his ideas upon the idiomatic materiality: "there must be a permanent tension between the instrument and the intention."⁴⁷⁶ I would say, rather, that the dialectic tension takes place between the performer's intentions, ability, and creativity in interpreting the scores, and the composer's intentions, vision, and wishes. This permanent tension wherein his deep knowledge of the instruments potential rests, coupled with his conceptual ideals concerning the disassembling of the physical gestures, has been named "radically idiomatic instrumentalism." According to composer/performer Richard Barrett, the term "denotes music which radicalizes the concept of what it means for composition to be 'idiomatic' to instruments."⁴⁷⁷

Traditionally, the term idiomatic is applied to music written within the natural⁴⁷⁸ physical limitations of the specific instruments and human body. The

474 Hübler, "Expanding String Technique," p. 233.

475 It is important to distinguish between compositions built upon an idiomatic reality and those that disregard what is practically possible. Ferneyhough is known to build dummies/models of instruments to be able to work out fingerings carefully. In addition, he has played several instruments himself: "In younger years I managed tolerably almost everything that could blow; starting with the full spectrum of brass and, shortly thereafter, complementing this valuable experience with self-tutoring on most woodwinds. For a brief period in 1965, I was a professional trumpet player with the BBC in Birmingham; later, in London I was employed as a peripatetic woodwind teacher". Ferneyhough in Christopher Fox, "The Extended Clarinet: Four Contemporary Approaches," in *The Versatile Clarinet*, ed. Roger Heaton (London: Routledge, 2005), pp. 16–17.

476 Hübler, "Expanding String Technique," p. 244.

477 Richard Barrett, private email correspondence, November 15, 2011.

478 "Natural" is, of course, subject to the perceptions of context and at a given time.

accepted boundaries of what constitutes idiomatic have been linked to certain criteria and have changed through history; they are also perceived differently in different communities. Nevertheless, idiomaticism is primarily associated with what is natural and comfortable to play. One of the radical aspects in radically idiomatic instrumentalism, then, is the challenging of the comfortable and familiar in the relation to the instrument, leading the way into the more rare and unfamiliar techniques and the sonic worlds. The fundamental meaning of radical is that it simply takes the way the instrument is played, from its very roots—and uses it as a starting point for composing. Tim Rutherford-Johnson explains the concept thusly:

I take it to mean an approach to composition that begins with the instrument—its mechanics, the way it is played, its acoustic properties—and deconstructs/ dismantles these in various ways (in Hübler's case, using tablature notation to compose different performance actions separately).⁴⁷⁹

The physicality of playing, down to the smallest detail, becomes the material in composition. The works originate not from an abstract compositional idea, but from the instrumental practice in all its chaotic, physical, and inexhaustible glory. Composer Dominik Karski goes as far as saying “I do not consider an instrument to ‘become an instrument’ until it is in the hands of a performer.”⁴⁸⁰ The actions that arise between the instrument and performer, the manhandling of the object, become, then, a *new* instrument.⁴⁸¹

Bringing the physical reality into composition is, according to Richard Barrett, an attempt “to engage as intimately as possible with the musical resources at the conjunction between performer and instrument, an engagement which attempts to dissolve the boundaries between instrumentalism and compositional materials.”⁴⁸² The performer's physical interface with the instrument as an explicit parameter can be seen as a continuation of Lachenmann's *musique concrète instrumentale*, music that emphasizes the way sound is produced—the energetic aspect of sounds—rather than how it should be heard. Leaving the tonal system of consonance or dissonance and venturing into a “*mechanical modality* whose basis is the construction of the instrument and the ‘ergonomics’

479 Tim Rutherford-Johnson, private email correspondence, October 5, 2011.

480 Dominik Karski, “The Music of Klaus K. Hübler,” <http://johnsonsr Rambler.wordpress.com/tag/klaus-k-hubler/>.

481 This is not far from Lachenmann's statement that “to compose is to build an instrument” (ein Instrument bauen). See his “Über das Komponieren,” in Helmut Lachenmann, *Musik Als Existenzielle Erfahrung: Schriften 1966–1995*, 2nd ed. (Wiesbaden: Breitkopf & Härtel, 2004).

482 Barrett, “Standpoint and Sightlines,” p. 27.

of fingerings, embouchure, breath, and so on ..."⁴⁸³ introduces a new dimension of performer interactivity. Ferneyhough, the prime exponent of multi-layered notation said of his own approach "...ideally, each passage should be written so that its defining qualities are irreducibly bound to the technical and expressive characteristics of a specific instrument."⁴⁸⁴ Later he speaks of "a sort of 'X-ray' of his instrument's inner essence,"⁴⁸⁵ further emphasizing that something is hidden inside the instrument, an essence we cannot see with the naked eye, but which may be unleashed by interpretation. Avery and Cox say of Hübler's music:

In each piece, the independent organization of performative actions is not treated in a typically serialism manner, such that any aspect organized by a series is a 'parameter' like any other and all elements organized are subsidiary to the total design, but rather is realized in light of what might be called the piece's existential state, as an inextricable component of its expressive vision.⁴⁸⁶

An instrument's *inner essence* and a piece's *existential state* and *expressive vision* are all expressions revealing a search for the unexploited, the inside, the depth of the work and the instrument. A piece's existential state—its existence, or form of "being in time and space"—can be defined in the form of notation or sound, which, in the case of Hübler's music, are interrelated to a high degree, as the physical playing parameters are part of the notation. These are examples of statements centered on the composer and the work, in the discourse of contemporary music, here extended to the instrument, but strangely omitting the instrumentalist. It is implicit in these texts that the instrument is played by a performer—it is not mechanical, does not make sound by itself—but it is interesting to note the distinct absence of explicit mention of the performer—of such terms as *instrumental practice*, *performance* and the *performer*. The actual human through whose agency this *inner essence*, the piece's *existential state* and *expressive vision* are made manifest is strangely absent from the discourse. Hübler's aim for "a permanent tension between the instrument and the intention," discussed earlier, similarly omits the performer as the active creator of the sounding work, and creates a notion of the passive performer, or of the performance as something that exists on a different plane and in a different time than the written discourse.

483 Ibid.

484 Ferneyhough in Fox, "The Extended Clarinet: Four Contemporary Approaches," p. 71.

485 Ferneyhough, *Collected Writings*, p. 375.

486 Avery and Cox, "Hübler, Klaus K," *Grove Music Online*.

Terms such as X-rays, *inner essence* and an *existential state* may also be associated with corporeality and concepts such as instinct, intuition, and viscerality, which again are closely related to the subconscious, topics rarely discussed in relation to composed music, but which have been more relevant to discussions of improvised music. In the next section, I look at certain kindred traits between composed and improvised music in the context of radically idiomatic instrumentalism.

4.4.1 Radical idiomaticism in composed and improvised music

In the late 1960s and 1970s, the free improvisational scene set out radically to explore new sonic and instrumental territories. Pioneers such as saxophonist Anthony Braxton and guitarist Derek Bailey both contributed to the discourse on idiomaticism and tradition. Anthony Braxton coined the term “trans-idiomatic” of music that cannot be linked to any one established tradition, but rather amalgamates elements from several. And Derek Bailey used “non-idiomatic” in reference to a playing style void of known licks and idioms, exploring the unknown and unpredictable. The diversity in contemporary culture and media, notably in the field of electronics, made a number of improvising musicians want to escape the traditional idiomatic expressivity, disguise their instruments, and re-invent them in this new paradigm. As improvising cellist Fred Lonberg-Holm puts it:

I don't choose sounds that would be considered 'ordinary'... as they are perhaps too pregnant with expectations of harmonic and melodic developments which we are purposely trying to evade. By keeping the sounds as ambiguous as possible (or trying to) we are more free to work outside the expectations one might usually have.⁴⁸⁷

Improvising saxophonist Bhubu Rainey said, “[m]y interest lies in digging through all of that dull humanity, being cognizant of those points where the gravity of habit or a plea for attention can suck everything interesting out of the music.”⁴⁸⁸ Rainey and Lonberg-Holm are searching for music out of the ordinary, beyond habits and common expectations, yet still within the instrumental realm.

487 Charlie Wilmoth, “Scrapes and Hisses: Extended Techniques in Improvised Music,” <http://www.dustedmagazine.com/features/468>, accessed December 21, 2013.

488 Ibid.

Improvisational aesthetics have influenced composers working within the New Complexity in various ways. Richard Barrett, himself an avid improviser, is explicit in drawing upon the improvisational field in his composing practice through close collaboration with performers who both play notated and improvised music.⁴⁸⁹ He says:

Hübler was probably the first to *notate* this ‘decoupling’ idea in a systematic way, but it’s been around in improvised music for a lot longer. I don’t expect Klaus would see his usage of it as emerging from the work of people like Malcolm Goldstein or Barry Guy or Evan Parker though. (I think on the other hand that the way I try to approach instrumentalism has at least as much to do with such musicians as with the tradition of notated music.)⁴⁹⁰

Ferneyhough, on the other hand, positions himself far from improvisation and expresses the classic schism between the two camps, a schism with both ideological and ontological consequences.

I know that some composers start from an improvisation when establishing overall sound worlds for particular pieces, thereafter resorting to various, more or less literal, transcription techniques in order to arrive at a final fully-notated score. Such approaches are very alien to me. It would be unhelpful though, I think, to remain on the associative level engendered by some supposed resemblance of particular sonic characteristics (extended techniques, for instance) common to some improvisation and certain of my own works. In that case, such immediate associations might well blind one to equally significant qualities on other, more long-term discursive formal qualities of individual pieces.⁴⁹¹

Although the improvisational and compositional scenes in the 1960s and 1970s were driven by some of the same motivations—to investigate and exploit in radical ways the undiscovered resources and potentialities of the instruments—the greatest difference lay in the conception of the music expressed through the notational versus non-notational practices.

A timely question here is whether the composer has a timbral performance in mind—a sonic vision that is converted into writing and then interpreted by the musician back to the sonic domain. Or is it that these sounds are already heard, that they exist, and then are translated into writing in a score?

489 Barrett has collaborated with Paul Obermayer in *FURT*, vocalist Ute Wasserman, cellist Arne Deforce, and others.

490 Barrett, in “The Music of Klaus K. Hübler.”

491 Ferneyhough, *Collected Writings*, p. 450.

Although they shared “particular sonic characteristics,” free improvisation rebelled against the objectification of music,⁴⁹² an attitude far from the focus upon the scores as essential objects and musical writing as a basis for the discourse as found within the New Complexity.

4.4.2 Improvising *Opus breve*

Using the “playing-through method” as described above, in practicing *Opus breve*, brings out certain elements of improvisation. I decided to experiment further with this approach, primarily with the aim of uncovering more layers and timbre combinations in the material, but also to try to liberate myself from the constraints I felt imposed on me by the difficulties of the score. I tried two different approaches: first, using the score as a visual trigger, and second, just spinning further on the sound world of the piece, boldly exploring the different timbres and techniques and try to move around without limiting my imagination.

The image of the score is saturated in a way; it contains a kind of potent explosive force that seems about to overflow. It is as if the notes are alive, as if an inherent force in the score wants to burst out. For me, in short, the written music encourages action. The strong visual energy elicits a visceral response from me, pressing into the realms of physicality—it triggers certain movements and sounds. This results in a new correspondence between the visual image of the score and the sound result, a correspondence that is not necessarily in line with the composer’s intentions. This can be related to the fact that certain notational characteristics may appear counterintuitive; in *Opus breve*, this is the case, for example, where the left hand is engaged in busy action while the bow barely plays, thus at first glance the image suggests a lot of sound—something that is not happening.



In the videos, I play two improvisations inspired by *Opus breve* (video #8 and #9). My experience from working in this way, and from watching and listening to the recording, is that it differs from performing *Opus breve* from the score in a way that is related to energy. In the improvisations, the abandonment of control and acceptance of what would be called mistakes when playing from the score



⁴⁹² Objects in music could be, for example, instruments, scores, and recordings. Although freely improvised music is not written down, and thus can not be reiterated in the literal sense of the word, several recordings from this period have become legendary, and serve as documents and ideals for musicians, properties not altogether unlike those of a score.

is a prerequisite and perhaps even a requirement. The control and cerebral activity involved when playing from the score—trying to perform as many of the notated details as possible—on the other hand, is immense. Even in a performance situation, when several of the technical issues should be automated, the sheer concentration needed to relate to the score is profound. In balancing on the edge between controlling the technical parameters while letting go of (full) control in a concert context, the piece is perceived by both performer and audience as particularly powerful and intense.⁴⁹³ My experience was that in improvisation, my concentration was not preoccupied in the same manner, and although I felt that I spent maximum of energy, the energy seemed more directed and focused and had a less frantic and desperate character.

I found that exploring and cultivating sounds freely, not only as the result of the notation but also as sounds with value in themselves, enriched my relationship with the score. When I returned to the score, it was as if my palette was widened, I had found more possible timbres to match the notation.

For Hübler, Ferneyhough, and Barrett, the physical execution is in different ways inextricably linked with the expressivity of the work, and the score and performance have become interdependent in constituting the work. The interpretations are as different as each musicians' bodies, the instruments and the ergonomic relationships between the two. Performing music where physicality is an integrated factor in the compositions, as we have seen in these examples, challenges the concept of *Werktreue*. In the following, How, then, can we interpret this concept in the context of complex music, where the embodiment of a work, the actual performance, becomes a compositional stratum of the work.

4.5 **Modernist Music Performance practice and *Werktreue***

The common theory about performance practice of modernist music is that there is little room for interpretation, because the technical learning of the music demands all the resources. The ideals of *Werktreue* and *Neue sachlichkeit*, also, have given rise to an idealization of clean, unemotional, readings of

493 In the following three reviews of *Opus breve*, the critics perceive the great complexity and energy expressed in performance: Bendik Hagerup, "Friedrich Gauwerky," *Morgenbladet*, 2000. Nicolas Hodges, "King's College: Anton Lukoszevieve," *Tempo*, no. 207 (1998). and Pace, "Frank Cox and Brian Ferneyhough."

modernist music. This is supported by Stravinsky's demand that the music should be executed rather than interpreted,⁴⁹⁴ as well as Hindemith's recommendation, in *Kammermusik* no.1 opus 24/1, that performers should never try to express their own feelings. To musicians educated in the Western classical performance practices, with *Werktreue* as a central element, it can become a moral issue if they approach a complicated and seemingly "unplayable" score. Interpretation thus has a moral and ethical aspect where fidelity and duty to the composer and the score are paramount. But what does this fidelity consist of, and what is the duty at stake?

The prevailing performance practice of modernist music is reflected in the direction Cox calls The "High Modernist Model" of performance practice.⁴⁹⁵ This model is a linear, noise free, and transparent chain between conception, notation, and realization, influenced by the objective style reinforced by the recording industry's ideal of perfection, and it is familiar to practices taught worldwide in conservatories today. Cox calls this an "ideal type" based on

... a direct-functional relationship between 1) notation, as indicating tasks demanding responsible technical mastery, 2) ... an adequate "realization," in which all notes are correct, all the rhythms are accurately realized, all the dynamics, phrasing marks etc., are audibly projected ... , and 3) ideal perception, which should be able to measure, based on the score, the correspondence of the former two aspects, and even more ideally perceive composed relationships from responsible realizations".⁴⁹⁶

Cox presents a "soft" version of the model, in which "the demands of responsible realization may occasionally be overridden by interpretational demands," but he maintains "in 'hard' versions, the latter should always be subordinated to the former."⁴⁹⁷ In either version, the demands for transparency, correspondence, and perception of composed relationships position this model within a *Werktreue* ideal. Cox repeatedly calls for *responsible* and *morally responsible* performance, the responsibility clearly being to realize the composer's intentions and his work. There seems to be little faith in the potential and skills of the performer to interpret the work. This hierarchical model places the composer in power to exert strict control over performances, but also carries with it the

494 Igor Stravinsky, *Poetics of Music in the Form of Six Lessons* (Cambridge, MA: Harvard University Press, 1970), p. 18.

495 Cox attempts to create a theory of performance practice for complex music in his thorough article "Notes toward a Performance Practice for Complex Music."

496 *Ibid.*, p. 71–2.

497 *Ibid.*, p. 72.

danger of producing unimaginative interpretations by restraining the creativity of the musicians.

The *Werktreue* ideal reflects a positivistic approach to music; it rests on the belief that there is something close to a truth when it comes to performing a work. It is an ideology of replication, of the possibility of a transparent rendering of what is notated. This is naturally challenged when transferred to the practical realm of performance, where musicians have always been interpreting, inventing, and modifying scores, and have made their own contribution. In Lydia Goehr's words: "To act and sing correctly under the composers' strict control involved a technique of self-denial, which was required if the mythic or aesthetic space of the work was to be transformed into an ideal, socialized space."⁴⁹⁸ This "self-denial" reinforces the moral imperative and adds a psychological dimension to performance. The performers can feel inadequate in this paradigm, practicing even more and stretching even further, to make the performance more "true" to the text. Performers may lose their confidence—something so crucial in performing music. This loss of confidence was vividly described by clarinetist Roger Heaton in 1987:

The absurdity of the excesses of the New Complexity lies not merely in the precise notation of 'expression', but in the subjugation and manipulation of the performer, who can only conclude that his efforts are ultimately of second importance. The player confronted by these impossible works, is defeated before even beginning, and ultimately discouraged and depressed by the approximation which occurs, challenging his integrity.⁴⁹⁹

Within the discourse around performance, there is a sharp distinction between being genuine and not being genuine. The ideal of the diligent and honest musician, loyal to the work and the composer, is held up against that of the dilettante who fakes, cheats, and takes shortcuts. This thinking is linked to the model of instrumentalists as craft workers, whose honor and pride reside in correctly executing their job as they have learned it, often from a master teacher. To "fake it" is to produce faulty goods, and is shameful. These attitudes so strongly embedded in performance practice, that challenges are met with powerful objections. Heaton writes:

Because the pieces are impossible, the performer has to fake and to improvise certain sections; players familiar with the style, and probably well practiced through free improvisation, can get away with it. This leads to the possibility

498 Lydia Goehr, "Conflicting Ideals of Performance in an Imperfect Practice," in *The Quest for Voice. On Music, Politics, and the Limits of Philosophy* (Oxford: Oxford University Press, 1998), p. 158.

499 Roger Heaton, "The Performer's Point of View," *Contact* 30 (1987): p. 33.

of the imaginative, but technically less competent, players performing these pieces, whereas a player with a sound traditional technique (the only one to have!) would not attempt something which has no regard for the instrument while still, by notation, setting out its terms of reference within the tradition from which that instrument comes.⁵⁰⁰

Heaton's comments go to the very core of how musicians often experience an absolute distinction between the "playable" and the "unplayable," and the perceived insult in using the traditional instruments and notation in this new way. Heaton's only alternative to playing the notes correctly, a position within the High Modernist Model of performance practice, is to fake or improvise. To be accused of faking is a serious insult for performers trained in Western Classical Music, where the ideals are authenticity, accuracy, and fidelity to what is written. When faking is understood as pretending, misleading, or deceiving—producing faulty goods—it is understandable that the word has negative connotations, but the word can also mean imitating, simulating, or substituting, skills highly operative in musical practice. Heaton equates being imaginative and improvising with being less technically competent, expressing an exclusive faith in the traditional view of performance practice where musicians do as they are told and where a score is a set of instructions to be followed without involving too much of the musician's creativity.

Yet, many composers writing within the aesthetics of the New Complexity, have clearly stated that a perfect rendition of the score is not an objective, or even necessarily desirable. Richard Barrett says:

Whatever kind of notated music you take, the relation between what you see on the page and what you hear in the performance is not a simple one to one relationship. Notation to me is not a specification, but more of a proposal of a way of making music. The music doesn't make "demands," it makes proposals. The act of interpreting is one whereby such a "proposal" is transformed into music by the performer.⁵⁰¹

When approaching a score by Barrett, for example *Blattwerk*,⁵⁰² for cello and live electronics (see Fig. 27), the presumable openness of the statement that notation is "a proposal of a way of making music" is far from the first thing that comes to mind; one is first impressed that this is an extremely demanding and

500 *Ibid.*, p. 32.

501 Richard Barrett and Arne Deforce, "The Resonant Box with Four Strings: Interview on the Musical Esthetics of Richard Barrett and the Genesis of His Cello Music," http://www.arnedeforce.be/composerfiles_toelichtingen/BarrettResBox.htm.

502 Richard Barrett, *Blattwerk for Cello and Live Electronics* (Boosey & Hawkes, 2002).

precisely notated work. In the case of Barrett's (or any composer's) music, it is therefore utterly important to know his view on his style and aesthetics before embarking on his works.

Ferneyhough repeatedly denies in interviews that his music should follow the transparent and linear principles found in the "High Modernist Model" of performance practice: "It is clear that no conceivable notation would ever be equal to the task of rendering every aspect of a work's physiognomy in a manner capable of reproduction; nor am I suggesting that this would even be desirable."⁵⁰³ When asked what he thought were the essential criteria for a good performance of his work, he answered:

I would say the establishment of audible criteria of meaningful inexactitude. That is, from work to work, from one section of a work to another section, from one performer to another, from one performance situation to another, the level of meaningful inexactitude is one indication, one hint of the way in which a work "means."⁵⁰⁴

Ferneyhough's often-quoted "meaningful inexactitude" goes to the heart of the matter: music must create meaning, not *one* true meaning, but a multitude of meanings through multiple (personal) interpretations.

Though *Werktreue* primarily has been a theoretical construct, we have seen that it has a powerful influence on performers and consequently on practice. The challenge is that the notion of loyalty is largely implicit in practice and rarely addressed—a culturally embedded truth that cannot be subjected to validity testing. In order to investigate any phenomenon, we must first identify the premises on which it is based. An important premise for the loyal/disloyal binary, which we have seen is so deeply rooted in performance practices, is the still-powerful work-concept. What happens, then, when the work-concept is challenged, when the work is no longer to found complete and innate in the score, but is dependent upon performance to be fully constituted? How can a performer be loyal to a score with intricate notation that has multiple possible faithful readings?

503 Brian Ferneyhough, "Questionnaire Response," in *Complexity in Music? An Inquiry into Its Nature, Motivation and Performability*, ed. Joel Bons (Rotterdam: Job Press: 1990), p. 19.

504 Ferneyhough, *Collected Writings*, pp. 268–9.

4.5.1 The struggle idiom

A significant trait in compositions after World War II is a resistance embedded in the score, a resistance that occurs in various degrees, but that can lead, at its most extreme, to a sense of struggle and even loss of control for the performer. Several composers, including Hübler's teacher Ferneyhough, were experimenting with notational and instrumental expression, creating intricate scores that were pushing the capacity of the performers to the extreme, demanding faithfulness and dedication to the totality of the work. Ferneyhough's *Time and Motion Study II* (1973–6), for cello and electronics (see Fig. 26), was a groundbreaking work, with significant physical and mental struggle for the cellist who is wired with several microphones, including one throat-microphone and two foot pedals. Two assistants are required, and the score is written on up to five staves. Ferneyhough said: "I wanted to subtitle the cello piece "Electric Chair Music," but decided that that would be far too explicit for the final interpretational approach. The cellist ... is certainly tortured throughout. We have yet to see if he survives."⁵⁰⁵ Ferneyhough refers to the ideas of Antonin Artaud, who posed struggle as a prerequisite for freeing the spirit. The work investigates the filtering of memory through the human body, and through the cellist's performance, which is being looped and played back, building up to an inevitable breakdown, which is composed into the work.⁵⁰⁶ According to Artaud's ideas, struggle and breakdown open up a new consciousness, transcending all that has gone before. Artaud's "Theatre of Cruelty" aimed at breaking away from conventional text-based theatre to a physical theatre where all expressions were regarded as physical expressions in space. The body became the locus of action: "The body is the body, alone it stands."⁵⁰⁷

Pianist Marc Couroux introduces the term "critical virtuosity" to describe "deliberately writing against conventional physical paradigms in order to trigger new relationships between body and matter."⁵⁰⁸ He writes about learn-

505 "Interview with Andrew Clements (1977)," in Ferneyhough, *Collected Writings*, p. 215. At the time of the interview (1977), the premiere of *Time and Motion Study II* had not yet taken place.

506 Iddon discusses the relationship between the vocalizing cellist and the live electronics in the piece, suggesting a combined cyborg identity instead of an opposition. He describes the deterioration in the "entropy circuit" in a "mutually assured destruction" followed by "the demise of the energy producer, the cellist himself" in Martin Iddon, "On the Entropy Circuit: Brian Ferneyhough's *Time and Motion Study II*," *Contemporary Music Review* 25/1–2 (2006): p. 103.

507 Antonin Artaud, "The Body Is the Body," *Semiotext(e)*, *Anti-Oedipus* 3, no. 3 (1977).

508 Couroux, "Evryali and the Exploding of the Interface," p. 54.

ing the piece *Evryali* (1973) by Xenakis, notated on up to 10 staves, one for each finger. According to Couroux, some passages are unplayable, which puts the performer in a very difficult position. At the same time, he criticizes the pianist Hill for reducing and rewriting the score for pragmatic purposes, going as far as calling this an “ethical violation.” When Couroux performs *Evryali* he says: “the uneasiness remains, and so do the scars of having breached a seemingly unreachably performative ethic.”⁵⁰⁹

A more recent piano work explicitly investigating the performer’s struggle is *When the panting starts* (2004), by Wieland Hoben, which assigns an individual staff to each finger and has deliberately awkward fingerings which the performer is asked to play “faster than possible.” The score instructs that “NO attempt should be made while learning the piece to achieve true fluency of execution in such passages... ”⁵¹⁰ The instructions problematize the indisputable truths about the meaning of practicing; when the resistance is distilled and presented as a separate parameter, the performer can never achieve the goal (“faster than possible”), but can only repeat the struggling Sisyphian work loop.

American composer Evan Johnson writes in the instruction in his score, *Apostrophe 2 (pressing down on my sternum)*: “In absolutely no case should the performer ignore the presence of material on the page even if it is not literally playable—it must be ‘communicated.’ ‘Improvisation’ on the given materials is not permissible.”⁵¹¹ In these pieces, the combination of the physical and mental striving to meet the demands of the score is under investigation: the encounter between the instrument and performer is in the center—almost like theatre. The struggling, failure, and breakdown is staged in the performance situation, starring performer and instrument, score (representing the composer) and audience, and the outcome is uncertain.

Failure or breakdown is seen by most performers as something to avoid at all costs, even when deliberately composed into the score. They link the failure directly to individual moral responsibility, rather than looking at the work’s aesthetics and navigating the practice into a more corresponding conception of interpretation. The realistic notion of what is playable is, as every performer knows, a movable factor, and ideally up to the diligence of the performer. Many

509 Ibid.

510 Wieland Hoban, *When the Panting Starts* (2004).

511 Evan Johnson, *Apostrophe 2 (pressing down on my sternum)* (2009) for quarter-tone flügelhorn and alto trombone.

performers speak of terms like *performance ethics* and *ethical violation*, reflecting the moral dimensions of performance, often combined with anxiety. An idealistic and utopian approach is called for, approaching seemingly unplayable or impossible tasks. According to Cox, “One must work on each piece as though an authoritative realization/interpretation were possible, although it will in fact never be so.”⁵¹² He adds: “The burden of proof here will lie on the performer, not the composer.”⁵¹³ Writing as a pianist, Finnissy says: “I have a tendency to always assume that it is my fault if things don’t work.”⁵¹⁴ The contemporary-music performer is put under enormous pressure with these extreme demands, as the composer Reinhold Friedl acknowledges:

The question remains, what kind of pleasure or satisfaction would an interpreter experience from this style of playing music? This work is clearly reduced to a technical approach to music, the mere execution, precise as possible, of given structures. Two possibilities result: (1) the interpreter becomes a technician who does not know and does not care about pleasure or (2) he or she finds a certain pleasure in merely obeying orders, in the sense of the classic slave role. If this role is combined with pleasure, it turns out to be a classic example of a sadomasochistic structure.⁵¹⁵

Friedl articulates two extremes, either the technician who renders the score without feelings, or, the slave-performer who obeys orders, and can derive only masochistic pleasure from the process. He says further:

To explain the performer who tries to perform the “impossible” scores of the new complexity: The interpreter has to work so hard onstage, trying to realize the impossible, that his ever-losing fight against the given structure gains a very emotional dimension: Sisyphus onstage, performing his masochistic pleasure, only to fail each time.⁵¹⁶

Friedl’s argument is that the works in question are “unplayable” and “impossible,” descriptions that belong to the old binary thinking with the arguments biting their own tails. His talk of the “emotional dimension” in performance, however, Sisyphus’ failing but never giving in, is an important element in much of this music discussed in this chapter. I will return to the performers’ determination, or reluctance to fail, and their interest in the breakdown, but rather than

512 Cox, “Notes toward a Performance Practice for Complex Music,” p. 105.

513 Ibid., p. 125.

514 Finnissy, “Biting the Hand That Feeds You,” p. 72–3.

515 Reinhold Friedl, “Some Sadomasochistic Aspects of Musical Pleasure,” *Leonardo Music Journal* 12 (2002): p. 29.

516 Ibid.

regarding them as obeying slaves who unreflectingly execute orders, my starting point is the performers as creative humans with knowing bodies.

All these conflicting elements in performance can be described as the *struggle idiom*, which alludes to the performer's struggle with difficult and seemingly unplayable music. The struggle with the material becomes part of the aesthetic. The idiom can also be seen as a byproduct of the struggle of modernist music in society during the last century—the struggle to be listened to, taken into account, and appreciated. Struggle and resistance have several functions: to expand perception, to prevent disobedience, to produce energy and vitality, and to create multiple meanings.

To use the term the *struggle idiom* however, is to accept the problematic binaries of struggle/resolution, difficult/easy, and complex/simple, which feed back into the linear and transparent High Modernist Model of performance practice. If we could break down these binaries, we might access more fluid approaches and a higher reflexivity in instrumental practice.

4.5.2 A battle between performance ethics and the work's aesthetic

Performing works on the threshold of performability opens up a new level of aesthetic experience that calls for a new performance practice. If the music contains challenges that bring the performer to the brink of breakdown, then the potential for breakdown is already present in the work, and must therefore be taken into consideration. What happens to the performance, the performer, and the work itself during the struggle, breakdown, or collapse?

In connection with performing Ferneyhough's *Bone Alphabet*, Schick wrote:

If the interpretive skeleton, built up painstakingly during the learning process, is not sufficiently strong to support the weight of the complexities in the score, then the entire piece threatens to collapse into a simple and singularly unappealing mass.⁵¹⁷

To argue that the musician's practice-process is what prevents collapse, makes the practitioner accountable if "the complexities in the score" prove to be too much to handle in a performance situation. Taking responsibility for the performance is quite natural for performers, yet it is interesting to see the moral

⁵¹⁷ Schick, "Developing an Interpretative Context," p. 133.

implication this statement entails. And what is this “unappealing mass” that would appear after the “interpretive skeleton” collapses?

Couroux problematizes the idea of a potential performance collapse along with that of the “performer-as-hero.” In doing so, he challenges the hermetic and persistent concert ritual regulating the positions of composer, performer, and audience:

We live with the antiquated notion that the performer is a totalized whole who must confidently project the music he plays in order for the message to be transmitted. What might conceivably happen if the performer were deliberately *ineffective*? What would be the sonic result of such explorations? Moreover, it has seemed to me that the one central issue preventing a more widespread communication between the performer and the listener (the key crisis of contemporary music this past century) has been the refusal on the performer’s part to let his performative persona disintegrate on stage. Why couldn’t the performer’s entire nervous system be put on the line in front of everyone?⁵¹⁸

Couroux criticizes the hierarchical and rigid rituals in the classical performance practice and proposes a practice where risk-taking and the display of human emotions and conditions has a great potential for communication between performer and audience—an anti-virtuosic practice. Couroux uses the example of the pianist David Helfgott who suffered from mental illness:

The example of Helfgott is unwittingly appropriate: the audience at times seems more interested in the possibility of collapse rather than success. Wouldn’t that be a more human form of communication? It would undoubtedly derail the composer’s creative monopoly and position of authority (especially over the performer). Though we never hesitate to qualify music as radical or avant-garde we almost always fail to question the structures in which this music is presented.⁵¹⁹

The struggle becomes a battle between performance ethics and the work’s aesthetic. The built-in verge of collapse is fought with all means available. The performer cannot lose the battle, or she loses face! The psychological effect is strong: this music requires all the performer’s resources in the battle, but the outcome is still uncertain.

518 Marc Couroux, “Some Ideas about Viewer Re-Mobilization from a Practice-in-Progress,” *Circuit: musiques contemporaines* 16/3, (2006): p. 85.

519 Ibid.

4.5.3 Virtuosity versus resistance

The technical perfection in instrumental playing within classical music has increased enormously over the last 40 years.⁵²⁰ One of the attractions for performers of complex music is beyond doubt the virtuosic aspects of music that requires highly trained musicians able to handle large amounts of information that must be translated into action within a short time span. Performers instinctively approach a difficult score as a challenge to be overcome—a continuation of the performance practice that raised the level to present standards. The “challenge approach” forms an *a priori* understanding for musicians; working out, working through, and overcoming problems are performer’s automatic responses to a score. When difficulties and obstructions in the score are overcome and the score is well internalized, a resistance has been worn down, but what is this phenomenon called resistance? What is actually happening when we talk about smoothing out or wearing down the resistance? Is it not a paradox that the often-immense work of mastering the obstacles and challenges in a score should not be rewarding?

It is a paradox: the performer wants to overcome the hurdles, to practice until she overcomes the difficulties, but once she has done so, an important attribute of the music is lost. It is *difficult* music, and it should stay difficult: the resistance created by the difficulty is an important element of the work (cf. the aforementioned works by Ferneyhough, Xenakis, Hoben, and Johnson). One would think that the composers would be pleased when performers are able to play what is written; when playing the music too well becomes a problem, we have a paradox. The performers face an important question: how can the immanent layer of resistance and struggle be retained in performance, while the performer remains faithful to the demands of the score?

Put this way the problem is unsolvable, and this pinpoints the dilemma of the performer and indicates that the resistance and struggle in question are complex phenomena that move across several levels. Pianist Ian Pace sees the function of the resistance from an ideological perspective:

Interpretative strategies need to be continually re-examined when learning a new piece or re-learning an old one. But at heart they represent a strategy of *resistance* in performance: resistance towards certain ideological assumptions that entail absorption of musical works into the culture industry. This absorption itself entails a harmonisation of the antinomic elements within such

520 Once “unplayable” works by Xenakis, Ferneyhough and Stockhausen have now become common repertoire, even among music students.

works, the smoothing out of such discontinuities as can produce psychological estrangement or simply cause fragmentations and incompleteness within the musical experience such as demands some active input from the listener if their listening experiences are to become coherent.⁵²¹

Pace seeks to raise awareness of the performers' responsibility in integrating the resistance in all levels of practice. Smoothing out the resistance for him becomes a symptom of our society's strong tendency to explain the contradictions and gloss over the paradoxes. It is interesting that in order not to be swallowed by the culture industry, he urges the performer to keep "the antinomic elements within such works," the discontinuities and fragmentations. The performer embodies the work, and is responsible for critically communicating the entire work within its context. When the resistance in a work is experienced as smoothed out or broken down, it happens over time as the performance practice evolves and the work is tackled by several performers. Perhaps this is what Adorno means when he says that "[t]he ageing of the new music means nothing else than that this critical impulse is ebbing away."⁵²² The "critical impulse" relates to resistance, and it is found in both instrumental writing and instrumental performance.

4.6 Toward a new performance practice

As we have seen, if the complexity of the music is an intrinsic part of the composers' aesthetic, it is similarly an intrinsic part of the performance aesthetic. The complexity of performance creates the space for a new domain of aesthetic experience that calls for a new performance practice. The performance practice of complex music has three significant characteristics:

1. ***A new emphasis of the role of the body.*** The decoupling of the physically executed parameters in composition takes place in the instrumental and performative domain. The performance forefronts the instrumental practice, and thus the locus of performance, the body interacting with the instrument. 2. ***Radical idiomatic instrumentalism—a move from *Werktreue* to work-ambiguity.*** A shift from a transparent and linear performance practice to a practice where the resistance, the struggle idiom, and breakdown of control are embedded in

521 Ian Pace, "Complexity as Imaginative Stimulant / Making Possible the Irrational," in *Collected Writings of the Orpheus Institute* (Leuven: Leuven University Press, 2008), p. 191.

522 Theodor W. Adorno, *Essays on Music*, ed. Richard D. Leppert, trans. Susan H. Gillespie (Berkeley and Los Angeles: University of California Press, 2002), p. 181.

sound and action, embracing the expressions of internal contradictions. Central in this shift is the radical confrontation of the preconceived conception of instrument identity and technique. How the performer relates to this leads to the last point: 3. **The critical and self-reflective performer.** The works implicitly critiques conventional performance practice by challenging and confronting essential aspects of practice, causing the performer to question habits and ingrained patterns.

4.6.1 A new emphasis of the role of the body

Recent literature offers a number of explorations of the implications of the new emphasis of the body's role in contemporary music, most noteworthy from performers. In discussing the performance practice in Xenakis's *Mists*, pianist Pavlos Antoniadis develops a model he calls "corporeal navigation," which focuses "on physicality and non-serial learning."⁵²³ He draws on cognitive science and acknowledges the hybridity and non-linearity in learning complex music.

The notion of a score-space as a kind of multi-layered state-space of the system embodied mind-instrument-score allows for the emergence of the notion of corporeal navigation, as a metaphor for the hybrid process of learning as performance and of performing itself, which stems out of the physical, gestural, sound-producing movement.⁵²⁴

Antoniadis points to the importance of physical, gestural movements in learning. We have seen the significance of gesture, its centrality in learning and remembering works as well as in performing them, throughout this chapter. Gestures result in music and music results in gestures. Ballon says of the *Time and Motion Study II* score: "... I could play everything, it is so organic ... there is nothing impossible ... it is a piece in which you have to memorize gestures."⁵²⁵

In the very end of his article, "Performance Practice for Complex Music," Cox introduces the concept of "corporal thinking":

523 Pavlos Antoniadis, "Physicality as a Performer-Specific Perspectival Point to I. Xenakis's Piano Work: Case Study *Mists*," paper presented at the the Xenakis International Symposium, Southbank Centre, London, 2011. Online at <http://www.gold.ac.uk/media/07.3%20Pavlos%20Antoniadis.pdf>, p. 1.

524 Pavlos Antoniadis, "Corporeal Navigation: Embodied and Extended Cognition as a Model for Discourses and Tools for Complex Piano Music after 1945," *CeReNeM*, issue 4 (2014).

525 Orning, "Interview with Séverine Ballon,"

... the overlaid layers of independently-organized action-structures found in much radical complex music not only demand the development of new skills, but open the possibility of a new sort of ‘corporal thinking’ transcending means/end-oriented training (for example of traditional virtuosity). In this, recent developments in radical complex music lie very close to peak developments in modern improvisation ... Both, however, value that which is so consistently denigrated in Western Philosophy—the physical body and physical motion—without fetishizing the physical domains at the expense of the mental/ideal (which would amount to simply inverting the terms of appraisal).⁵²⁶

In repeating the request that “corporal thinking should not in its turn be fetishized,”⁵²⁷ Cox is not denying the body’s strengthened position in contemporary music performance, but is simply cautioning against over-emphasis on this aspect.

Decoupling the elements of notation and leaving to the performer to create coherence inevitably leads to changing and unstable configuration. The instrumental practice is dissected into parts, and the performer is challenged to the extreme to be able to assemble the pieces and create a new unity. Composer Matthew Seargent writes about parametric decoupling:

But the physical origination of the material opens a wider space for consideration. The physicality of these works’ gestural layers allow for probably their best understanding in physical terms, as forces. As two or more directional forces collide in nature, a hybrid output force is formed by the collision. The attributes of this output force (its velocity, trajectory, etc.) are wholly dependent on the initial inputs that created it; some combinations will cancel each other out, others will amplify one another.⁵²⁸

Thinking of physicality as “forces” which “collide” and create a “hybrid output” rather than compositional strata, brings the terminology into the performative realm. Sergeant continues: “these collisional forces only become activated when the work is executed in performance,”⁵²⁹ emphasizing the significance of the performative territory.

“Corporeal navigation” and “corporal thinking” can be understood in the context of radically idiomatic instrumentalism, discussed above, where the idiomatic now encompasses all of the performer’s performative equipment.

526 Cox, “Notes toward a Performance Practice for Complex Music,” p. 128.

527 Ibid., p. 132.

528 Matthew Sergeant, “Introducing ‘Re-Coupling’: The Compositional Appropriation of Instrumental Physicality to Disrupt Pattern-Based Musical Materials” (Athens: ATINER’S Conference Paper Series, 2013), p. 8.

529 Ibid., p. 9.

Returning to Klaus Hübler, who acknowledges the central role of the body in his works:"

My compositions do not exceed the technical possibilities of the instruments ... but they break with the 'conditioned reflexes' of the performers. They require e.g. a new awareness of bodily processes at play, something Max Nyffeler called an 'analytical virtuosity', which of course is not an end in itself but a prerequisite for the realization of my ideas about sound. To settle this, it is sometimes downright necessary to make demands that seem to exceed the human skills for conscious control of movement.⁵³⁰

"Analytical virtuosity" defines the performance practice through the perspective of the body, with a "new awareness of bodily processes at play." However, there is an apparent contradiction at play between Hübler's statement that "my compositions do not exceed the technical possibilities of the instruments," and the "demands that seem to exceed the human skills for conscious control of movement." What exceeds these conscious skills? Are we looking at subconscious skills, intuitive, latent, tacit, or visceral skills? Hübler may be describing a practice in the making—in the process of developing. Or it may be the unimagined possibilities, or movements originating in the subconscious. One could also look at this music not as a test of skills, but as the exploitation of the uncontrollable aspects within the performer. What is located in this space, between the technically controllable and what is situated beyond the conscious body movements, this is something central to this performance practice, and confirms that this is a field in the state of becoming.

The term "analytical virtuosity" introduces an important element, which attracts performers of complex music, namely, virtuosity. Virtuosity foregrounds the physicality of playing—the playing itself. Couroux's "critical virtuosity," is similar, describing musical writing generates new body awareness by working deliberately against the idiomatic. Both terms describe a new way of understanding virtuosity, which in many ways has been associated in the past with entertainment and circus and opposed to genuine artistry, in which the performer centralizes the music rather than the performance in the center. Through the blackness of the scores and extreme technical and psychological demands of the performer, the music within the New Complexity becomes a self-critiquing virtuosic tradition—the performance of the work holds an intrinsic critique of virtuosity.

530 Carola Dewenter, "Neue Musik und Musikpädagogik. Ein Gespräch mit Klaus-Kart Hübler," *Zeitschrift für Musikpädagogik* 11(1986): p. 29.

Performing works on the threshold of the performer's capacities involves, as I have shown, psychological and physical elements of struggle, breakdown, and collapse. Performing within this realm involves risk: it can lead to a feeling of putting one's life on the line, perhaps even feel a bit like torture. Performance of this kind bears traces of spectacle and freak show—displays of the uncontrollable body. Performing music live is a “drastic” activity, as Carolyn Abbate describes it, it has a physical wildness that escapes analytical categories.

Performances should ideally have an impact on both the performer and the spectator. Through the physicality in his theatre, Artaud aimed at breaking down the boundaries between performer and audience:

The spectator will go to the theatre the way he goes to the surgeon or dentist. In the same state of mind—knowing, of course, that he will not die, but that it is a serious thing, and that he will not come out of it unscathed He must be totally convinced that we are capable of making him scream.⁵³¹

The cruelty of Artaud's “theatre of cruelty” is about audience investment, about the performer's actions having consequences for the spectator. A performance is *about* something, it should arouse a response of some kind from the audience, rather than repeating the familiar rituals of the classical concert hall. These rituals maintain the distance between performer and audience, and uphold the images of creative composer and obedient performer: everyone knows their role and is in full control.

We have seen that the complexity of the New Complexity includes the domain of the body. The practice, and thus the physical functions, becomes a parameter in the composition. This has implications for practicing and performing, and the attitudes towards the work-concept.

4.6.2 From *Werktreue* to ambiguity in radical idiomatic instrumentalism

If the score and the practice are to be brought into congruence in *Opus breve*, the practice must open up to the multidimensionality immanent in the score. From the *Werktreue* perspective, exemplified by the High Modernist Model of performance practice with its noise free, linear, and transparent chain between conception, notation, and realization, the piece can be seen unrealizable. In this

531 Artaud, *Selected Writings*, p. 157.

way, I think *Opus breve* can be seen as a utopian composition, and this must be reflected in its performance practice.

Much of the composition and discourse on the music of the New Complexity takes place on an intellectual level. Radical instrumentalism, the aesthetics of resistance, the implicit struggle, built-in breakdown, and the limits of human effort all have their origin in a theoretical realm. As long as aspects are situated in scores and position statements, we remain in the realm of abstraction and theory. But the embodiment of these ideas takes place in the physical reality of real people interacting with physical objects, and the gap between these parallel realities can sometimes be perceived as insurmountable for the performer. Ross Feller writes:

When first encountering a Ferneyhough score one usually notices the complex notation which seems to minimize interpretation. In fact it is designed to *maximize* ambiguity and imprecision, two components which require interpretation.⁵³²

Feller views ambiguity and imprecision as two positives, two resources that liberate the performer and give her scope for interpretation. The music we have discussed so far explicitly aims at ambiguity. In Liza Lim's words:

My focus in instrumental exploration tends always to look at areas where I feel there there's a lot of ambiguity and flux in the quality of the sounds—inbetween states, like between 'solid'/'liquid', 'granulated'/'gaseous'—a sense of potential for transformation that can occur very fluidly from any point in a continuum.⁵³³

Like many composers within the New Complexity, Lim uses the word ambiguity in a positive sense, as something that is not fixed, but rather creates a desired multidimensionality in music. When uncertainty is used as part of the expressive content of the work, its function spills over to the instrumental practice. Oxford Dictionaries Online defines "ambiguity" as "the quality of being open to more than one interpretation; inexactness."⁵³⁴ These two definitions are two sides of the same coin. When performers read ambiguity to mean "inexactness" the result can be frustrating, simply because it is difficult to know exactly what the notation implies, what the composer wants, and hence, what to do at the fundamental level (where to put the fingers etc.). Approaching an ambiguous

532 Ross Feller, "Strategic Defamiliarization: The Process of Difficulty in Brian Ferneyhough's Music" (paper presented at the Third Triennial British Musicological Societies' Conference, University of Surrey, United Kingdom, 1999), n.p.

533 Liza Lim in "The Music of Klaus K. Hübler."

534 "Ambiguity," in *Oxford Dictionaries* (Oxford University Press) <http://www.oxforddictionaries.com/definition/english/ambiguity?q=ambiguity>.

score, with the aim of certainty and clarity is thus futile. But if the performer can read ambiguity as “the quality of being open to more than one interpretation,” it becomes a positive attribute—an opportunity to interpret the work in a personal way.

It is time to leave the linear and transparent performance practice where the paradigm of a *perfect rendering of a score*, exists, and to move towards a performance practice embracing the ambiguity and the critical and performative potential therein. Accepting and embracing the ambiguity in the work’s notation and performance opens a creative space for the performer, a space where several areas are yet to be explored.

4.6.3 The critical and self-reflective performer

As we have seen, Hübler claimed that his compositions broke with the “conditioned reflexes” of the performers and required “new awareness of bodily processes at play” outside the conscious domain. The sheer technical difficulty of the works force the performers to examine their practice, as the tools they have learned are not sufficient in this context. Adorno said:

Adequate performance requires the formulation of the work as a problem, the recognition of the irreconcilable demands, arising from the relation of the content (*Gehalt*) of the work to its appearance, that confront the performer. In uncovering the tour de force of an artwork, the performance must find the point of indifference where the possibility of the impossible is hidden. Since the work is antinomic, a fully adequate performance is actually not possible, for every performance necessarily represses a contrary element. The highest criterion of performance is if, without repression, it makes itself the arena of those conflicts that have been emphatic in the tour the force.⁵³⁵

To view the performance as an arena of conflict, where the work confronts the performer and a battle is fought between the two, raises the temperature in the discourse, and is far from the trodden paths and familiar recipes often taught in the classical performance practice. In this light *Opus breve* can be seen as a work that problematizes the performer practice—the role and habits of the performer. The perceptual ambiguity of the piece works against the habitual patterns ingrained in the musician, questions every move and method, and forces the performer to find new methods and approaches. For the performer of this music, it is a tremendous challenge to interrogate and examine one’s own practice—to confront one’s limits, work on the margins, and accept the nonlinearity

535 Theodor W. Adorno, *Adorno: Aesthetic Theory* (London: Continuum, 2004), p. 140.

of complexity that removes perfection out of the vocabulary. In doing so, the performer allows these scores to become an area of investigation into corporeal, analytical, perceptual, and psychological aspects of performance, engaging the broad range of human capacities for expression.

What can these considerations bring into performance? Is it possible to become more aware about the physical and gestural layers at the early stage in practicing? Is it possible to import some new aspects into interpretation? Can we make room for a co-creative mindset that explores the work rather than solving it? Can we confront the work as a battleground of possibilities in line with Adorno's suggestions? To do so does not mean one should not try to learn what is in the score as accurately as possible. This is not a proposal for the performers to become sloppy and inexact and to treat the score as a graphic score aimed at igniting improvisation. In complex works, there is still a great need for diligent and conscientious note-readers: performers who approach the task systematically. However, parallel to the painstaking and detailed endeavor required to learn these works, one can look at the work as a prism, as a physical three-dimensional organism possible to experience from a range of different perspectives. Séverine Ballon describes her practice of Ferneyhough's *Time and Motion Study II* as paying great attention to detail and the totality of the work at the same time, starting to play through the work from day one. In this way, she inhabits the work, explores its intrinsic qualities at all stages, from the virtually unknown until completely internalized. She does not wait until she masters each step and has it perfect and controlled before moving to the next. She explores the boundary between control and no control, and constantly moves between micro and macro levels.

How can we as performers gain access to resources that are beyond our control—to the powers and capabilities on the edge of what is controllable and rational? First, we must abandon the idea of the one true interpretation. The common inclination toward perfection among performers of classical music can become an excuse for no further action. In a right/wrong paradigm, the imperative to “get it right” is so self-explanatory, that it relieves the performers of the responsibility of thinking for themselves. There is an interesting conflict, little discussed, between these (polarized) choices either to be active, make judgments, and take personal responsibility, or to be passive, correctly executing “orders” from the composer and thus be exempted from responsibility. There is, of course, a great deal of area in between these poles, but the dominance of the latter model is clear to anyone who is classically trained. The orchestral

institutions are largely dependent on performers who “do as they are told,” if admittedly on a very high level.

The culture overshadowed by the figure of the “great composer” needs to be challenged. A culture in which the score rather can be seen as a starting point for interpretation, a springboard for any number of interpretations, each of which sheds light on the score, requires curious and exploratory performers with the will to experiment.

4.7 Conclusion

Leading composers within the New Complexity, like Ferneyhough, Barrett, and Finnissy, are explicit in their wish for beautiful, musical phrasing, a “meaningful inexactitude,” and personal creative engagement rather than a perfect reading of the score. The linear performance practice model with transparent layers between composer, work and performance is now turned opaque, muddled with noise and distortion in the chain of action.

In *Opus breve*, the performance practice is about not merely about what the performer does, but also what constitutes the work. Hübler’s sound world is full of contradictions, ambiguities, and flux in the quality of the sounds—it creates an in-between state with a great potential for transformation. The extreme detail on every level leads to unlimited combinations of choice and represents a number of possible sounding outcomes. By conventional definitions, *Opus breve* may be considered an “unfinished” piece, as it represents numerous possible performances and different interpretations. In this way, *Opus breve* highlights the way the ontology of the work is powerfully interwoven with the role of the performer.

In *Opus breve*, Hübler forces the performer to inhabit the physical and sonic space actively, in order to follow the requests of the score. This is a new direction in performance practice, in which constitutive elements of the work are moved into the performative domain through the instrumental practice. Each performer’s physical and mental predispositions will thus be decisive factors in interpretation. Listening to the three available recordings of the *Opus breve*,⁵³⁶ in

536 This is also confirmed by the notable difference between the three available commercial recordings of *Opus breve*, performed by Frances Marie Uitti (Wergo, 1996), Friedrich Gauwerky

which it is difficult to recognize that the same piece is being played, further supports this argument. The question whether the piece can be realized—and what it means to ‘realize’ a work in this context—highlights the central role of performance practice, and the way any compositional aesthetic is dependent upon the performer’s communal practice. It also leads to the need of revise the concept of “realization” to suit the practice in question.

4.7.1 The spirit of the instrument

Hübler wrote:

I find attractive that after “composition resistance” comes the “instrument resistance,” and then you have to fight both. On the other hand, I believe that the instruments reveal their “spirit.” Then suddenly they turn out as a kind of inspiration, I do not really like the word—as a resource of ideas and possibilities.⁵³⁷

He expresses a faith in laboriously working his way through layers of resistance for then to reach a kind of core, something he calls the “spirit” of the instrument.

My relationship with *Opus breve* has changed over the last four years. From a dense and inaccessible score I had to attack from several angles in order to crack the code, it has become a work I value highly and gladly program in concerts. The long road required to master it alienated me at first, however, the “playing through-method” made me more familiar with the work, narrowing the gap created by the written notation. I have played it in concert numerous times over the past four years, and since it is so short, I often play it twice during a concert. I still have to spend ample time practicing *Opus breve* before a concert, the resistance represented by the score and my interaction with the instrument is definitely not ironed out, no matter how much I practice it.

The complexity of *Opus breve* is reflected in the complexity of my investment in investigating, learning, and performing it, and in the way this takes place on many levels involving body, cognition, and emotions. Lukoszevieveze wrote: “*Opus Breve* isn’t really complex ... the notation appears complex, but the piece is more

(Albedo, 1999) and Franklin Cox (forthcoming on Centaur Records).

537 Nyffeler, “Bis das Instrument seinen Geist offenbart: Klaus K. Hübler im Gespräch,” p. 6. “Aber das finde ich eben reizvoll: Zum ‘Kompositionswiderstand’ kommt dann noch der ‘Instrumentwiderstand’, und man hat dann gegen beide anzukämpfen. Andererseits glaube ich, dass dann die Instrumente ihren ‘Geist’ offenbaren Können. Sie erweisen sich dann plötzlich als eine Art Inspirationsquelle– ich mag das Wort eigentlich nicht –, als eine Ressource von Einfällen und Möglichkeiten.”

like a sonic choreography, old fashioned, faded like an old photo, romantic even. ...⁵³⁸ The intricate calligraphic score holds ever-new questions and a multitude of answers urging the performer to throw herself into the whirlwind of gestures and ambiguities. The score holds a captivating depth that attracts recurring investigations, and which guarantees that there is always a new layer or hidden details to be revealed in the work—it is never emptied of meaning. As a performer I want to get back to work again and again, in the same way that I want to return to great works of art, be it paintings, books or buildings. The complexity of *Opus breve* is thus a kind of basic condition for the works being.

In my opinion, works within New Complexity represent one important way in which contemporary music performance practice has been challenged and propelled. The performers' encounters with the works have triggered active and important discussions about the relationship between performer and composer, and have opened up a space for the importance of questioning long-established values underlying the classical performance practice. I believe that many performers can benefit from acknowledging their own creative role in performance, and by recognizing their own authority, determination, and taste, find several new dimensions for the interpretation and not least discover additional resources in themselves. In this process, it is unavoidable to question the power hierarchies in music, and to confront the inherited beliefs about obedience, authority, and creativity.

Can we have the best of two worlds? Is it possible to learn the score to the extent of what is practically and mentally possible, and let go of the control and use our creative imagination in a parallel process?

The excitement and challenge of approaching the unknown is here expressed by Irvine Arditti, the prime pioneer of contemporary music:

I love the idea of going to the limit of what you can do ... You see, with the music we play there is no performing tradition. We have to create it, we have to turn these very odd-looking marks into music which has never been heard before.⁵³⁹

Arditti summarizes brilliantly the key knowledge required from a performer of contemporary music: virtuosity (physical and mental), pioneering work, creativity, and imagination. This is a performance tradition in the state of becoming.

As we have seen, Hübler's *Opus breve*, from 1987, investigates the extreme resources of the performer, both intellectually and physically. The piece can

538 Lukoszevieve in correspondence with the author.

539 Ivan Hewett, "Irvine Arditti: Extreme Violinist," *The Telegraph* 16 November 2012.

thus be seen to reflect a peak in instrumental writing within this aesthetic orientation. Where do we go from here? As we shall see in the next chapter, Simon Steen-Andersen (born in 1976) also investigates a complexity, but one that originates not in the notation, but rather in the interaction between several types of medial and performative expression. Steen-Andersen also uses decoupled notation to make use of the two hands' autonomy. But where Hübler uses the parametric layers to investigate an unprecedented sound world, Steen-Andersen employs the technique to closely examine synchronous and asynchronous bodily movements within instrumental practice.

The hyper-idiomatic cello—a kinetic game of action and sounds

Simon Steen Andersen's trilogy *Studies for String Instrument #1–3*

5.1 Introduction

In this chapter, I present the process of working with and performing the trilogy *Studies for String Instrument #1–3* (2007, 2009, 2011),⁵⁴⁰ by Danish composer Simon Steen-Andersen (b. 1976), investigating the experimental elements involved and considering the implications for the performer. I will discuss the influence of Helmut Lachenmann's *musique concrète instrumentale* on Steen-Andersen, and look at how he expands this aesthetic to incorporate further the physicality, visuality, and technology in instrumental performance. By shifting the perceptual relationships between action and sound, Steen-Andersen establishes body movement as an autonomous parameter in his music. This results in a polyvalent and transmedial expression in which sound, movement, and visuality are of equal importance, challenging the modernist conception of musical material and the identity of the work. Bringing concepts such as perception, identity, and temporality into play, Steen-Andersen also problematizes and

⁵⁴⁰ Simon Steen-Andersen, *Study for String Instrument #1* (Copenhagen: Edition-S—music-sound-art, 2011). *Study for String Instrument #2* (Copenhagen: Edition-S—music-sound-art, 2011). *Study for String Instrument #3* (Copenhagen: Edition-S—music-sound-art, 2011). Parts of the scores can be viewed in the appendix.

questions the relevance of the rituals and traditions surrounding the concert experience. All this is done with elegant humor, convincing compositional skills, and a personal artistic touch.

As a cellist and a member of the ensemble *asamisimasa*, I have collaborated with Steen-Andersen since 2010, and have performed his music in concerts in Europe and in the US. Working with the composer gives me a different entry point into the works and the composer's aesthetics than I have had for the other three composers in my project.⁵⁴¹

Studies #1 and *#2* were composed before I started working with Steen-Andersen.⁵⁴² *Study #3* was composed shortly before *asamisimasa* performed a Steen-Andersen portrait concert at the Ultraschall Festival in Berlin on January 21, 2011, where I gave the piece its premiere. Though my collaboration with Steen-Andersen was not close during the composition process, we did work closely during the period of practice and performance,⁵⁴³ something that has made it difficult for me to look at the material objectively—to establish a critical external position. Therefore, this chapter is largely a direct report from my encounter with the three *Studies*, a “tale from the trenches,” both in my description of the music and my experience of performing them. In collaborations of this kind there is an inherent danger of paraphrasing the composer's own ideas, and I will try to avoid this by clarifying my own position as a performer.

Steen-Andersen is a composer with very clear and strong opinions about the way his works should be performed. This is largely due to the fact that the instrumental techniques and methods he introduces in the works are

541 I never met Morton Feldman, who died in 1987. I have played *Pression* for Helmut Lachmann, and have interviewed him. My contact with Klaus K. Hübler has been limited to e-mail correspondence.

542 *Study #1* was first performed in Krakow, by cellist Jakob Kullberg, on December 8, 2007, and *Study #2* was premiered in Berlin by Mathis Mayr, December 10, 2009.

543 Steen-Andersen has travelled and performed with *asamisimasa*, leading to a more “long-term” collaboration than the more common model of performer and composer working together until the first performance, after which the performer is usually “on her own.” There are several types of collaborations between composers and performers. See for example Fabrice Fitch and Neil Heyde, “‘Recercar’—the Collaborative Process as Invention,” *Twentieth-century music* 4/1 (2007): 71–95; Barbara Lüneburg, “A Holistic View of the Creative Potential of Performance Practice in Contemporary Music” (PhD diss., Brunel University, London, 2013); Stefan Östersjö, “Shut up ‘N’ Play! Negotiating the Musical Work” (PhD diss., Lund University, 2008) and Eric Clarke, Nicholas Cook, Bryn Harrison, and Philip Thomas. “Interpretation and Performance in Bryn Harrison’s *être-temps*,” *Musicae Scientiae* 9/1 (2005): pp. 31–74, <http://www.searchnewmusic.org/bellamy.pdf>.

The image displays a musical score for a string instrument, divided into two systems. The first system features a 'bow' staff and a 'string(s)' staff. The bow staff includes instructions such as 'frog', 'point high', 'point deep', and 'move bow back in position'. The string staff includes a note '(inaudible or whatever sound the movement of the hand makes)'. The second system continues the 'bow' and 'str.' parts, with a 'Strong downbeats' instruction. The score includes various musical notations like notes, rests, and dynamic markings such as 'f'.

Figure 28: *Study for String Instrument #1* (2007), page 1. Used by permission of Edition-S, © 2011 (www.edition-s.dk).

inextricably linked to the work’s concept and identity. To put it simply, the musical flow does not function if the work is not played precisely according to the composer’s instructions. This authorial control is also helpful—even necessary—because the instrumental techniques and methods are novel and innovative, and thus not established in the performance practice. In this way, Steen-Andersen belongs to the category of the composer who impersonates the figure of the oracle, the omnipresent and indispensable creator who requires control over all stages of the process.⁵⁴⁴

What are the significant elements in the performance practice of *Studies for String Instrument #1-3*? Does performing this music require new skills? How does the performer relate to the visual aspects in this practice? What characterizes this particular collaboration between composer and performer?

⁵⁴⁴ See Chapter Two for a discussion of this model of composer.

5.2 Simon Steen-Andersen and the three *Studies for String Instrument*

Berlin based Simon Steen-Andersen is an established composer whose works have been performed worldwide,⁵⁴⁵ and who has been the recipient of several prizes.⁵⁴⁶ His compositions range from installations, to works for solo instruments, chamber groups, and symphonic orchestra.

Figure 29: *Study for String Instrument #1* (2007), page 2, measures 150-58. Used by permission of Edition-S, © 2011 (www.edition-s.dk).

A prominent trait of Steen-Andersen's practice is a concrete and material approach to composition, including an emphasis on the physical and choreographic aspects of instrumental performance. His works often include use of video and amplification as well as prepared instruments and various methods of muting. His exploration and integration of technological aspects has given a number of his works a transmedial character.

The series *Studies #1-3* was composed between 2007 and 2011, each of the works exploring and developing a condensed set of technical materials, thus they are 'studies' in the traditional sense that while maintaining musical interest, each explores a particular, usually difficult, technique, though the techniques chosen as his focus are far from traditional. Each of Steen-Andersen's *Studies* isolates certain performance parameters, which are outlined as exercises in a nearly

⁵⁴⁵ Steen-Anderson's works have been performed at festivals such as Darmstadt Ferienkurse für neue Musik, Donaueschinger Musiktage, Other Minds (San Francisco), Ultraschall, Ultima and in Huddersfield Contemporary Music Festival.

⁵⁴⁶ He has received the Kranichsteiner Musikpreis (2008), the DAAD Berliner Künstlerprogramm Residency (2010), and the International Rostrum of Composers among other awards.

didactic manner. *Study #1* explores the relationship between movement and sound by juxtaposing the binaries of movement/stillness and sound/silence. It unfolds using the entire fingerboard and the length of the bow and investigates distance, speed, angles, and directions. *Study #2*, for string instrument and whammy pedal, explores the numerous possibilities embedded in electronic pitch shifting across a span of two octaves. *Study #3*, for string instrument and video, is a predominantly choreographic piece—a *pas de deux* for one performer—exploring perceptual relationships between a virtual and a real cellist.

Common to all three *Studies* is that Steen-Andersen presents a set of rules which he follows strictly for a while, before gradually starting to break and play with them. The principles and rules he imposes onto the material serve as a creative stimulus to playfully explore all aspects within his self-imposed limitations, resulting in surprisingly interesting pieces for such small format. His direct and often one-to-one treatment of concepts and material is a characteristic of Steen-Andersen's practice.

The *Studies* are brief, each lasting approximately five to six minutes.

5.3 **Study for String Instrument #1: "Movement of the Sound or Sound of the Movement?"**

My performance of *Study #1*, with Swedish violinist Karin Hellqvist⁵⁴⁷ can be found in video #10.



Study for String Instrument #1 (2007) traces an outline of the physical geography of traditional performance space of the cello. The right hand has a horizontal span, from the tip to the frog of the bow; the left hand's span is vertical, the length of the fingerboard, from the deepest note to the highest. The two staves of the score represent these two spans (see Fig. 28): the upper staff depicts right hand's bowing actions; the lower depicts the left hand's movement on the fingerboard.

Although Steen-Andersen's notational aesthetics are far from Klaus Hübler's, this notation is directly related to Hübler's decoupled notation, in its division of the performance actions of the right and left hand. The instructions read:

⁵⁴⁷ I chose to perform this work with two performers rather than one simply because it sounds better, and the visual unison is displayed. This will be discussed later.

If played in a very big or noisy hall amplification may be used.—can be played on any string, but I recommend the 4th string.—always use as much bow as possible and always move between the lowest possible position and the very highest (the end of the fingerboard).⁵⁴⁸

The notation may be seen as a choreography for the two hands. The piece begins with a very quick gesture of frog to point on the bow and deep to high position on the fingerboard (the hands moving away from each other) in a duration of a 32nd-note, followed by the left hand sliding alone (the bow arm is inactive), silently and slowly down the fingerboard for a duration of eight quarter-notes. The gesture is repeated, but the duration is reduced to five quarter-notes, and the durations decrease gradually in the following measures until the movements in both hands are continuous and without breaks. The sound in the upward movement is a solid glissando, whereas the descending sound is that of artificial quarter harmonics. Following the introduction, *crescendos* and

548 Steen-Andersen, *Study for String Instrument #1*.

The figure consists of two parts. The upper part is a musical score for a string instrument. It features two staves: 'bow' and 'string(s)'. The 'bow' staff has a tempo marking of ♩ = 60-80 and includes performance instructions such as 'move bow back in position' and '(inaudible or whatever sound the movement of the hand makes)'. The 'string(s)' staff shows a glissando-like movement with dynamic markings of *f*. The lower part is a diagram of the instrument's neck and body. It labels the 'Steg' (bridge), 'Griffbrett' (fingerboard), and 'I. Saite' (first string). A tempo marking of 'ca. 65' is present, along with the instruction '(Bogen wird zumeist in der geschlossenen Faust gehalten)'. The diagram also shows 'arco stop' and 'sim. + II. Saite'.

Figure 30: *Study for String Instrument #1* (2007), page 1. Used by permission of Edition-S, © 2011 (www.edition-s.dk) and Helmut Lachenmann "Pression" © 1972 by Musikverlage Hans Gerig, Köln 1980 assigned to Breitkopf & Härtel, Wiesbaden), page 1.

diminuendos are introduced, requiring *exponential movements*, no longer even movements but faster gestures, coupled with crescendo.

In measure 50, a process of decoupling the sound and the movement begins, and it culminates in measure 153 (see Fig. 29). Up until this point, the hands have been moving consistently in straight lines in each direction—the bow from frog to tip (horizontally) and the left hand from low position to high (vertically).⁵⁴⁹ In measure 50, the directional pattern of the bow changes, but only for two bars. Now the two hands meet (for the first time) every second note. The hands start meeting again in measure 79, and soon after, a rhythmic counterpoint between the two hand directions unfolds.

A new section is introduced in measure 110, a $3/8$ measure, and the following eight measures, marked *as if dancing* is introduced, played *sul ponto estremo*. In this section the note values become shorter, the music resembles a waltz (with either strong or absent downbeats) and lighter second and third beats. From measure 120, new material is introduced, resulting in greater independence for the hands: the fingers of the left hand fingers (still in glissando), begin tapping and scratching on several strings (this later develops to a *tremolo scratch*), while the bowing hand starts playing *col legno* and *ordinario*, then *col legno jeté*. In measure 145 the two hands both execute an exaggerated tremolo. In measure 153, hard bow pressure produces a crushed noise that *crescendos* violently to fortissimo. This is loudest point of the piece both sonically and visually, as “the hands practically touching each other, as if two objects exchanging kinetic energy.”⁵⁵⁰ The left hand is hitting the string to create percussive sounds. The piece moves towards an end with simple repeated figures of triplets in a seemingly random canon, the tremolo gestures gradually taking over the glissandos and bowings. At the very end (from measure 177), when performed as a duo, the unison breaks up with a few instances of rests (freezing the position) in one instrument.

According to Steen-Andersen, the form of *Study #1* is “a kind of deconstructed glissando, in which the movements of the two hands slowly gain their own life and finally are completely detached from one another.”⁵⁵¹ The piece is thus a

549 Paradoxically the lowest position appears visually as the highest as it is placed on the highest visual point of the instrument (the start of the neck).

550 Steen-Andersen, *Study for String Instrument #1*

551 Agneta Mei Hytten, “Det moderne projekt lever videre,” *Dansk Musik Tidsskrift* 83 (November 2009): p. 32. My translation. “Formen er en slags dekonstruktion af et glissando, hvor de to hænders bevægelser langsomt får et eget liv og til sidst løsriver sig helt fra hinanden.”

gradual process from simultaneously moving hands to a clear independence between the hands—from movement-monophony to movement-polyphony.

Steen-Andersen writes in the preface of the score:

Movement of the sound or sound of the movement? One simple ‘sample’ is repeated over and over and is slowly broken down in its individual elements in a process of autonomizing the movements themselves. The piece is notated only as movements

(and can therefore be played on any string instrument and maybe even on other instruments), and it is just as much a choreography for the player as it is a sounding piece for the instrument. A choreographic game — or even a kind of dance, accompanying itself.⁵⁵²



Figure 31: Karin and Tanja recording *Study #1*.

Steen-Andersen’s “movement of the sound” is closely related to Helmut Lachenmann’s concept of sound production: “The aspect of observing an acoustic event from the perspective of ‘What happened?’ this is what I call *musique concrète instrumentale*.”⁵⁵³ As we saw in Chapter Three,

musique concrète instrumentale is an aesthetic direction that brings the energy in the act of sound production and the resulting physicality in performance to the center, displacing the usually central role of heard sound, and thus reversing traditional hierarchies of musical communication. Instead of starting with an abstract idea, then notating it (abstractly) in a score, finally to be materialized in sound by instruments, the process is reversed, as the concrete sounds with their acoustic attributes are now brought into the core of composition. The method of *prescriptive* or *action notation*, facilitates performance within this concrete instrumental aesthetic.

552 Steen-Andersen, “Study for String Instrument #1.”

553 Paul Steenhuisen, “Interview with Helmut Lachenmann—Toronto, 2003,” *Contemporary Music Review* 23/3–4 (2004): p. 163.

One of the earliest experimental works exploring the boundaries between movement and sound is Lachenmann's *Pression* (see Fig. 30).⁵⁵⁴ The opening measure of Steen-Anderson's *Study #1*, with the left hand moving barely audibly down the string with no bowing, is a direct quotation—conscious or not—of the opening of *Pression*. Because these passages are close to soundless, the movement of the body is brought to the fore, emptied of “musical meaning,” as we see the arm moving in a staged motion but hear no—or very little—sound. Steen-Andersen isolates and develops this gesture as a compositional component, which he juxtaposes with other components, thus creating a direct perceptual play between the opposites of sound/silence and movement/stillness. The prominence and focus has shifted from sound towards the physical gestures, and Steen-Andersen cultivates this as he experiments with the arm moving up and down at different speeds, with and without bow “in a process of autonomizing the movements themselves.” The *execution* of this movement now constitutes the work's main material, and the sonic result of the finger gliding down the string becomes a by-product of the gesture: the “sound of the movement.” This attempt to emancipate the movement from being a vehicle of the production of sound is a striking element in Steen-Andersen's work, something I shall investigate and discuss further in relation to the two other studies.

5.3.1 Performing *Study #1*

I have performed *Study #1* both as a solo, and as a duo. There are several advantages of performing as a duo, related to both the visual and aural aspects of *Study #1*. The purely sonic outcome of the piece is unstable and unpredictable. Having two performers creates more sound, and the obscure and unstable sound is now in two layers that blend into one another, creating what I believe is a more interesting result. Performed as a solo, the piece is a clear realization of Steen-Andersen's statement that it is “as much a choreography for the player as it is a sounding piece for the instrument.” Nevertheless, two (or more)⁵⁵⁵ performers are required to produce a visual dimension capable of manifesting the main point of what Steen-Andersen calls the -“hyper-idiomatic”—that is the

554 Lachenmann's preface to *Pression* (1972) indicates his awareness of the importance of the visual aspect in performance: “... If possible, this piece should be played by heart, or at least in such a way that (a) the pages do not have to be turned, and (b) the score does not block the view of the cello and the bow.”

555 *Study #1* was performed by the Telemark Chamber Orchestra conducted by Lars-Erik ter Jung at the Ultima Festival 2011.

translation of the gestures to the idiomatic domains of different instruments so that the piece remains “the same” while sounding completely different. In the video, I have chosen to perform it as a duo with Karin Hellqvist, as the idea of creating a visual unison of the same piece adds another dimension to the performance of the work.

In my attempt to “choreograph” the work for cello and violin—to find a way for the two players to perform “the same” movements with their instruments—my attention was initially directed at the spatial dimension; I focused on how the instruments were placed in the room in relation to the players, and on the fact that our left hands moved in different directions with relation to our bodies.⁵⁵⁶ The bow movements, however, can be synchronized. Karin and I worked hard to try to get our bows to move in one line, completely in sync and perfectly aligned (see Fig. 31). When we recorded, we ended up with her sitting on a chair on the floor and me sitting on a high piano stool on a platform. Although we achieved a satisfactory starting angle, it would not automatically remain stable throughout the piece. There were two main reasons for this: first, from the beginning of the “waltz” (measure 110) through the rest of the piece, the notes get shorter and the techniques vary; the physicality involved in performing the techniques makes it difficult to keep a perfectly straight line. Second, the automated

Figure 32: *Study for String Instrument #2* (2009), page 1. Used by permission of Edition-S, © 2011 (www.edition-s.dk).

⁵⁵⁶ When the cellist’s left hand moves from the low register to the high, the hand moves away from the body, while the opposite is the case with the violinist.



Figure 33: Simon and Tanja in performance of *Study #2*.

legato-stroke (in classical performance practice)⁵⁵⁷ involves circular thinking in bow-changing moments, and this is hard to eradicate altogether. In order to compensate for my inherent urge to phrase, I tried to practice more mechanically, and to reveal and clearly display the two different (perpendicular) directions and angles between the bow and left arm.

Steen-Andersen suggested playing on the C-string to accommodate the alignment of the angle, but I chose the G-string, both because I think it sounds better, and because the friction of the thick C-string almost burned my fingertips in the super fast and repeated glissandos around which the piece is constructed. The instruction to “always use as much bow as possible and always move between the lowest possible position and the very highest (the end of the fingerboard),” goes against the habits of classical performance practice, where shaping of the sound by the bow is at the core. Pulling the bow as fast as required feels unnatural and forced, reduces sound control, and gives a feeling of executing a mechanical and “unmusical” movement, almost like a robot. If I press down on the string hard enough to make a consistently good sound in the glissandos in the fast tempo, the physical resistance leads to blisters on my fingers. The

557 What I regard as the “classical performance practice” is discussed in Chapters One and Four.

Figure 34: *Study for String Instrument #2*, (2009), page 2, measures 30 - 45. Used by permission of Edition-S, © 2011 (www.edition-s.dk).

high speed of the bow would in any case destroy the consistency of the sound, so eventually I overcame my initial feelings of violating the sound quality and became accustomed to focusing on executing the movements, and doing my best to accept whatever sounds came out.

Figure 35: *Study for String Instrument #2*, (2009), page 2, measures 62 - 73. Used by permission of Edition-S, © 2011 (www.edition-s.dk).

The image shows two systems of musical notation for a cello and a whistle. The first system, starting at measure 111, features a tempo of 5/16 and a metronome marking of ca. 60. The cello part (instr.) has a dynamic of *pp* and includes a staccato instruction. The whistle part (wha.) has a dynamic of *pp* and includes a *pizz.* instruction. The second system, starting at measure 116, features a tempo of 3/4. The cello part has dynamics of *pp*, *mp*, and *pp*. The whistle part has a dynamic of *mf*. A note in the cello part is marked with a staccato instruction: "(staccato always as short as possible no matter the note length)".

Figure 36: *Study for String Instrument #2*, (2009), page 4. Used by permission of Edition-S, © 2011 (www.edition-s.dk).

What does it mean to be musical and to “interpret the music” in this context? For me there are two conflicting directions in the performance moment: either to execute the movements mechanically and calculatedly, or make it groove and swing—phrasing the music together with Karin as chamber music. In the mechanical mode, I focus on bow and hand speed. I calculate the bow speed and distance mathematically when for example playing 3 against 2 in the left hand. Twice as fast notes means twice as fast hand movement. This brings us again to the one-to-one relationship that reinforces the notion of simply doing what the score says, executing the performance directions, without deviating from them through personal interpretation. The pieces employ simple, concrete, and stripped-down actions, which have to be executed quite literally or “objectively.” A traditional understanding of musicality, in which one would impose phrasing, emphasis, additional gesture, and so forth, would mar the clarity of the material. Watching a video of myself practicing, I detected movement patterns that have no place in this piece. Typical and common cellist gestures seemed irrelevant in the context of the *Studies*. Of course, this is by no means an unambiguous statement. Sections of *Study #1*, for instance the “waltz” (measure 110), require phrasing and musical interaction. The same applies to the last part of the piece, when each hand phrases its own line, in what I would call “organic gestures.” The main challenge in these sections of the piece is to perform every sound *molto legato*, gluing the sounds together without pause between them,

a technique strongly urged by the composer. The arm speed required to move between the sounds in order to obtain *legato*, can also contribute to the notion of mechanical execution. The mental and instrumental challenges posed by this technique require other performance models and practice methods than those taught within the paradigm of the classical performance practice.

A major part of practice time for *Study #1* is spent attempting to obtain the desired visual result of a motion, as seen from the outside rather than being experienced from within. When practicing, I believe that I repeat the same movement, I think I am exact, but feedback (mirror, video or another person) tells me I am wrong. I try to practice deliberately controlling the speed of the movements; half bow, then stop, the other half, then stop. When I practice measure 153, in which “the hands [are] practically touching each other, as if two objects exchanging kinetic energy,”⁵⁵⁸ I try to create a mental picture of the physical laws that form the basis of how a pendulum hits another pendulum. I have to mimic this image with my arms, and this posed entirely new challenges to my choreographic repertoire as a cellist. I have the feeling of understanding it, I think it looks good, but I am far from the target. To detach the connection between movement and sound requires quite different skills and focus than those we ordinarily encounter.

5.4 ***Study for String Instrument #2 “A duo making a solo” or a failed attempt***



My performance of *Study #2* with Simon Steen-Andersen on whammy can be found in video #11.

In *Study #2*, for string instrument(s) ad lib and whammy pedal (2009), the pedal can be controlled by the string player, but it is usually operated by a second person (often, as in my video, the composer). The work is frequently performed with violin and cello together with the whammy.⁵⁵⁹ The cello is muted with a heavy practice mute to dampen most of the acoustical sound, and it is amplified by a contact microphone that is fed through the whammy and played over loudspeakers.

⁵⁵⁸ Steen-Andersen, “Study for String Instrument #1.”

⁵⁵⁹ The whammy is a pitch-shifting effect pedal, which can be preset to transpose the sound two octaves up in real time.

The main element in *Study #2* is a glissando of two octaves played by the cello and whammy, moving synchronously and asynchronously up and down in different combinations, tempos, and dynamics. When performing the whammy part, Steen-Andersen attaches a plank to the pedal, which is then controlled by the hands holding the end of the plank; the added length to the pedal enhances the visual aspect of the performance of the pedal part.

The piece starts with a short note on top of the two-octave span followed by a rest of seven quarter-notes length (see Fig. 32). From there, every other note alternates low and high: the length of the rests in between gradually decreases and the notes increasing in length so that the notes appear closer and closer together. Finally, there are no rests and the note values decrease again with the effect of speeding up to a four-measure frenzy up and down. The glissandos gradually slow down again, this time with sound during the increasingly slow movements of the arm. From measure 30, the same glissando is prescribed to be executed *groovy* and with heavy downbeats (see Fig. 34).

Until now, the whammy has consistently moved in the opposite direction of the cello in the glissandos. Now, the interplay and interaction become more elaborate and varied. The rhythmic emphasis changes, and the cello and whammy play alternately together, in opposition, or in canon. From measure 53 there is a new crescendo, of both speed and intensity, then a second frenzy lasting seven measures introduces the calming of this section: the tempo slows, and seven new distinct actions/sounds are now gradually introduced in between the gliding glissando movements (see Fig. 35): (1) vertical bowing producing *pure noise*; (2) *vibrato estremo* without bowing; (3) tremolo bowing on the body of the cello; (4) left hand pizzicato on open A-string; (5) left hand tapping on string without bow; (6) *col legno jeté*; and (7) gradual transition to pure noise and back (with horizontal bowing).

In measure 73, half way through the piece, the tempo is ♩ = 50 and within the same span of the two octaves, a dancelike section unfolds, the cello buoyantly navigating amidst the particular actions which constantly modulate according to the whammy position. The whammy exerts more influence on the sound than the cello in this section, and, though many of the cello sounds are measurably audible in themselves, the whammy and amplification magnify and distort them. This section ends with a repeated motif—a triplet moving up and down—that is augmented three times, mirroring the opening, whose rhythmic profile goes from slow to fast (see Fig. 36).

In a final coda, the whammy surprisingly takes over as the main instrument: it starts to “sing” a melody, changing pitch each time the cellist touches the body of the instrument. During this whammy “solo,” the cellist’s role is only to feed the pedal with unpitched noise produced by a steady tremolo on the body of the instrument. The last six measures consist of even 16th-notes bowed on the side of the instrument, the last measure suddenly dropping to one quarter of the speed, as if abruptly stopping a LP on a turntable.

The form of *Study #2* resembles *Study #1*, in that the cello and whammy start in “visual unison,” moving together for a while before starting to go in opposite directions. Over the course of the piece, the whammy part achieves independence, culminating in the “solo” at the end. The pairing of cello and whammy pedal is analogous to that of the two hands in *Study #1*.

The whammy pedal is not a sounding instrument, it is dependent for its sound on the cello, and in this respect it can be seen as an extension of the cello. Nevertheless, the fact that the pedal is usually handled by a separate performer, has led the composer to call *Study #2* “a duo making a solo.”⁵⁶⁰ Musically speaking, and in light of the unfolding trajectory from dependence to independence, a more apt name might be “a solo making a duo.” The pedal has moved from secondary to primary status, it is symbolically placed on a pedestal and physically raised from its former “low” position on the floor, exposing it to our attention. The subtle movements are magnified by the plank, further facilitating mechanical control but more importantly bringing the whammy player visually in line with the cellist, underscoring the notion of the pedal’s autonomy and its function as an equal duo-partner to the cello. If the pedal had been handled by the cellist (on the floor as a foot-pedal), as originally conceived, and as the score prescribes, the effect would have been considerably different. The cello and pedal would then been part of a unified body, one which gradually disintegrated during the piece. The pedal’s gradual move toward autonomy would not have been visible in the same way. The visual aspect of displaying the pedal and assigning it a greater visual impact is something that has emerged in the practice processes, after the piece was composed.

The previously mentioned main element—the two-octave range manipulated in various ways—presents the following possibilities: one player stays while the other moves (two octaves glissando), they both go in the same direction (four octaves glissando) or they go in opposite direction (the tone stays more

⁵⁶⁰ Simon Steen-Andersen, private email correspondence March 25, 2012.

The image displays a musical score for 'Study for String Instrument #3' on page 1. It is divided into three main sections. The first section, labeled 'LIVE' and 'VIDEO', consists of two staves. The 'LIVE' staff begins with a 6/8 time signature and the instruction 'damp strings with left hand'. It features a sequence of notes with 'V' (vibrato) markings above them. A 'REPEAT 8*' sign is present. The 'VIDEO' staff follows a similar pattern but includes the instruction '(sound and video fading in during the first 4 repetitions)'. Above the 'VIDEO' staff, there is a note '(or 12 straight dotted quarters in tempo 130.9091)'. The second section of the score is a single staff with a 5/8 time signature, marked with a '3' above the staff. It contains a sequence of notes with 'V' markings, and the time signature changes to 4/8, 3/8, 2/8, 3/8, 4/8, and 5/8. The third section is another single staff with a 5/8 time signature, also marked with a '3' above the staff, containing notes with 'V' markings and time signature changes to 4/8, 3/8, 2/8, 3/8, 4/8, and 5/8.

Figure 37: *Study for String Instrument #3*, page 1 (2011), Used by permission of Edition-S, © 2011 (www.edition-s.dk).

or less in the same spot while gradually changing tone quality). Of these three, the last is the most interesting: the result of the cello and the whammy executing glissandos in equal speed but in opposite directions is theoretically (and ideally) a stable tone that neutralizes the glissandos. This hypothetical ideal is one of the elements exposed in *Study #2*. The experiment is unconcealed; it is candidly presented from the first note. The illusion is the possibility of succeeding, something that would lead to a much simpler and less interesting sonic result without the psychological and social implications of the imperfect one. The ideal of perfect synchronization in playing together can never be obtained, but is obvious for everyone experiencing the piece (live), making the expressiveness and humor of the *failed attempt* and the degree of proximity to the obvious ideal, into musical parameters. This can also be seen as a nihilistic view, man and machine cannot be united. The fact that it will never be accomplished makes it a utopian act and intellectual experiment.⁵⁶¹

561 A related idea of failure or breakdown as a constitutive element is used in Steen-Andersen's *In Spite Of, And Maybe Even Therefore* (2007) which consists of two constitutive groups that are both being built and destroyed at the same time by each group interrupting the other in alternation. In the second part of that work, Beethoven's Piano Bagatelles opus 126 are

An optical illusion is created when the whammy transforms the cello sounds and turns the direction of the glissandos: what we see is not what we hear, as the sound is separated from its origin. This incongruity creates a space in which gestures again play a decisive role, leaving the spectator to interpret the constantly changing relationship between movements and sounds. The whammy takes on a transformational role, it guises and modulates the “gagged” and muted cello, which is ultimately deprived of its traditional attributes. The physical cause and effect connection implicit in human action is broken. Voiced through the electronics, the cello breaks out of its classical role; it has become an *augmented instrument*.⁵⁶²

5.4.1 Performing Study #2

I have played *Study #2* in three versions: with cello, guitar, and whammy;⁵⁶³ cello, violin,⁵⁶⁴ and whammy; and, most frequently, cello and whammy. In all the performances, the composer has performed the whammy.

The experience of playing loudly but with little acoustic affect (the cello is silenced with a heavy practice mute) is unusual, as “my” sound goes directly to the whammy, and is thus left outside my control. However, since the whammy

played by a flute, clarinet and horn whose performers gradually dismantle their instruments, dissolving the piece and leaving only the choreographed movements of playing and the sonic rubble from the mutilated instruments behind. Steen-Andersen’s aesthetic can be seen to rest upon the dialectic movement between building up and breaking down. His knowledge of tradition, and of each instrument’s potential is actively used in breaking down the same tradition he is building upon. His research into the technology of each particular instrument reveals new and experimental approaches, which he again incorporates in the tradition. This topos is also discussed in Chapter Four.

562 “Augmented instruments, also referred to as extended or hybrid instruments or hyperinstruments, are acoustic (sometimes electric) musical instruments extended by the addition of several sensors, providing the performers the ability to control extra sound or musical parameters. The original instrument maintains all its default features in the sense that it continues to make the same sounds it would normally make, but with the addition of extra features that may tremendously increase its functionality,” Eduardo Reck Miranda and Marcelo M. Wanderley, *New Digital Musical Instruments: Control and Interaction Beyond the Keyboard* (Middleton, WI: A-R Editions, 2006), p. 22.

563 The recorded version on the CD *Pretty Sound* is with cello, guitar (performed by Håkon Stene), and whammy, and it is performed on the third string, whereas in live performance, the composer recommends the first string. *Pretty Sound: Solo and Chamber Works by Simon Steen-Anderson*, performed by Asamisimasa (Dacapo 8.226523, 2011).

564 When performed with another string player, the composer asks for the interval of a major third between the instruments.

pedal is dependent on input signal to generate any sound at all, this becomes the element that unifies us as musical partners. In this way, the whammy becomes an extension of my cello. I quite enjoy the fact that the sonic outcome of what I play differs from my own intentions; but naturally, as I become acquainted with the effect the whammy exerts on my different sounds and phrasings, I deliberately play with it and adjust along the way. The challenge in performing the sounds as *legato* as possible applies here as it does in *Study #1*. The timbres and specific qualities of the sounds themselves also need dedicated work, as each sound in the piece is assigned its own characteristic and identity. The transition between the different degrees and kinds of crushes are important, for example the vertical crushes that should go into the horizontal crush (measures 112–113) which transforms gradually to *normale*. This tactile and subtle investigation of the sonic material is closely related to the performance practice of both Lachenmann and Hübler.

From measure 121, the signal of the contact microphone on the cello has to be turned up so that the “white noise” resulting from the steady tremolo



Figure 38: From a performance of *Study for String Instrument #3*.

(performed on the wood of the cello) is strong enough to produce the whammy “melody” with an even pitch.

Although the visual parameters and the directions of movement are decidedly a present factor in *Study #2*, they are not the main element, and the mechanical aspects in performance discussed earlier are thus less evident. Unlike *Study #1*, where a traditional notion of phrasing and musical “swing” would destroy the desired effect, *Study #2* benefits from active musical interaction and phrasing.

5.5 **Study for String Instrument #3 - Doppelgänger**



My performance of *Study #3* can be found in video #12.

Study for String Instrument #3 (2011) for cello and video is a duo between one virtual and one real cellist. The virtual cellist is pre-recorded on video and then projected upon the performing cellist (the same person), in real time (see Fig. 38). The sound from the video is sent through loudspeakers, and merges with the live sound, which is amplified by a contact microphone and wireless system. A click track ensures that the two performances are synchronized. The score is written as a duo, with each part complementing the other (see Fig. 37). The pre-recorded video of the second part is the conditioning element in performing the piece, it can be seen to take on the role of score, in the sense that, once established, the live performance depends on meticulously following every move recorded on tape. Every move and every sound performed live must be coordinated with the video. The live cellist must adjust the size of the image and fit exactly to the sitting position and bow placement in the video.

The directions indicate that the wood of the bow is to be “prepared with 5–7 pieces of masking tape placed with irregular distances and widths, one being at exactly the middle of the bow.”⁵⁶⁵

The prescription for the right hand reads: “The bow is always played *col legno* from the very point till the screw(!) [composer’s exclamation mark] on the 2nd and the 3rd string (bow so far to the point that the point slides down on the 4th string)—keep the bow perfectly horizontal and 90 degrees on the audience.”⁵⁶⁶

⁵⁶⁵ Steen-Andersen, *Study for String Instrument #3*.

⁵⁶⁶ *Ibid.*

An additional technique, introduced in measure 47, is a tremolo with the silver/metal winding at the frog of the bow, “quasi LP scratching.”⁵⁶⁷

The three upper strings are muted with plastic tape or foam rubber to prevent them from resonating. The fourth string, which is the only “free” string, is tuned down about an octave. The bowing technique with the prepared bow produces a noisy, grainy, uneven, and continuous sound. The material differences between the surface of the tape, wood and silver influence the quality and the consistency of the sound. However, when the bow approaches the multiple edges of the tape along the stick, it produces a certain repetitive pattern that can be recognized after a while when the bow moves at the same speed. The variation in sound also depends upon the degrees of acceleration and pressure of the bow, and on whether the pre-recorded cello is playing alternately or together with the live cellist.

The cellist performs without an endpin, like a baroque cello, which, together with the wireless microphone glued to the instrument, enables the performer freedom of movement, which is crucial in this piece.

Study #3 starts with the two parts in unison. After eight measures, the parts start getting out of synchronization. Often, at this particular moment, spectators seem to think that what they see is some kind of live projection with a slight delay. Soon after, it becomes clear that what they see is two different cellists, or a cellist with a *Doppelgänger*. Halfway into the piece, the live cellist leaves the bow on a stool and brings the cello to a guitar position on the lap, playing *pizzicato* (horizontally), visually in perfect line with the video cellist who is bowing horizontally. The video cellist shortly begins to mimic the live cellist’s position, and they are synchronized again until the live cellist lifts the cello and reverses this movement, playing guitar position the opposite way (see Fig. 38). The video cellist mimics again, and both cellos turn back and forth in the air, in a beautifully choreographed sequence.

Study #3 ends with the live cellist turning the cello upside down (balanced on its head), mirroring the video cellist in normal position. In this position, vertical movements (perpendicular, up and down) of the bow are introduced for the first time. The visual result is a strange, mutant double-necked cello, an image that is frozen as the piece ends.

⁵⁶⁷ Ibid.

Even when the video is projected accurately upon the live cellist, there is a shadow on the screen caused by the player and instrument creating the image of a third cellist, further confusing the already ambiguous image and the audience's spatial perception. The score suggests that *Study #3* "could be played as a duo, with the second player sitting right behind the first player,"⁵⁶⁸ possibly adding another visual layer.

The piece explores a three dimensional space: the horizontal and vertical axis, as well as the back and forth and up and down directions of the instrument and bow, cellist, video, and shadow. In a way, it is a spatial etude, exploring and exploiting the 360 degrees range of moving the instrument.

In live performance, as the performer, I must carry the consequences of my previous actions; there is a binding relationship with my *Doppelgänger*—the other I on the video. In this way, playing with the pre-recorded video also means dealing with memory, my previous actions representing another time dimension.⁵⁶⁹ The video is literally filtered through the live performer, and it is impossible to mark a sharp boundary between the real and the digital cellist. The double on the video, as a twin, ghost, or *Doppelgänger*,⁵⁷⁰ also forces the performer to become self-reflective; who am I, who do I see, and what is real in this context? I watch myself perform with myself, melting together and floating apart. It raises questions about the original and copy: there is no longer any unique—no "one of a kind"—the digital clone or avatar, metaphorically intervenes and co-exists with the real world. A virtual reality comes into existence and the chronological time ceases to exist, as the two time-layers merge: everything happens simultaneously.⁵⁷¹

568 Ibid.

569 The investigation of layers of memory relates *Study #3* to Ferneyhough's iconic work *Time and Motion Study II* for cello and electronics, which thematizes the sieving of memory through looping and playback of the material while new layers are added in an unpredictable timing.

570 The idea *Doppelgänger* and its philosophical implications originated in the Romantic period, specifically in Jean Paul's novel, *Siebenkas* (1796). *Doppelgänger* is associated with the psychological realm, the unexplored and hidden elements in conceptions of subjectivity.

571 This can be seen as reminiscent of modernism in the visual arts, where the traditional perspective is abandoned and an object can be presented from several angles simultaneously. Although very different in character, the potential of projecting video upon a performer is explored further in Steen-Andersen's next solo piece *History of My Instrument* (2011) for harp, video and pick-up. In this piece, the video is projected upon a harp covered with white paper, thus serving as a screen, and the harpist intervenes in different ways in the film, taking on different roles. Steen-Andersen's version of the history of the harp is presented chronologically in a humorous and dramatic interplay between harp clichés and experimental noise performed

After several performances of *Study #3*, I have experienced that when my alter ego (the video cellist) starts to deviate from my live movements, some of the spectators become both bewildered and amazed.⁵⁷² The ambiguity formed by the three visual layers creates a space of interpretation where the audience has an active role in the creation of meaning.

The topic of observing oneself, follows the trend in contemporary art of the matizing aspects of reality, thus questioning how we relate to individualism and identity in our society. The theme is a characteristic of several of Steen-Andersen's other works, including *Next To Beside Besides*⁵⁷³ (NTBB) (2004–06) and *Self Simulator* (2009), the latter a construction that enables the performer to see herself from behind as she moves, similar to the view of a surveillance



Figure 39: Charlotte Moorman performs on the TV Cello.

on the prepared harp. History thus becomes a tool for the composer to question what a harp can look like, sound like, and be treated like, effectively breaking down its golden angel-like image through these juxtapositions of elements. The piece gradually releases the harp from its heavy history and opens up a possible future character for the instrument.

572 The following are some excerpts from reviews: "hilarious and moving etude for one cellist," Joshua Kosman, "Other Minds Festival Review: A Whimsical Opener," <http://www.sfgate.com/music/article/Other-Minds-Festival-review-A-whimsical-opener-3378109.php>. "The shadow and video did the same motions, sometimes in reverse, creating an image that looked like fluttering wings." "Her actions ... sometimes humorously reminiscent of the Marx Brothers mirror routine, was an engaging and occasionally disturbing image (I'm not sure why it was disturbing actually)", Percustooth, "Other Minds Festival 17," <http://newmusicbuff.wordpress.com/2012/03/02/other-minds-festival-17>.

573 The NTBB cycle is based on a sequence of performances of the same piece, which are videotaped live, with each performer playing in synchronization with the video of the previous sequence. NTBB "is a series of 'choreographic translations' (translations of the movements or actions, rather than an instrumentation of the resulting sounds) of the piece *Beside Besides* for solo cello." Simon Steen-Andersen, "Next to Beside Besides." http://www.simonsteenandersen.dk/eng_art-nexttobesidebesides.htm. (2005).

camera. The device thus enables one to watch oneself watching the world, appearing as a study in perception of reality.⁵⁷⁴

5.5.1 Projected images in musical works

The incorporation of projected images in musical works has a long history. In her recent book, *Sounding the Gallery: Video and the Rise of Art-Music*, Holly Rogers observes that “[a]lthough its single-authored potential was not yet realized, by 1968, video’s ‘synaesthetic alloy’ was regularly included in audiovisual environments situated in a diverse array of both art and music spaces ...”⁵⁷⁵ The 40-year-old work, *Concerto for TV Cello* (1971) by Nam June Paik (1932–2006) and Charlotte Moorman (1933–1991)⁵⁷⁶ can be seen as a direct forerunner of Steen-Andersen’s *Study #3*. In this cutting-edge piece, they built a cello from three TV monitors on which a bridge and strings were strapped (see Fig. 39).

When Moorman played the instrument, electronic pickups distorted the sounds in real time before feeding the resultant screeches and whines through speakers: “When I play,” explained Moorman in a television interview, “I don’t make

574 “The Self Simulator turns the idea of virtual reality upside down, making reality virtual ... In doing so, the Self Simulator confronts us with ourselves through alienating, and aims to, among other things, make us reorientate and experiment with even the simplest of everyday actions ... being you ... Only reality sets the limits ... The Self Simulator ... as real as it gets.” Simon Steen-Andersen, “Self Simulator V. 1.0,” <http://www.simonsteenandersen.dk/video/SelfSim-demo1.mpg>.

575 Holly Rogers, *Sounding the Gallery: Video and the Rise of Art-Music* (Oxford: Oxford University Press, 2013), p. 141.

576 Charlotte Moorman was called “The Jeanne d’Arc of New Music” by the composer Edgard Varèse. She was a cellist and founder of *New York Avant-Garde Festival* (she arranged 15 festivals between 1963 and 1982 in venues such as Shea Stadium, Grand Central Terminal, the Staten Island Ferry, and the World Trade Center). She also collaborated closely with Paik in the works *Opera Sextronique* (1966) (which led to her being arrested for performing topless, as the score prescribed), and *TV Bra for Living Sculpture* (1969) with a bra made of two small TV monitors. She also collaborated with John Cage, Yoko Ono and Joseph Beuys (who made a felted cello for her), and with Jim McWilliams, in his pieces *Sky Kiss* (1969), in which a naked Moorman was raised heavenwards suspended from helium-filled weather balloons outside Central Park, and *Ice Cello* (1972), in London, in which a naked Moorman performing silently on a cello made of ice till it was melted. It is interesting to mention two statements by Moorman describing her collaboration with Paik: “Paik thinks of me as a work of his, he does not think of me as Charlotte Moorman. He can do with me as he pleases, and I’m very honoured about the whole thing.” In the other statement, Moorman claims a more active and creative role: “All these pieces [we did together] are half mine. In performance, these are not Nam June Paik pieces, but Nam June Paik/Charlotte Moorman pieces. They are collaborations.” Quoted in Rogers, *Sounding the Gallery*, p. 174.

conventional cello sounds, I make TV Cello sounds.” The instrument was connected to several video cameras that transmitted a live, close-circuit feed of the performance onto the cello’s monitors. Moorman’s actions were relayed immediately onto the screens, her video image appearing as though it were miming, a perfect lip-synch to the live events. Both performer and instrument, she was able to play and be played, becoming inextricably linked to the cello and her own image.⁵⁷⁷

The principle of projecting the material from the live performance onto the performing object is the same (the footage from *Study #3* is pre-recorded but simulates real time performance), but unlike *Study #3*, where the body and cello are used as canvas for the projection, in *Concerto for TV Cello* the cello is the technological object itself, in that it is projecting and being projected. The live interacting aspect occurs only on the “TV Cello,” as Moorman’s performance actions affected the image. The audience was also filmed and projected on to the monitors so that they became an integral part of the artwork. Common to both pieces is the absence of traditional cello sounds and the use of non-pitched sounds and noise.

Stefan Prins (b. 1979) has further developed the idea of projecting the image of the musicians on their own bodies and instruments. In the work *Generation Kill* (2012) for cello, percussion, e-guitar, violin, four musicians with game controllers, live-electronics, and live-video, he works with several visual layers projected upon a transparent screen in front of the performers: live video, pre-recorded video, disintegrated live video, and absence of video (illuminating the real time performer or going in black, showing no image).⁵⁷⁸ This multitude of visual layers, ultimately managed by performers using PlayStation game controllers operate as a perception game, the changing images in relation to the sound or absence of sound constantly challenge our sensory experiences. It is as if the (inner) complexity of the music is now facing outwards, searching, and collecting meaningful layers in other media, predominantly the visual domain. In that this complexity blends elements from the audio and spatial dimensions, it primarily challenges the instinctive connection between what we see and hear in a concert situation—the established laws of physics, to which the instruments and performers have had to submit. The digital revolution has developed tools and instruments that are now challenging these given values

577 Rogers, *Sounding the Gallery*, p. 175. A video of Moorman’s performance is available on Youtube: Charlotte Moorman and Nam June Paik, *TV Cello*, <http://www.youtube.com/watch?v=-9lnblGHzUM>.

578 For a performance by Nadar Ensemble, see Stefan Prins, *Generation Kill*, <http://vimeo.com/63164780>.

and situations, and Steen-Andersen is one of those who partake in the new opportunities.

5.5.2 Performing *Study #3*

I want to emphasize that the main challenge in performing *Study #3* is to align the video perfectly in projecting the life size version of the image upon myself. The mimesis is conducted down to the smallest detail with regards to posture, shoulder height, and arm and head position. This must be automated in advance, as I do not see the projection during the live performance unless I turn my head, which is not part of the choreography. The techniques of playing pizzicato in the inverted guitar-position and of turning the cello in the air and upside down, require repeated practice, as the movement should appear effortless and elegant in spite of happening within a short time span.

5.6 Performance practice⁵⁷⁹

Far from the complex modernist scores viewed as autonomous aesthetic objects, Steen-Andersen's clear and sparse scores are closer to "do-it-yourself" manuals, which invite to action and performance. His aim is: "A [score that is a] good representation, but still rather simple ... and then supply a video manual. If it is a very physical thing, you show it, for reference. It is very hard to explain with words, but once you can show it, it is pretty easy."⁵⁸⁰

The score appears to be a set of instructions on how to execute the music, building on certain established norms, and he is inventing symbols or adding explanatory notes where needed (especially in the choreographed sequences). Because the notation, while prescribing the actions, gives little information about the sonic and visual outcome (and many sounds and actions are the

579 In this discussion, I refer to the performance practice derived from the three *Studies*, but I also include other works. I draw here on quotations from the composer regarding other works that are relevant to the performance practice of the *Studies*, as there are great similarities in issues and ideas.

580 Daniel Vezza, "Podcast 25-Simon Steen-Andersen," (2013), <http://composerconversations.com/>. Accessed November 24, 2013. Steen-Andersen has not yet created a video manual. He emphasizes that the goal is to communicate uncommon techniques or to give a key, rather than present it as a model of perfection, which is a danger in presenting an "absolute" model from real life which has circumvented interpretation of the written score.

composer's invention), the score has to be interpreted and performed to come alive.⁵⁸¹ In a recent interview, Steen-Andersen has said, "it is getting less and less abstract what I do, and so, it needs a body, it needs a performance before it can exist, before you can actually see if it works. It needs a situation, it needs an audience, it needs a time and a place."⁵⁸² The coming into being of his works is thus dependent on a concrete reality. In short: the performance constitutes the work.

5.6.1 Two main challenges

There are two new main challenges for the performer in Steen-Andersen's music. The first challenge is the demand for absolutely *legatissimo* execution of all the actions, in spite of any technical obstacles. Regardless of the physical hurdles or long distances traversed on the instrument, the composer is relentless in his demands of almost mechanically execution of perfect *legato*.

The *legato* ideal originates from a "monophonic polyphony," as found in Bach, for example, where a monophonic surface switches between many voices. Steen-Andersen converts the voices to different types of materials or samples, played by a solo performer. The ideal might also originate with electronic music, where samples can be assembled and played back regardless of (human) physical limitations.

For a performer trained in a classical performance practice, where organic movement, breathing, and phrasing are deeply embedded in the physical and musical language, this music is extremely demanding, requiring one to perform very fast and jumpy movements at once, and to sometimes try to create an illusion of *legato* where the ideal cannot possibly be achieved. There is something mechanical in this style of playing, that forms a counterpoint to a more "musical"⁵⁸³ or organic style. My sense of the mechanical properties of the music may originate in the fact that the focus is on movement rather than sound. I

581 This naturally applies to all notated music, but is paramount in the cases that the music cannot be read or imagined based on notation.

582 Vezza, "Podcast 25-Simon Steen-Andersen."

583 With the expressions "organic" movements and "musical" style, I think of an instinctive approach to music, often found among classically trained performers, including myself. My extensive background performing new music makes me a poor example of this, but the bodily approach to classical music sits, precisely—in the body. I recognize that the terms "organic" and "musical" are very vague—and culturally defined—but here I use them generically to describe for an attitude that is fundamental to classical practice. It would be interesting to

must act, regardless of what I hear, which is difficult to bypass for any classically trained musician.

The second challenge is the kinetic implications for the performer, due to the visual domain of the work. Kinetic control over the gestures is obviously fundamental in playing a musical instrument, but in Steen-Andersen's *Studies #1-3*, the gestures must correspond to the visual intent. A good example is found in measures 153–160 of *Study #1*, where the hands meet “as if two objects exchanging kinetic energy,” an illustration of the visual aspect being privileged, and thus influencing the execution (see Fig. 29). This moment demands emphasis on the kinetic impact, in performance that means equal speed of both hands moving towards each other, an action not concurrent with the slowing down the bow speed required for the *pure noise* prescribed simultaneously. In this instance, the habitual hierarchical thinking of sound over gesture has to yield. This is cognitively far from producing gestures stemming from a musical intent, as taught from early age and which is internalized in classical performance practice. In *Study #3*, this idea of kinetic energy is cultivated as one of the main motifs, as the virtual and the live cellists exchange and complete each other's actions.⁵⁸⁴ When one cellist accelerates the bow and stops abruptly in the middle of the bow, the other cellist starts to move fast in the middle of her bow, as if hit by the other bow. These movements happen repeatedly, and later a similar “chamber play” takes place as one of the cellists plays a pizzicato glissando ending in the middle of the fingerboard, exactly where the other cellist take over and complete the action to the top. In order to carry out these ideas, the performer must investigate her own movement patterns, so that the actions can become coherent and identical at each recurrence. Perceiving the exact physical position of the body in this manner is more related to the body control of dancers than musicians. The visual sensitivity and kinesthetic awareness are skills that can be trained, for example by working with visual feedback (mirror, video, or instructor). Classical performance practice does not prepare musicians for this degree of visual awareness. This is a way of thinking about music that requires

look into these notions of what constitutes natural, organic and musical, and where the terms originate in relation to music, but this is outside the scope of this study.

584 Another composer examining the kinetic aspect of music is German composer Johannes Kreidler (b. 1980). *Kinect Studies #1 and #2* for “Microsoft kinect 3d sensor” are video works in which he uses his body in kinetic experiments conceptualizing 3D, sound, and space. Through the decoupling of instrumental sound and physical movement, virtual instruments emerge in an unexpected and humoristic setting.

a remapping of the performers instincts, as it goes against the habitual patterns and aims, at times, for the utopian.

After spending considerable time with Steen-Andersen's works, what I perceive as a contradiction between "musical" and "mechanical" has changed. I have tried to imagine how a dancer would simply and straightforwardly move the arm a certain distance at a certain speed. I think my initial mechanical feeling originated because I had to leave my familiar, ingrained ways of playing and thinking, and do something quite different with my familiar tools—the cello and bow.

I now think that my notion of what is organic and musical in performance is related to the habitual and traditional attitude that has conditioned performance practice and constructed truths and dichotomies that continue to persist. The remapping opened my eyes to unexamined assumptions and formerly hidden properties of my original practice. This applies particularly to the question of what interpretation is in this context and the notion of musicality.

5.6.2 Interpretation?

Considering relative youth of the performance practice for this novel notation, and the lack of an established tradition, one might assume there would be a wide potential for interpretational freedom in Steen-Andersen's *Studies #1-3*. Yet, because the music is constructed around sparse, yet strong ideas, often originating in a physical realm, these ideas need realization if the result is to be close to the composer's intentions. In this respect, *Texttreue*—absolute faithfulness to the instructions—is crucial, as the music will to a great degree cease to function if not performed accurately. Where, then, is the room for interpretation in a system characterized by such accuracy and strict, "absolute" instructions? Is obeying every rule a form of slavery? What consequence does this have for the performer?

The answers depend upon how we view the term interpretation. The term originates from the Latin *interpretamentum/interpretatio* and can mean translation and explanation. According to Oxford Companion to Music, interpretation is:

The process by which a performer translates a work from notation into artistically valid sound. Because of the ambiguity inherent in musical notation, a performer

must make important decisions about the meaning and realization of aspects of a work which the composer cannot clearly prescribe.⁵⁸⁵

Steen-Andersen's works pose a dilemma: regardless of how concrete the notation claims to be, it presents a wealth of ambiguities, aspects that must be understood and translated into action. The notation and playing techniques are still in an experimental phase where things often are unclear, and few elements are standardized and established. For this reason, Steen-Andersen is deeply involved in the interpretation and translation of his own gestures, signs, and sounds. It seems that, for now at least, he considers the means of communication at his disposal insufficiently sophisticated to allow him to let go of his control, something that leads to his "co-translation" activities with the performers of his works.

Steen-Andersen's recurring mantra is the *legatissimo* and consistency in playing distinctive identities of each timbre. Steen-Andersen's specificity, and his focus on detail right up to the moment the concert starts, can be overwhelming, and I, as the performer, sometimes feel my autonomy restricted, whereas the actual concert experience, strangely enough, feels personal and unique. Playing the pieces on my instrument, with my playing body, and practicing the movements, have contributed to the feeling that the pieces have become my own. The interpretational freedom has been removed from the traditional domain of sound production and phrasing, to the corporeal domain of embodying the instrument. The physical and visual execution of the studies is inextricably linked with the identity of the work. Each interpretation will be unique, as each musician's body and instrument, as well as the relationship between them, are unique.

The seemingly controlling composer must be viewed in this context: the experience is strict in one dimension and free in another, something that is evident in the variability of the different performances. This also resonates with one of the basic ideas of modernism—the dissolving of the strictness/freedom paradox.

5.7 The hyper-idiomatic composition

The term idiomatic is traditionally applied to music written within the natural physical limitations of the specific instrument and human body. As the term is

⁵⁸⁵ Bryan White, "Interpretation," in *The Oxford Companion to Music*. *Oxford Music Online* (Oxford University Press).

used also to describe the style of effortless virtuosic playing, some musicians would claim that Steen-Andersen's works are quite the opposite of idiomatic, with their unconventional techniques and physical challenges. But his approach is idiomatic, in the sense that he uses the physical instrument with all its concrete and particular attributes, as the point of departure:

Apparently the movement from instrumentation dependent to hyper-idiomatic composition is parallel to the movement from "abstract" to "concrete" music. Somewhere in this movement composition and instrumentation melts together and it no longer makes sense to look at the music detached from the instrument it is played on. At the extreme point of this movement exists a music which uses material 100% dictated by the physics of the instrument and the musician and where the composition becomes a choreography for instrument and musician—with sound as a consequence... Here the relationship between action and resulting sound gets turned upside down: the movement is no longer a *mean* to realize a sound idea and therefore a "product" of a sound composition, in contrary the sound is the product of a movement composition and the movement is no longer *mean* but *objective* in itself. The sounding part of the music is the sound of this movement, the sound of *the work*, the sound of a music composed within the logics and problems of the physical and the movements. (The music can for example be linear even though the sound of it isn't!).⁵⁸⁶

A paradox occurs when a composer claims that a work is idiomatic, but the "same" when played on other instruments:

When the actual composition takes place within the situations and the movements these can be notated abstractly and performed on another instrument (with the typical movements and parallel situations of this particular instrument), and it will be the same piece, even though it sounds completely different(!)—in the same way that "Kunst der Fuge" is the same piece performed on an organ or by a string quartet—although realized through essentially different types of movements. The *hyper-idiomatic* becomes an abstract idea—an X in the equation, which can be filled out with the unique situations of the one or the other instrument.⁵⁸⁷

Has Steen-Andersen emancipated the movement with his *hyper-idiomatic* approach or has he just turned the hierarchical relationship between sound and movement on its head? And how has he transferred meaning from the unique idiomatic characteristics of one instrument to those of another?

⁵⁸⁶ Steen-Andersen, writing in connection with *Next To Beside Besides*; his comments apply equally well to *Studies #1-3*. Steen-Andersen, "Next to Beside Besides."

⁵⁸⁷ Ibid. Steen-Andersen invites other stringed instruments and instruments from other families to perform *Studies #1-3*. In Berlin, on July 5, 2011, I heard flautist Erik Drescher perform *Study #2* for *Glissandoflöte* and Whammy.

Radical in this context is that Steen-Andersen claims that his work is the same, when the gestural and sonic results are so different. He sees the abstract notation of the concrete gestures as the connecting link: from concrete actions, to abstract notation, back to concrete actions but translated to another “instrumental language” (idiomaticism). By claiming this, he makes notation the common denominator in how we relate to the performance of music as a language. He calls notation abstract, which is then interpreted concretely within the next musician’s idiomatic reality. In 1961 Cornelius Cardew wrote:

What I am looking for is a notation (way of writing a text) where fidelity to this text is possible. Perhaps a notation of the way in which instruments ‘actually are played’. This leads to the question: what actions are actually involved in playing? And here the concept of the ‘hypothetically imagined sound’ becomes dubious: on what basis does the player imagine the sound? On the basis of his understanding of the notation? But the process of imagining cannot be included in the notation!⁵⁸⁸

Cardew, a prime explorer of indeterminate and graphic notation speaks here of notating the way in which instruments “actually are played.” In the same way, Steen-Andersen tries to notate, as concretely as he can, in the language of the instruments—in the way in which they “actually are played.”

All notation is abstract, in that it symbolizes or represents something. The question is what and how this notation communicates. Steen-Andersen’s general avoidance of pitched material is a notable feature of his notation, which creates an abstraction of the material that greatly facilitates translation to other instruments.⁵⁸⁹ In *Study #1* the words for tessitura are “deep” and “high”, thus transferable to any stringed instrument (in theory, to any instrument), the same is the case with the two-octave span in *Study #2*. Nevertheless, the composer’s claim that the piece sounds completely different on different instruments is not unequivocal. Several parameters are given: time, meter, rhythm, articulation, duration, dynamics, and register—in short, form, structure, and a general skeleton of the piece are fixed. What is often omitted is pitch (where it is required) and a detailed description of timbre.⁵⁹⁰ I think the identities of the given parameters are strong enough to identify the pieces played by any instrument. Perhaps the

588 Cornelius Cardew, “Notation: Interpretation, Etc.,” *Tempo*, no. 58 (1961): p. 24.

589 Although the use of noise or unpitched sounds has been used in music for 100 years, it is still often perceived as abstract. A reason for this could be that the enormous spectrum of sounds within this category are not classified and analysed as pitched sounds are.

590 It is interesting to see that pitch and timbre are parameters often left to the performer (“set free”) in this context. These are the same parameters left to the performer in Feldman’s *Projection I* and *Intersection IV*, discussed in Chapter Two.

composer emphasized the *sound* in “sounds completely different” on different instruments rather than that the piece should be unrecognizable. It does sound different, because each instrument fills out the blank spaces, which is its specific timbre and sound. In this way, the score becomes a “readymade,” that can be personalized and fitted to each musician, a one-size fits all, that is customized and will appear different on each individual.

What of Steen-Andersen’s claim that in Bach’s *Die Kunst der Fuge* a performance on string quartet is the same piece as on the organ, but executed with different movements, while in his own music, it is the same piece when different instruments play “the same” movements within their own idiomatic realm, which results in very different sounds? Bach’s score consists of familiar signs that represent the sounding of known parameters such as pitch and rhythm. These are interpreted and translated into sound and movements, with emphasis on sound in the classical performance practice. Steen-Andersen’s scores are composed employing partly unknown symbols representing instructions for movement. These are interpreted and translated to movements and sounds, with emphasis on movements. Can we regard the pieces in these two situations as being “the same” in a similar manner? In Bach, the sounding outcome in relation to harmony and pitch are the identifiable factors embedded in the history of musical theory and style. It is this that makes the piece “the same” in any performance medium. The unchanging principles that create the “sameness” in Simon’s pieces are the movements, a parameter not yet established as an autonomous parameter in music. If every instrumentalist were to execute the exact same movements, the spectator would perhaps recognize the movements of the piece as being partly “the same.” The challenge occurs when the movements are performed idiomatically, that is, with emphasis on translation of the movements to the specific idiomatic realm. The *sameness* of the movements thus highlights the *differences* between the instruments. The patterns that are unique to each instrument are revealed in the choreographies. “Sameness” as an idea of a set of designated movements required to perform the piece can thus be seen as an abstract idea, as the sameness *per se* disappears through the physical translations to movements which reveal the idiosyncratic movements to each instrument. The translation of this idea becomes the crucial point. Where the performers of the Bach translate the descriptive score into their (sounding) instrumental realm, Steen-Andersen’s performers translate the prescriptive score containing the idea of the movements into their instrumental realm. The strong position held by sound can obscure the sameness in the Steen-Andersen’s piece, as the sonic outcomes may diverge significantly. To claim that the “same” sound with different movements is similar to the “same” movements with different sounds then becomes more a polemical position statement

than a working argument. By claiming that the difference between Bach on organ and string quartet lies in the difference of movements made by the performers, he is challenging fundamental assumptions and trying to get us away from the traditional primacy of sound.

The identity of the work does not reside in the variation of sonic outcome or in the different gestures, but in the very mediation of the gestures, what Steen-Andersen calls “choreographical translations.”⁵⁹¹ The mediation, the execution of the gestures, is the core of the work, and the sound is what may come out of these gestures—“sound of movement.” The gesture has become “means without an end,” an expression by Italian philosopher Giorgio Agamben, discussed in Chapter Three. Lachenmann composes with familiar instrumental gestures in his nearly soundless passages; Steen-Andersen brings the use of gestural material a step further, systematically investigating and exploiting the mediation of the movements in themselves. The means in this case are the performers’ intentionality in interpreting the gestures as prescribed in the score.⁵⁹² At the core of the hyper-idiomatic is thus the way the different kinds and functions of notation trigger performers’ intention in the moment of performance. The descriptive notation in Bach triggers a sound ideal, and the instrumental practice is a vehicle to produce that ideal. In Steen-Andersen’s hyper-idiomatic realm, the instrumental practice is valued in itself and not regarded as a vehicle or a means to express the music. For the performer, there is a major psychological distinction between these different intentions in practice and performance: sound of the movement or movement of the sound. This represents a significant shift in the prevalent notion of the work-concept in which the score is viewed as the dominant carrier of meaning, and challenges the classical performance practice with its ideal of *Werktreue*.

The mediations of translating the choreographical movements create a visual unison:

The cycle is in other words not just an open row of variations, versions or solutions of different problems and methods of translation—it also gives the opportunity to put together innumerable combinations of heterophonically [sic] sounding, but

591 Steen-Andersen, “Next to Beside Besides.”

592 This is a parallel to John Cage’s silent 4’33”, composed over 60 years ago (1952). The piece is for any instrument and is staged in a concert situation with all its rituals and expectations. The main elements in music as we define it have been removed, only the time is left, together with the now empty rituals of entering the stage, the performers preparing themselves as if ready to play, and the turning of pages in the score

movement wise “unison” ensemble compositions, where difference and equality are in focus—where the translation situation in itself becomes a musical parameter.⁵⁹³

The translation situation is the crucial point in this logic, as it is through and within the mediation that it takes place. As a performer, I cannot remain indifferent or distant to Steen-Andersen’s music, as the mediation means to translate it into the highly personal instrumental reality, which naturally varies from performer to performer.

Prescriptive notation is not new in itself, of course, a number of composers since the 1950s have made use of this notation. What is innovative about Steen-Andersen’s attitude is that he has isolated movements and given them value as an individual parameter in his hyper-idiomatic paradigm, altering the hierarchical relationships between sound and gesture. The outcome of the hyper-idiomatic experiment might not be radical, but it constitutes a fundamental change in thinking: movements communicate in their own right, they are not simply carriers of sound. This is radical indeed.

Obtaining a visual unison with one or more performers demands new ways of practicing and thinking.⁵⁹⁴ The expanded repertoire of and focus on physical movements required for *Studies #1–3* associate them with music theatre, performance art and even dance, and can thus be seen to expand the traditional role of the performer and the cello.

Could these Studies be performed on the cello by non-cellists? That we can even ask this question is perhaps an indication of how far the instrumental practice has been stretched and moved away from the conventional practice.⁵⁹⁵ I think the answer for *Study #3*, where the bow-movements are very repetitive and the left hand is only engaged in the glissandos in the middle of the piece, may be yes. But *Studies #1* and *#2* are too virtuosic in ways specific to the cello to be convincingly performed by someone unpracticed on the instrument.⁵⁹⁶

593 Steen-Andersen, “Next to Beside Besides.”

594 An excellent example of a visual unison between a cellist and a snare drum can be seen in the performance of Steen-Andersen’s “Beside Besides,” performed by the Ume Duo: Karolina Öhman, cello and Erika Öhman, percussion (16.10.2012). <http://www.youtube.com/watch?v=OgZw1ve3H6c>.

595 As an example of a non-cellist playing a cello-piece, percussionist Håkon Stene is studying Lachenmann’s *Pression*, a piece (as discussed in Chapter Three), which mainly consists of non-conventional cello techniques.

596 I mean by this that the pieces stem from a virtuosity that is based on the classical cello-technique, which for example involve technical skills as bow-control and left hand tactility, skills difficult to achieve for non-trained cellists.

I have discussed how the term hyper-idiomatic can mean the concrete and physical translation from one unique instrumental language (idiomaticism) to another. The term idiomatic is here regarded as the concrete and physical handling of the instrument. Combined with the prefix “hyper”—meaning *excessive*, *exceedingly* or *overly*—hyper-idiomatic can thus be interpreted as an exceedingly concrete relationship with the instrument—as concrete as you can get. In the following, I look at the impact of the concrete approach to the instrument

5.7.1 Concrete instrumental practice

As we have seen, the notion of the concrete permeates Steen-Andersen’s instrumental writing practice. It is as if he quite cheekily asks “what is a string instrument?” and answers that it is a sound-producing object that can be experimented with and reinvented, but that has a striking shape and size that can be used in a visual choreography. The cello thus becomes an everyday object introduced to the (hands on) everyday world of knocking, scraping and touching. Apart from the obvious influence from “musique concrète,” this aesthetic owes a debt to the American heritage from the “found objects” and “ready mades” of Duchamp and Cage.

In his essay “That Old Thing, Art...,” Roland Barthes says: “What pop art wants is to desymbolize the object, to give it the obtuse and matte stubbornness of a fact. (John Cage: ‘The object is a fact, not a symbol’).”⁵⁹⁷ Steen-Andersen rids the cello of a deeper meaning, he works on the surface, with what is visible and tangible and understood directly. Using the cello as a found object, he removes its historical connotations and the symbolic meaning of the cello as instrument. The cello turned upside down, resting on its head, in *Study #3*, is the ultimate attempt desymbolizing of the cello as a historical object—he has quite literally turned the symbol on its head.⁵⁹⁸ But, as he chooses a cello, with 400 years of music inscribed in its very form, rather than a homemade instrument or other objects, the history does not so easily rub off. The concrete “disrespect” works precisely *because* this beautiful instrument—with its extensive repertoire of canonical works—commands such deeply ingrained respect. By challenging this

597 Roland Barthes, “That Old Thing, Art...” in *The Responsibility of Forms* (University of California Press, 1991), pp. 201–2.

598 One often finds a humorous dimension in Steen-Andersen’s works, such as the cello on his head and a megaphone performing a cadence (in *On And Off And To And Fro*). Håkon Stene (a friend of the composer) has called this “slapstick avant-garde.” See Daniel Vezza, “Podcast 25-Simon Steen-Andersen.” <http://composerconversations.com/>.

respect in the way he uses traditional musical objects, Steen-Andersen plays with history.

In Steen-Andersen's inclination towards the concrete aspects in music, both in notation and execution, he owes a debt to Lachenmann, who spoke of "energetic aspect of sounds."⁵⁹⁹ Similarly Steen-Andersen says, "for me the movement always had a goal, that is to produce a lot of energy. An intense situation."⁶⁰⁰ When Steen-Andersen mutes the cello (in *Studies #2* and *#3*), he "strangles" its real sound—the resonance from the instrumental body. By silencing the instrument's natural sound, he allows attention to turn to the actions of the instrumental process—the sound of resistance of the bow against strings and wood, is brought forward. Richard Barrett has spoken of a "mechanical modality whose basis is the construction of the instrument and the 'ergonomics' of fingerings, embouchure, breath and so on ..."⁶⁰¹ Steen-Andersen extends this modality, he amplifies it, enlarges it, and stretches it out in time. Where Hübler, in *Opus breve*, bakes aspects of instrumental and notational practice into the work, Steen-Andersen brings the bodily gestures that are usually asked to serve the music with as little attention to themselves as possible, to the center of attention. Rather than hiding the position shift of two octaves, he draws attention to the journey of the arm, the distance and the time it takes, and the sound it produces:

Within the instrumental grey zones, a whole micro-world of tiny sounds exist that under normal circumstances are too weak to be heard or are hidden or masked by the tones of the normal dynamic register. These are the sounds of the instrument's physical materials—the wood, metal, bow-hairs—and the friction or vibration of their meeting with each other or with the skin on the fingers or lips; it is the sound of the instrument builder's engineering work in the form of ingenious key-work, multi-part keyboard constructions and differential densities of string windings; it is the sound of the labor of the hardworking instrumentalist, which the classical *playing-with-ease*-ideal tries to keep secret—it is the sound of the position change, the intake of breath, the swallowing, the feedback-system of the irregularity and nervousness; it is the sound of the *human being behind the instrument*.⁶⁰²

599 Steenhuisen, "Interview with Helmut Lachenmann—Toronto, 2003," p. 9.

600 Vezza, "Podcast 25-Simon Steen-Andersen."

601 Richard Barrett, "Standpoint and Sightlines (provisional) 1995—beyond 'postmodernism!'" In *Diskurse zur gegenwärtigen Musikkultur vom 1994: 13 Beiträge vom 9. internationalen studentischen Symposium für Musikwissenschaft in Giessen 1994*, ed. Nina Polaschegg (Regensburg: ConBrio, 1996), p. 27

602 Simon Steen-Andersen, "På tærsklen til noget uendeligt småt." <http://www.simonsteenandersen.dk/Taerskel.htm>. My translation. "I instrumentets grå zone findes

By stripping the instrument of its historical baggage, and treating it as an object, Steen-Andersen re-introduces the human factor—the human bodies who play and create the instrument. This is crucial information to bring back to the performance practice.

Lachenmann's skepticism about amplification has kept his works in the acoustic realm: "A loudspeaker is a totally sterile instrument. Even the most exciting sounds are no longer exciting when projected through a loudspeaker. There is no danger in it anymore ... With electronics, there is not ambivalence. There is no history there."⁶⁰³ Steen-Andersen, on the contrary, brings the concrete instrumental music further by his extensive use of amplification. He uses microphone and camera in an exploratory way, as microscope, enabling earlier hidden and inconspicuous sounds and movements to step into the limelight. He brings microphones, loudspeakers, megaphones, video cameras and monitors in as full-fledged instruments, equal to the acoustic instruments in the ensemble. For each piece, he "builds" a new instrument,⁶⁰⁴ repeating Lachenmann's famous dictum: "...composing music means inventing an imaginary 'instrument' and showing it through an exclusive and not so easily repeatable context."⁶⁰⁵

As a child of the technological revolution, Steen-Andersen incorporates the consequences of his questions in his artistic language. It is interesting to observe that he does not use technology to create abstract layers in his art; rather, it is always a tool in a direct, generally simple fashion.

en hel mikroverden af små lyde, der under normale omstændigheder er for svage til at blive hørt eller er skjult eller overdøvet af tonerne i det normale dynamiske register. Det er lydene af instrumentets fysiske materialer—træet, metallet, buehårene—og friktionen eller vibrationen i deres møde med hinanden eller huden på fingrene eller læberne; det er lyden af instrumentbyggerens ingeniørarbejde i form af sindrige klap-systemer, mangleddede tangentkonstruktioner og differentierede tæthedsgrader af strengomviklinger; det er lyden af *selve arbejdet*, instrumentalistens hårdtarbejdende fabrik forsøgt hemmeligholdt i det klassiske *med-legende-lethed*-ideals navn—det er lyden af positionsskiftet, åndedrættet, synkebevægelsen, uregelmæssigheden og nervøsitetsens feedback-system; det er lyden af *mennesket bag instrumentet*."

603 Steenhuisen, "Interview with Helmut Lachenmann—Toronto, 2003," p. 10.

604 A good example is his recent piece, *Black Box Music* (2012) for percussion solo, amplified box, 15 instruments, and video. In this piece, the percussionist Håkon Stene conducts the ensemble from a small black box, which is projected on the wall, grotesquely enlarged giving the audience an illusion of a real-size stage performance. The piece explores the gestural communication through a great repertoire of hand and finger movements.

605 Abigail Heathcote, "Sound Structures, Transformations, and Broken Magic : An Interview with Helmut Lachenmann," in *Contemporary Music: Theoretical and Philosophical Perspectives* ed. I. Deliège & M. Paddison (Aldershot: Ashgate, 2010), p. 348.

5.7.2 Positive complexity

In his paper: “Between Complexity and Simplicity” Steen-Andersen introduced the term “positive complexity,” in an attempt to create a broader understanding of the concept, as

[a] richness and a presence at many levels at the same time, inviting and offering approaches in many different ways. A complexity consisting of many extremely simple and direct elements and aspects of the music and of the performance situation and its context to create even more layers adding to the complexity, the richness and ambiguity, while, on the other hand, being able to work as different entrances or invitations to approach the music and the experience.⁶⁰⁶

Steen-Andersen discusses the uncritical use of the term complexity,⁶⁰⁷ which by no means is a guarantee that the listener perceives complexity. He says:

The use of such notions may say something about the music itself but not necessarily anything about the experience of the music... an object or a situation is no longer defined by its musical density or action level, but by its experience density or ambiguity, which means that a seemingly simple or non-dense object or situation with many implications and references and with a high level of ambiguity or inner contradiction should no longer be labeled as simple or simplistic, but indeed as a complex object or situation with the potential for creating complex experiences.⁶⁰⁸

He challenges the notion that the complex music necessarily involves a complex listening experience, or conversely, that so-called simplicity is so perceived by the listener. In doing so he confronts the power of definition in contemporary music, where the hegemonies of the composers and theorists have been weighty. He moves the power of definition to the listener, and thus challenges several dogmas embedded in the discourse. In doing so he is also admitting that there might be more to his own music than the concrete reality presented on stage.

In several of Steen-Andersen’s statements we can trace the dialectic of his own discourse. Consequently, we cannot take everything he says as face value. Looking at his practice in a historical context, one can see that he is young, and he is trying to establish himself and his own position as a composer. In this

606 Simon Steen-Anderson, “Between Complexity and Simplicity: New Music and the Audience,” in *Classical music and modern classical music in globalization and consumer society*, ed. Karl Aage Rasmussen (Rome: Accademia de Danimarca, 2010), p. 66.

607 The indiscriminate use of the term complexity (as discussed in Chapter Four), is predominantly the result of misreading by critics rather than located in the music itself.

608 Steen-Andersen, “Between Complexity and Simplicity,” p. 66.

chapter, I have gone into Steen-Andersen's statements because it was important to see what they could shed light on at this time. To return to the caveat introduced at the outset of this chapter: this is a status report, I speak as a witness from the years 2010–2013, this is history happening now, but without a (necessary) distance to go further in depth.

5.8 Conclusion

In breaking with tradition by challenging the “natural” and organic movements embedded in classical performance practice, Steen-Andersen's music suggests new relationships between performer and instrument. The cello has let go of its dignity and aura by being put on its head, an action both concrete and symbolic, which opens up a new way of thinking about and treating the cello. The choreographic elements and the use of video, whammy pedal, and amplification, bring new and different parameters into the performance practice.

To return to what Steen-Andersen wrote in connection with the hyper-idiomatic: “It no longer makes sense to look at the music detached from the instrument it is played on.” In this way, the cello and music has become one, thus the practice has become an essential element with the cello and its performer playing the key role. This is a new practice and a new way to think about practice.

In the course of our collaboration on his *Studies*, Steen-Andersen wrote to me: “My idea with the trilogy was that it overall should be a movement in the direction of the visual side of string playing, culminating in #3 where the balance between sound and movement should be crossed.”⁶⁰⁹ The trajectory of the trilogy can well be seen as the movement slowly being emancipated from the sound/movement correspondence, eventually gaining its independence. It can also be seen as a tale about the development in contemporary music: first presenting movement as a separate parameter, leaving the classical performance practice behind. Second, using technology to transform the sound of the cello and challenge the visual/aural correspondence. Third, using video as an instrument to create a virtual reality in performance, introducing visuality and spatiality as a compositional parameters. Challenging the long tradition of performing on a cello (Steen-Andersen uses tradition and breaks free of it at the same time), the sound is also freed from the heavy connotations of the string sound,

609 Private email April 6, 2012.

concretely moving into an abstract sound world. Most importantly, though, the studies have reinstated the human body in performance, the performing body as a concrete and decisive factor in constituting a work.⁶¹⁰ With all this, Steen-Andersen opens up a whole new field of perception and interpretation. He creates a playful yet serious laboratory for looking at and listening to performance. He is not seeking closed circles or resolution in his works. Rather, the perceptual shift between movements back and forth stems from a dialectic approach:⁶¹¹ “For me the ideal situation is that the music is balanced midway between two modes or ways of being experienced—that it is both.”⁶¹² Critical reflection permeates this practice, questioning the habitual thinking, playing and listening, an approach not unlike Lachenmann’s *musique concrete instrumentale* which aimed at reformulating the concept of beauty, offering people to listen with “new ears” through alienation, that is, placing strange sound elements in a known context. Steen-Andersen is bringing the alienation effect to another level, he incorporates not only the sound and the scores, he also brings in the visual and spatial spheres in an unprecedented fashion. By doing so, he questions the inherited ritual of the concert, challenging the performers and audience to reorient themselves in this transmedial reality. The studies thus become perceptual studies of experiencing with all our senses: a small-scale *Gesamtkunstwerk* of our time.

610 The human body has been notably absent in the western concert tradition, from the tradition of performers dressing uniformly in black so that the focus is not removed from the music, to “pure” electronic music freed from the disturbing presence of the human mediator.

611 Steen-Andersen studied with Matthias Spahlinger in Freiburg and is clearly influenced by Lachenmann’s aesthetics.

612 Steen-Andersen in Hytten, “Det moderne projekt lever videre,” p. 32. My translation. “For mig er den optimale situasjon, at musikken balancerer midt imellem to tilstande eller måder at blive oplyst på—at den er både og”.

6 The polyphonic performer

6.1 Introduction

My object of study, as presented in Chapter One, has been performance practice in music for solo cello by Morton Feldman, Helmut Lachenmann, Klaus K. Hübler, and Simon Steen-Andersen. The aim of my dissertation has been to investigate and conceptualize a performance practice in selected contemporary cello music since 1950. My objective has been to generate new knowledge about what constitutes the practice of the contemporary music cellist: the different approaches to the music, the resources and expertise called for, and the kinds of challenges they represent. I hope this knowledge will help to clarify a contemporary performance practice, and contribute to an understanding of how the musician's role has evolved during the last 60 years and more. My own practice as a cellist has been central to this investigation. In general terms, my hypothesis was that the performer needs new skills and expertise in approaching contemporary music after 1950, skills and knowledge that extend beyond the confines of the traditional classical education and musicianship.

I have tested this hypothesis through “experiments,” as it were—practicing, performing, recording, analyzing, studying, and finally writing about seven works by these four composers. The results of each experiment are recounted in each chapter, but in this final chapter I revisit my findings, with particular relation to the four overarching themes introduced in Chapter One: *notation*, *Werktreue*, *idiomaticism*, and *body*.

This chapter thus offers both a brief summary of my findings in the previous chapters, and an attempt to distill more sharply and explicitly what each work may have contributed to my investigations. After this thematic summary, I will look at certain aspects of the idea of “The polyphonic performer,” I will look at what kind of knowledge this study has produced and to whom this knowledge may be relevant, and I will briefly reflect upon the methods that led to this knowledge.

6.1.1 Selection

My criteria for choosing the works were that they all represent significant aesthetic shifts since 1950 and have pioneered certain notational and playing techniques that have conditioned later practices. The works also represent different points in time and belong to differing compositional and notational practices. Their strong individuality and clarity concerning musical poetics and aesthetics make them highly suitable for highlighting various aspects of performance practice addressed by my questions in this dissertation. A necessary condition and motivation for the selection, considering the full five years spent with this music, was that I appreciate the works.

Although it can be seen to cover some of the major directions in postwar contemporary music, my selection is by no means representative as a general overview, as several central works, directions and tendencies are left out. The works I have chosen belong to a selection of aesthetic and compositional directions, but I would very probably have come to different conclusions had I chosen other works, even within the same directions. The knowledge and the conclusions I draw from my chosen material, is exactly that—specific knowledge concerning seven specific works. Chapters 2–5 are thus independent investigations of works investigating specific questions that have arisen from one performer’s engagement with them.

In the next section, I discuss my findings in these chapters in light of the four main themes: *notation*, *Werktreue*, *idiomaticism* and *body*.

6.2 Notation

In his search “to free the sounds from a compositional rhetoric,” Morton Feldman uses the grid as the basis for notating *Projection I* and *Intersection IV*.

Art critic Rosalind Krauss has written regarding the grid: “For those for whom art begins in a kind of originary purity, the grid was emblematic of the sheer disinterestedness of the work of art, its absolute purposelessness, from which it derived the promise of its autonomy.”⁶¹³ In this way, in employing the grid Feldman can be seen as actively distinguishing himself from the prevailing compositional musical poetics and aesthetics predominantly being developed in Europe, and staking his claim for autonomy of his music. Krauss continues: “The absolute stasis of the grid, its lack of hierarchy, of center, of inflection, emphasizes not only its anti-referential character, but—more importantly—its hostility to narrative.”⁶¹⁴ In Feldman’s search for a “totally abstract sonic adventure,” the idea of the anti-referential and non-linear was essential.

This is purely prescriptive notation: it does not reveal how it is actually to be performed. It requires an understanding of code by the performer in order to play it as “the rules” must have been read and understood in advance. This almost has the nature of a board game: the player (musical and metaphorical) moves within the squares of the grid according to a specific set of rules. The score also has a visual value in itself. To abstract the notes, Feldman removed them visually from the traditional sound domain—something that had a great psychological impact on the performer. The notation, and not least the indeterminate performance aspect, was radical at the time, indicating a clear step away from the traditional performance practice.

The idiosyncratic notation of *Pression* is predominantly prescriptive, but includes some elements from descriptive notation. Helmut Lachenmann’s important innovation, the bridge clef, conceptualizes the physical space of the instrument: now the music originates on the instrument, not in some abstract soundscape one imagines while reading the score. The notation becomes a mapping of a physical, material domain. Through the proliferation and renown of Lachenmann’s music, the performance practice has refined and developed his style of prescriptive notation. Over the last 43 years, the predominantly non-pitched sound world in his music has evolved into a multifaceted and nuanced sonic palette, and the playing techniques have started to seep into the mainstream performance practice. In Chapter Three, discussing the 2010 revised edition of *Pression*, we saw how parts of the notation that were experimental and cutting edge when the work was written, had now become part of the

613 Rosalind E. Krauss, *The Originality of the Avant-Garde and Other Modernist Myths* (Cambridge, MA: MIT Press, 1985), p. 158.

614 Ibid.

established notational repertoire, so that the notation could now be made more specific, in line with the development of the general performance practice of contemporary music.

In *Opus breve*, Klaus K. Hübler distributes the performative actions over three staves, one for the left hand, one for the bow's back and forth rhythm, and one for the bow's string-placement (including rhythmic information). In addition, separate information strands about bow and left-hand articulation are given, as well as detailed instructions concerning bow-placement on the perpendicular axis (between *sul ponticello* and *sul tasto*). Hübler also applies an unusual specificity of dynamics, using different dynamics for each note in a four-note chord, for example. He uses the familiar notation system as a vehicle for the much less common practice of separating out the practice constituents and preparing them as if they were different voices in a score. It is a radical practice, in which an ensemble consisting of ten fingers and two arms, a cello and a bow, becomes a polyphony. The body must divide its attention into the separate limbs and functions: it must desynchronize previously synchronized movements, in order to solve these separate physical tasks. However, because they are solved by one body and mind using only one instrument, many of the decoupled actions are re-coupled in the act of performance. The audience may thus be ignorant of the score's complexity, so this can be seen as complexity primarily on the compositional, notational, and performative level. The combination of all the various elements creates a tremendous pressure on performers who must use all their resources to play the score, which is regarded by many to be among the most difficult in the repertoire.

In Simon Steen-Andersen *Studies #1-3*, the notation is stripped down to the bare necessities, to a minimum of what is needed for understanding what to do. This is prescriptive notation, apart from certain descriptive elements such as time signatures, rhythms, and durations. The writing is as pragmatic as possible, aiming at a direct and logical flow of information to the performer, turning them into performer's scores rather than readers' and analyst's scores. Vital musical information is omitted from score, and must be reconstructed orally or through video instructions. Due to these under-communicated elements, a kind of tacit contract is implicit in his notation; that the actions and procedures rather than the sonic result, are his focus.

6.2.1 Prescriptive notation and action notation

As we have seen, all the selected works represent new notational and compositional strategies, and they have departed from descriptive notation. Nevertheless, they represent very diverse approaches to prescriptiveness in their manner of notation. They all prescribe actions, but with highly varied means and consequences. In order to understand Feldman's scores, the instructions in the written text are crucial. The graphic score itself does not convey the information required for performance in a direct way. Lachenmann's *Pression* offers a more intuitive approach. The bridge clef gives instant recognition as to where to perform the actions, and several symbols are highly associative, offering a visceral link between eye and hands. In Hübler's *Opus breve*, all the actions are notated with traditional characters, although the textual instructions are needed for information about the functions of the two upper staves. The division of the score into extra staves communicates directly where the action unfolds, as each staff is assigned specific action parameters. In one way, this makes this score as direct and visceral as that of *Pression*, for example the left hand plays tremolo or the right hand quintuplet is easily recognized separately. The major difference between the two is that Lachenmann treats the cello largely as a monophonic instrument whereas Hübler treats it as a polyphonic one.⁶¹⁵ This reflects the writing in that Hübler's decoupled actions must be performed simultaneously in order to obtain the "polyphonic" result. The sheer difficulty of executing this creates a long detour into the psychological and physical realms of performing music. As the visual nature of the notation invokes action, this may seem counterintuitive due to the great amount of time required to understand physically and intellectually how to perform the score. In *Pression*, on the other hand, the notation is largely one to one—what you see is what you play. In his article, "Notating Action-Based Music," Juraj Kojs writes: "Pure action-based scores in fact utilize images that suggest clear instructions at first sight and need no further explanation. Such scores could literally be sight-read!"⁶¹⁶ In *Pression*, reading the score is a hands-on experience: you see a symbol of a hand or a bow, telling you to move the hand a distance from here to

615 The description of *Pression* as monophonic is not straightforward. There are several places in *Pression* where the hands are separated in different actions performing two different voices, and thus can be seen as polyphonic. But apart from a few places where the division is apparent (e.g. in the beginning), Lachenmann's way of superimposing voices is closer to the style in the Bach-suites: by scoring the voices in succession albeit with different *tessitura* or sound categories, he creates the illusion of polyphony.

616 Juraj Kojs, "Notating Action-Based Music," *Leonardo Music Journal* 21(2011): p. 67.

there, rub down there, stroke up here, throw the bow on this very spot, scratch this distance, hit on the left side, and so on. The strong and direct correspondence between what you see and what you do, makes the score of *Pression* a prime example of action notation, in a literal sense.

Tablature

This direct way in which action notation works is close to that of Italian and Spanish Lute tablature practice from the sixteenth and seventeenth centuries, as described by Willi Apel:

If we conceive notation as a link connecting the writer of a composition with its performer... there is a direct and an indirect way to achieve this goal. In a notation representing the latter method, the player is referred to his instrument through the medium of numerous elements of a distinctly intellectual character, such as pitch, intervals, tonality, accidentals, scales and many other such points. In a notation representing the direct method, however, his fingers are referred immediately to the technical devices of his instrument, the keys, frets, strings, holes, etc. In German terminology, these two species are distinguished as "Tonschrift" and "Griffschrift," terms which may be conveniently translated "pitch notation" and "finger notation."⁶¹⁷

Apel describes the direct method of finger notation as "springing from the very natural desire to avoid burdening the player with intellectual technicalities and to cut short the road leading to practical performance."⁶¹⁸ Tablatures in music from the Renaissance were used to communicate a direct route between notation and action, which must have produced predictable results, or at least results within a well-known aesthetic. The tablature-inspired notation of the last half century, however, has been aiming for the opposite function, increasingly exploring unknown instrumental territories. The distinctive trait of this method, to be a direct link between writing and action is similar. However, the technical peculiarities and lack of agreement within the written practices reintroduce the intellectual domain in the sense that the content of the instructions require reflection through extensive testing. The expansion from tablature, "finger-notation," to action-notation, hence implies that larger and more complex procedures can be included in the notation. The psychological function of this direct link may not have been the composer's purpose when employing

617 Willi Apel, *The Notation of Polyphonic Music 900–1600* (Cambridge, MA: The Mediaeval Academy of America, 1953), p. 54.

618 Ibid.

the method, as their use of the notation might have been for the lack of better alternatives.

Steen-Andersen's scores are also action based, but they are not self-explanatory, since many of the "rules" are explained in written or verbal instructions. Once the instructions have been internalized, the scores become quite intuitive. For example, he depicts the span of two octaves with a line, and the actions unfolding within this span, are shown evenly distributed along this line.

Kojs observes: "Action-based music takes a different approach, proposing that action itself can be a pure manifestation of expression impregnated with information and aesthetic meaning; action-based music uses actions as the building blocks of musical compositions."⁶¹⁹ Though their motivations and methods vary, Lachenmann, Hübler and Steen-Andersen all use action as building blocks in their musical and notational approach. Their individual idiosyncratic notation can be seen to contain both information and aesthetic value, although Steen-Andersen perhaps invests less in the visual aspects of the score than the others do.

Feldman differs notably from the other three, in choosing a graphic representation far from musical notation practices. His notation shows his affinity to the developments in painting of his contemporaries in the art world. Filling up the grid with his building blocks of imagined sounds—one high *pizzicato* there, one deep *arco* there, one middle range harmonic there—he is constructing a piece with his assembled bits of sound. In this sense, his music might be said to be action-based. However, the process between conception and notation involves a high level of abstraction, expressed in notation as a maze filled with squares, numbers, and letters, very far from musical symbols. Kojs observation, "while action-based music often makes use of graphic notation, not all graphic notations are action-based,"⁶²⁰ is appropriate for this music, as it must be decoded and translated to the musical realm in order to be realized.

Grove Music Online gives a broad definition of action notation: "expansions of the verbal directions found in earlier notation, or symbols replacing them (e.g. the abbreviations for pedalling, fingering etc.) at the expense of the mensural aspects of the notation."⁶²¹ According to this definition, all of the works studied

619 Kojs, "Notating Action-Based Music," p. 65.

620 Ibid., p. 67.

621 Ian D. Bent, et al. "Notation." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed November 20, 2013, <http://www.oxfordmusiconline.com>.

here belong to the category of action notation, although Feldman replaces the symbols altogether.

The different degrees of prescriptiveness in the music I have discussed allow for a clearer distinction of action notation from other kinds of prescriptive notation. I think the term action notation is more accurately applied to notation that creates a direct link between the sign and the action, than to any notation arising out of action. This resembles Behnen's two categories of notation discussed in Chapter Two: the "correlative" symbol with a one-to-one correspondence between what is seen and heard, and the "procedural" symbol, requiring at least two steps of interpretation.⁶²² Action notation would thus be correlative: a notation that has an intuitive connecting link between the score and action, and thus between the score and the sonic outcome.

The term "action notation" would therefore not cover notation that involves the interpreter in lengthy detours between sign and action, such as internalization of written instructions or decoding of abstract systems. In this perspective, *Pression* and the *Studies* could be called action scores, whereas *Projection I*, *Intersection IV*, and *Opus breve* belong to a different category of prescriptive notation.

All four composers (though Steen-Andersen to a lesser degree) put great emphasis on the visual aspects of the score. When the visuality of the score is given value and attributes to this degree, the score can appear as an autonomous work of art, an artifact with its own aesthetic value. All the composers originate from a heavily notation-based tradition in which the score is treated as a historic document, preserving the possibilities for future performances beyond the life of the composer.

The many ways that visual representation influences the performer certainly make an impact on the act of interpretation. Where Feldman's notation emerges as visually clean and clear, with symbols, numbers, letters, and squares, Lachenmann's use of symbols and pictures of hands and of instrument parts, makes it more visceral. Hübler's "note-picture" radiates an abundance of withheld energy, while Steen-Andersen sticks to a laboratory-like accuracy. The works' idiosyncratic notation reflects the composers' aesthetic principles and approaches to performance, as well as the musical outcome.

Mieko Kanno observes:

622 Severin Hilar Behnen, "The Construction of Motion Graphics Scores" (Ph.D. diss., University of California, Los Angeles, 2008), pp. 46–7.

The breadth and power of prescriptive notational strategies may suggest themselves as a last resort for expressing something otherwise inexpressible. The diversity of prescriptive notations, and their acute differences from descriptive notational strategies pointedly remind us that notation is a means of articulating music and is not the music itself.⁶²³

Kanno reminds us of a fundamental truth about any notation—which becomes acute in prescriptive notation—that the notation itself is only a means and not the music itself. In action-based notation, by notating “actions”—what you need to do—rather than “the music”—what you need to recreate—the score can no longer make any claim that it is “the work”.

These new notational methods thus call into question the autonomous status the score has achieved through the emergence of the work-concept in Western art music. The category of the stable and fixed score known to govern the performances by acting as an intelligent measuring device (to see if the performance matches the score), no longer holds this function. In this performance practice, the functions and meaning of central elements involved in the construction of the work-concept, such as interpretation, loyalty, creativity, success and/or failure, are beginning to change.

If the notation shifts in focus from sound results to actions, this does not necessarily mean that practice is idealized. Lachenmann, for instance, is meticulous about the sounds he is after; if the notation looks crude and primitive, it is due to the shortcomings of the correlation of performance practice to notation. We saw in Chapter Three that, in cases where progress had developed more accurate methods of notation during the 43 years since *Pression* was composed, Lachenmann did change it. To interpret the notation in *Pression* as “free” is thus to misunderstand the reception of Lachenmann’s notational method. Composers will (ideally) always use the best tools they have to communicate their ideas, and in the examples I have chosen, they have invented new ways to express things for which there were no existing means at hand.

In the past, annotated editions of works, with their fingerings, bowings, phrasing, and sometimes alterations to the work itself, served as important guides to interpretation.⁶²⁴ With the advent of recorded sound, and the increasing

623 Mieko Kanno, “Prescriptive Notation: Limits and Challenges,” *Contemporary Music Review* 26/2 (2007): p. 252.

624 According to George W. Kennaway, “Julius Dotzauer’s edition of the Bach solo cello suites (Breitkopf & Härtel, 1826) is probably the first moderately detailed performing edition of any string music explicitly to offer ‘le Doigter et les Coups d’Archet’, and from the 1840s onward, performer’s editions of individual works began to appear, mainly in Germany.” See George W. Kennaway, “The

distribution of recordings, the sounding performance itself might be preserved and reiterable *ad infinitum*, now as another stable text to be analyzed. Recordings seemed to bring back the era of oral transmission. Captured sound is not only a supplement, but even a challenger to the high status of the written score. Recordings have become important carriers of performance practice—sound documents, carrying the tradition, creating a sound-archive for times to come. With the new audio-visual possibilities of technical media, the visual element is further added to the text, introducing the rendition of the actions and body of the performer.

Grove Online, defines notation as “[a] visual analogue of musical sound, either as a record of sound heard or imagined, or as a set of visual instructions for performers.”⁶²⁵ The definition opens the door to an approach not necessarily originating in sound, as “a set of visual instructions for performers” can comprise any instruction. The style and character of the notational style—the kinds of characters and symbols used, including code familiarity and type of communication between composer and performer—will reflect the time we live in. The style or forms that written instructions take are in themselves informative about the ideas they are used to express. Might we ask what ideas lie behind the notational choices made by the composers in this project? Feldman uses the abstraction of the grid to pull the mediation of the music out of the habitual performance practice. The extra steps required from the performer to play the pieces challenge both the habitual practice and the conception of the work. Lachenmann’s mapping of the cello forces the performer to reorient her approach, from a sound-picture to an action-picture, thus to look more closely at what to do and how to do it. The revision of *Pression* resulted in a more descriptive writing—a step away from the physical embodiment towards an emphasis on the sonic result. This shows again that the development and establishment of a style of notation as a performance practice is dependent on repeated performances and even on an emerging performance tradition. Hübler’s orchestrated cello is like a fan, unfolding all its disassembled parts, but as the performance is acted out by one body and one instrument, the reassembling of the layers will inevitably happen, albeit in new configurations. *Opus breve* could have been notated descriptively (as discussed in Chapter Four), but this would have given it a completely different and static character.

Publication and Dissemination of Annotated Editions,” accessed December 16, 2013, <http://chase.leeds.ac.uk/article/the-publication-and-dissemination-of-annotated-editions-george-kennaway/>.

625 Bent, et al. “Notation.”

Steen-Andersen uses notation as an instruction manual, trusting that the incomplete information will be supplied by instructions by the composer, by another performer or by a video manual.

My experience throughout this project has been that prescriptive and action notations foreground certain aspects related to interpretation, action, and embodiment. The lack of normativity in this notation, and the fact that a wide range of new sounds, timbres, and techniques have been neither classified nor assigned a written indicator, creates a new space of interpretation for the performer. The notation must be actively engaged with and the musicians must come up with solutions and bring the results out of their instruments. The fact that the notation places action at the center, in a more direct way than descriptive notation manages, does something to the psychological impact of the score, which we now recognize as “something that needs to be worked on.” We roll up our sleeves and get to work, inventing a new toolbox in the process.

If we look at the way composers’ intentions are expressed both in the score outside of it, in the seven works of this project, we see that none of the composers actually and deliberately bestow interpretational freedom to the performer.⁶²⁶ The notational experiments I have studied take place within the context of modernism. These composers choose a new notation language because they have something new to express. In doing so, they take significant risk: they cannot control the listener, spectator, reader, or interpreter. They are very specific about what they want, but there is neither an apparatus nor a tradition to ensure that they will get it—that their new notation will be realized according to their intentions. From performers’ point of view, this transitional time of experiments and uncertainty, ambiguity and openings, creates a new environment with unique opportunities for their own involvement. As Roland Barthes wrote: “The Text is experienced only in an activity of production.”⁶²⁷

626 It might seem paradoxical to claim this about Feldman’s partly indeterminate scores, but in investigating his views on the matter, and especially his statement that he wanted to “free the sounds from a compositional rhetoric,” rather than giving the performers occasion for license, makes me think that his motivation was not interpretational freedom.

627 Roland Barthes, “From Work to Text,” in *Image, Music, Text* (London: Fontana Press, 1977), p. 157.

6.3 *Werktreue*

To be loyal to the work in Feldman's early graphic scores was to identify the material of the work—the ranges and within them the pitches—and to translate these into actions. To be “true to the works” thus means to be true in interpretation, both in the act of deciding pitches and in the act of performing them.

The indeterminate aspects of the works give them great potential for diverse interpretations. In order to highlight the distinctive elements that constitute an interpretation, I chose to conduct two different interpretations: a *Texttreue* interpretation adhering closely to the text—taking the text literally—and a *Werktreue* interpretation, which took into account the context and reception of Feldman's oeuvre. This experiment clarified some of the elements that are implicit in a *Werktreue* interpretation, among them, assumptions about what the composer's intentions might have been, founded on various sources, and a wealth of contextual information found outside of the score. This experiment led to reflection on the powerful influence of context and the notion that no interpretation takes place in a vacuum. It also shed light on what Kanno called “the authorship of performance,” the performer's creative territory, which in contemporary music is trespassed by the “non-dead” composer.

The performance practice of Feldman's works appears to have strict, albeit unwritten, guidelines concerning the choices one is allowed to make in the seemingly free notation. Feldman's declared aesthetic project points to a fidelity that negates both the romantic and the modernist project.

In Lachenmann's *Pression*, the notation describes sounds most of which are not established in instrumental practice, something one might think would encourage freedom of interpretation in the performer. However, Lachenmann has gathered around him a handful of loyal performers and ensembles with whom he has painstakingly built and disseminated a performance practice. Lachenmann's precise ideas related to many details of the work are hard to ignore. From a broader perspective, these details could be called the basic technical knowledge of the work, rather than interpretation, since the notation is still new and relatively unestablished. Although I adhere faithfully to Lachenmann's instructions regarding sound quality and playing techniques, I do regard *Pression* as a work with significant opportunities for individual interpretation. The work's rich supply of timbre and phrasing-constellations opens up for ambiguity and divergent readings. The physicality of the individual instrument and body and their implications in performance is an important layer added to this. Knowing

Lachenmann's strong ties to music from the past, and having experienced him playing *Träumerei* on the piano to exemplify phrasings in *Pression*, also supports my argument that there is room for a personal interpretational approach. This is more true in relation to phrasing than in the determination of sound qualities.

Lachenmann's emphasis on listening as the core of musical activity, expressed in his statements, "to listen is to work,"⁶²⁸ and "to listen means to observe oneself"⁶²⁹ obviously applies to practice, as listening is fundamental to playing an instrument. From a practice perspective, it would then be "to practice is to work," and, "to practice means to observe oneself." The performer has to actively listen while playing, by listening to her playing and reflecting upon her playing. The working aspect of practice and performance is highlighted: to listen, interpret, play, and perform are activities, it is work on every level—intellectual, emotional, and physical. Lachenmann says:

For me, to listen means to observe oneself. This is what I would call an existential experience: by listening to the spiritual process that a piece of music represents, by following this process, remembering where one comes from, and reflecting on where one is in this process, one discovers that one is able to have an experience like this, and that one needs to have this experience.⁶³⁰

This opens up an aesthetic and ethical dimension of loyalty, far beyond the realms of notation and questions of correct and incorrect. Lachenmann's aesthetic project in relation to performance, can in this perspective be seen to engage the performer in a self-reflecting practice: nothing is taking place on the surface, every action has a meaning and a seriousness, which in turn engenders new layers of meaning.

To investigate the idea of *Werktreue* in relation to *Opus breve*, presented major challenges, as the work is extremely accurately notated, but at the same time open to great variation in interpretation. This is due to the complexity of the parametric performance layers, which are subject to an unpredictability that can mean widely varying results. Each layer is clearly identifiable, but when

628 Bendik Hagerup, "Helmut Lachenmann: Å lytte er å arbeide," *Ballade* (2005). <http://www.ballade.no/nmi.nsf/doc/art2005093009480246979171>, accessed December 16, 2013.

629 Ibid.

630 Ibid. My translation. "Å lytte betyr for meg å observere seg selv. Dette er hva jeg vil kalle en eksistensiell opplevelse, for ved å lytte til en slik åndelig prosess som et stykke musikk er ved å følge denne prosessen og huske hvor man kommer fra og reflektere over hvor man befinner seg i den oppdager man at man er i stand til å ha en slik opplevelse og at man trenger å være i stand til å ha en slik opplevelse."

forces collide in performance, there are infinite potential sounding results, as the playing techniques and sonic palette come from an instrumental area that is interpreted highly individually. Given the fact that the work consists of an infinite number of possible interpretations and performances, can we speak of any one correct and faithful interpretation? What does it mean to be true to this work? Is it to do try to do everything possible? Is it in making a sincere attempt? Or would “being true” mean to select one perspective, to emphasize a certain handful of elements and implement those? Or, does the *Werktreue* interpretation exist as a theoretical or utopian ideal of what is possible on a cello?

For the performer, the eternal goal in performance is to try to play as “well” as possible.⁶³¹ We saw in Chapter Four the frequency with which the words possible and impossible appear discussions of performance practice of complex music. If the adjective “possible” means capable of being done or achieved, or within the power or capacity of someone or something, then to play as well as possible is to play within one’s capacity. When music is written which deliberately exceeds the possible and the known, and even pushes this parameter to experiment with the performative boundaries on a physical and psychological level, the performer must make a complementary shift in their approach. Music so clearly experimenting with performance parameters requires an experimental practice approach, more apt to meet these new challenges. From this perspective, to be loyal to *Opus breve*, is to explore the work in several ways, both in practice and in performance. In a work of this complexity, this highlights the temporal difference between composing and performing, displaying a dialectic of the moment. The performance requires a multidimensionality that also includes time; it gives a sense of navigating through time and space. To really be true to this work, to play every combination and transition between the colliding forces moving within the different performance strata, one would have to be the movie character, Matrix, able to stop time, to perform every action until it is complete before proceeding. The cellist Franklin Cox always performs *Opus breve* in two versions, one slow, to bring out the details, and one in the specified tempo. In this way, he highlights several aspects missed when this rich and complex music passes by in real time. In the videos following accompanying

631 “Well” is obviously a relative term, a fact that leads to one of the core problems in the *Werktreue paradigm*. A performer can always play better with time and practice, and this can often create a sense of inferiority in the relation to composers who have high expectations and concrete demands. As Finnissy puts it, “I have a tendency to always assume that it is my fault if things don’t work.” Michael Finnissy, “Biting the Hand That Feeds You,” *Contemporary Music Review* 21/1(2002): pp. 72–3.

dissertation, I present two interpretations of the work (video #6 and #7), and I also include several short improvisations inspired by the piece. Being true to the work is thereby interpreted as being true to the ambiguities in it—to all the possibilities the work opens up to. It is being true to the experiment and all attempts made to achieve this—all the virtual, potential versions that add up to an interpretation. What we see here is a move from *Werktreue* to work-ambiguity.



In Steen-Andersen's music, loyalty to the work is closely related to following the score literally, supplemented with his instructions, expressed outside the score. When he and I have worked closely on his *Studies*, it is very difficult for me to distinguish between the work itself and his intentions as expressed in the process. In his case, the notation is particularly roughly carved and modest, and it provides little information beyond the very basics of what to do and when to do it. This also includes the notation of the choreographic instructions. The loyalty to the works lies in performing the movements as correctly as possible. Like Lachenmann's array of timbres, the sounds and techniques Steen-Andersen chooses as material are firmly established neither in notation nor in performance practice. The freedom is in a different realm, and my embodied knowledge focuses on the body in the present moment.

6.3.1 The Death of the Author

In Chapter Two, I discussed Wimsatt and Beardsley's claim that "[j]udging a poem is like judging a pudding or a machine. One demands that it work."⁶³² If this is translated to music, the question is: Demand that it work for whom? If the music should work for the audience, the performer is seen as part of the creation and is thus interlinked with the composer and his intentions. The performer and the level of the author's intention seem to collapse into one. Viewed like this, it means that the power over the work works from the conception of the idea, through the mediation of the work—from composer to audience. But if one demands that it works for the performer, the performer acquires a position parallel to that of the reader in literature, and thus is granted freedom to interpret and judge the work, independent of the creator. In music, the performer representing this extra link in the communicative chain is, in my opinion, the

⁶³² W. K. Wimsatt and Monroe C. Beardsley, "The Intentional Fallacy," in *Philosophy Looks at the Arts: Contemporary Readings in Aesthetics*, ed. Joseph Margolis (Philadelphia: Temple University Press, 1987), p. 368.

main reason for the continuing hold that *Werktreue* has on musical practice. Being true to the work is often seen as synonymous with being faithful to the composer. *Werktreue*—the imperative to be faithful to the composer—holds the performer in check, and limits her power.

In working with composers and performers, I tend hear the composer asked, “what do you want here” rather than, “what do you think the work needs here.” Some of the critique that the musician can experience from composers in contemporary music must be written on the account of technical innovations. It is paramount then, in this performance practice, to consider continuously—and to differentiate between—macro and micro perspectives, as the detailed explanation of a technique should not necessarily straitjacket the performer’s interpretive impulse.

The transmission of a musical work in the form of written notation has a long history steeped in tradition, the musical text has acquired in this way an almost mythical value. Our culture seems to have been worshipping writing in such a way that we have been blinded to the imbalance in the musical ecology. Performers should demand that the work works, and, through this demand, interpret, modify and usurp the score in order to inhabit the work, making it entirely their own, not caring about the Author-God lurking behind the notes. In music, the “reader” in Barthes’s famous statement that “[t]he birth of the reader must be at the cost of the death of the Author”⁶³³ is the performer. Barthes advocates that a text can have multiple meanings. In the role of interpretive reader, freed of the *Werktreue*’s authoritarian constraints, performers can supply us with more exciting, radical, fresh, and personal interpretations of the music. If performers increasingly make use of this room, and to a greater extent problematize given hierarchies and power relations in music, I think the balance would be disturbed and new things would happen, opening up to richer, more ambiguous and creative roles for the performers.

I have tried to operationalize the concept of *Werktreue* by looking at the way the idea of the composer’s authority is expressed in current musical practice, and to regard the actual consequences of this for the practice. The musicological discourse tends to move the concept of *Werktreue* to a theoretical sphere, since it is governed by regulations and underlying premises that must be identified to facilitate a theoretical discussion.

633 Roland Barthes, “The Death of the Author;” trans. Stephen Heath, in *Image, Music, Text* (London: Fontana, 1977), p.148.

A discussion I have not taken up but will now touch upon briefly is the concept of *Werktreue* as a factor in contemporary music's struggle for cultural and economic survival. Financial and institutional support are important factors in a contemporary musician's practice, and they are obviously crucial to artistic outcomes, since working conditions are dependent on them. In general, one can probably argue that all work in contemporary music is grossly underpaid and requires a generous portion of idealism on the part of the musician, as the hours spent learning complex scores always exceeds the opportunity to be rewarded accordingly. The problem boils down to time: it is almost always a time pressure on learning works. In the straitened circumstances of most performing institutions as well as soloists, there are too few resources to support the kind of time needed to rehearse contemporary music.⁶³⁴ This has led to a type of contemporary music that is accommodated to this economy—an "institution-friendly" contemporary music that can be learned to an acceptable performance level within a few days.⁶³⁵

Charles Rosen has observed:

It is not illegal to interpret a work of music against the express intentions of the composer. No jail sentence is imposed for playing a piece wrong. Nevertheless, we often feel that, if not illegal, it is in any case immoral deliberately to flout the author's indications, to play *forte* where the score gives *piano*, or *legato* where *staccato* was demanded. For one school of performance, any deviation from the authentic text is a sin, venial or mortal depending on the gravity of the transgression.⁶³⁶

The feeling of immorality when making artistic choices contrary to the score seems to be ingrained in many performers, and the strong emotions associated with this topic of loyalty, discussed in Chapter Two, shows that there is much at stake.

634 The scope of this dissertation does not allow for a full treatment of the variety of important issues related to the sociological position of new music and the role of the performer.

635 Frank Cox uses the term "official new music," which comprises "styles of composition oriented more toward refining, inflecting, and rearranging aspects of already-discovered domains than with opening up fundamentally new domains; since the late 1970's, such music, supported and propagated by the most renowned 'new music' ensembles and performers, has succeeded in becoming an almost international idiom within the contemporary-music system." See Frank Cox, "Notes toward a Performance Practice for Complex Music," in *Polyphony and Complexity, New Music and Aesthetics in the 21st Century*, ed. Frank Cox, Wolfram Schurig, and Claus-Steffen Mahnkopf (Hofheim: Wolke Verlag, 2002), p. 89–90.

636 Charles Rosen, "Freedom of Interpretation in Twentieth-Century Music," in *Composition—Performance—Reception. Studies in the Creative Process in Music*, ed. Wyndham Thomas (Aldershot: Ashgate, 1998), p. 66.

In this study, I have tried to problematize the relationship between musical text and performance. One of my findings is that *Werktreue* still holds a surprisingly strong position in musical practice. Although the music investigated has offered considerable interpretational space and new and fresh approaches to the performance practice, there is no doubt that the notion of the score and the composer's intentions still has an almost incredibly strong hold over performance.

Performers are expected to be true to more than the score—there is fidelity towards the composer's ideas and aesthetic, the performance context, the conventions of performance practice, and, to a certain extent, the musical industry. In short, the *Werktreue* ideal encompasses the infrastructure of musical communities as well as the ideology of musical life. An important further question is whether the performer has a higher aim than fidelity to all these aspects of the work. Everyone knows there are unknown components which is more than just playing the notes; each performer's unique embodying of a musical work, the immeasurable factors that can make a performance great, give life to the music and possibly create magic.

6.4 Body

In Feldman's *Projection I*, there is clearly an exploration of tactility, touch, and sensitivity. This requires a micro-sensitivity and an intimate relationship with the cello. *Projection IV* requires a different, but also close, relationship to the instrument in order to solve physical challenges such as rapid alternations between *arco* and *pizz*. Feldman wrote: "Know thy instrument! Know thy instrument better than yourselves. It's very, very important."⁶³⁷

Michel Polanyi emphasizes that knowledge resides in the body and the brain knows the world primarily through perception. After using equipment or tools to explore something for a while, we begin to feel not the tool but the thing *through* the tool. It becomes an extension of the hand; we begin to "inhabit" the tool—a similar experience to dwelling in one's body or clothes.

Our body is the ultimate instrument of all our external knowledge, whether intellectual or practical. In all our waking moments, we are relying on our awareness of contacts of our body with things outside for attending to these things. Our own body is the only thing in the world, which we normally never

637 Morton Feldman, *Morton Feldman Essays*, edited by Walter Zimmerman (Kerpen: Beginner Press, 1985).p. 193.

experience as an object, but experience always in terms of the world to which we are attending from our body. It is by making this intelligent use of our body that we feel it to be our body, and not a thing outside.⁶³⁸

The idea of our body as the ultimate instrument echoes Maurice Merleau-Ponty's description of an organist who learns to play a new instrument she never played before:

Between the musical essence of the piece such as it is indicated in the score and the music that actually resonates around the organ, such a direct relationship is established that the body of the organist and the instrument are nothing other than the place of passage of this relation. From then on, the music exists for itself, and everything else exists through it.⁶³⁹

Here, the distinction between the instrument and the body seems to disappear, they melt together. Feldman's dictum, "know thy instrument," might similarly be interpreted as *know thy body* with the instrument—the interface in which the tactility is developed.

In Lachenmann's *Pression*, the body is in focus from the start. In the second phrase, the arm moves with the bow producing minimal sound but a great movement. This visually "loud" gesture contrasts the absence of sound. It is as if we see the arm "for the first time" moving on the fingerboard—up and down, fast and slow. This reflects the mechanical function of the body, a body in interaction with the instrument. From this perspective, *Pression* can be understood as a catalogue of movements: a more accurate title might have been *Pression – Velocity*, as the whole piece investigates a number of possibilities and combinations on the axis between pressure and speed. Pressure and velocity are used as physical forces involving body-weight, muscles, and speed of action. The body of the cellist gets a main role when we see she bows the string holder and has to bend over the whole instrument, throws the bow on the strings or frantically rubs the wood on the lid with the hand.

The body has always been observed in performance, but when the instrument is exposed from these unfamiliar sides, we also get a new experience of the body from this interaction. The strong reaction *Pression* has aroused in the years since it was composed is not just about "the mistreating of this wonderful instrument," which Lachenmann expressed in my meeting with him, but also that these partly violent actions are actually done by skilled and cultivated (musician's) bodies. In *Pression*, the performer exceeds the traditional limits of

638 Michael Polanyi, *The Tacit Dimension* (Chicago: University of Chicago Press, 2009), p.15–16.

639 Maurice Merleau-Ponty, *Phenomenology of Perception* (London: Routledge, 1945/2013), p. 117.

what has been “permitted” physically within a certain classical paradigm. As a consequence, new repertoires of physical movements and patterns have been introduced. In this light *Pression* has revolutionized the performance practice of contemporary music, and I do not think it is coincidental that it is one of the most frequently performed cello pieces, in the new repertoire. It often acts as an entrance to the more radical contemporary music for cellists approaching this field. Cellists who have performed *Pression* have undergone a “new music baptism,” as it represents a kind of physical and aural encyclopedia of many pieces to follow.

The body finds itself in a state of confusion in learning Hübler’s *Opus breve*. It is as if it must re-learn how to learn, as a beginner, meticulously training the hands in independent actions. The string-player’s synchronicity between bow and left hand has to be unlearned in the process. It means not only to distinguish various bodily functions, but also to reprogram the habitual patterns between body and mind. In musical literacy, one sees a sign and plays what the sign means. In *Opus breve* I cannot read the score in a traditional manner, it must first be deciphered and then played. I have to think and experiment extensively with various solutions before I can determine what I actually have to do at a certain point in the fragmented notation. The split between the notation and the required performance actions must take place in the brain before it can happen physically. The result is an unusually large gap between the “visceral brain” and the body. In this gap there is a large space for reflection that challenges a number of programmed impulses and habits. In practicing *Opus breve*, I had to stop at every point and deliberately change direction away from the intuitive.

6.4.1 Focal and subsidiary awareness

Polanyi writes that all knowing is the *act* of knowing and can be seen as *action* and that all knowledge is *personal*. When describing the structure of tacit knowing, he distinguishes between focal awareness and subsidiary awareness, which are mutually exclusive. “If a pianist shifts the attention from the piece he is playing to the observation of what he is doing with his fingers while playing it he gets confused and may have to stop.”⁶⁴⁰ Focal awareness is thus the detailed

640 Michael Polanyi, *Personal Knowledge: Towards a Post-Critical Philosophy* (London: Routledge, 1998), p. 56.

focus on the fingers, while the subsidiary awareness belongs to the tacit category related to bodily functions. He further says:

Our subsidiary awareness of tools and probes can be regarded now as the act of making them form a part of our own body. The way we use a hammer or a blind man uses his stick, shows in fact that in both cases we shift outwards the points at which we make contact with the things that we observe as objects outside ourselves. While we rely on a tool or a probe, these are not handled as external-objects. We may test the tool for its effectiveness or the probe for its suitability ... but the tool and the probe can never lie in the field of these operations; they remain necessarily on our side of it, forming part of ourselves, the operating persons. We pour ourselves out into them and assimilate them as parts of our own existence. We accept them existentially by dwelling in them.⁶⁴¹

Polanyi here defines the tool (the instrument) as forming a part of ourselves, and the subsidiary awareness as the act of doing that. In a performance perspective, that would mean that being aware of the feeling of the proximity to the instrument in the act of playing, is a subsidiary awareness that is partly tacit. Polanyi claims that we switch between these two dimensions all the time, throughout our lives. The fluctuation between the two modes is done by the acting person, in the act of doing. This echoes Erika Fischer-Lichte's term "perceptual multistability," an oscillation between perceptual levels discussed in Chapter Three.

Perception can switch in the very act of perceiving. What is perceived as the actor's presence in one moment is perceived as the character in the next and vice versa ... The first order generates meaning around the perceived's phenomenal being that might trigger chains of association, while the second order produces meaning which, in its entirety constitutes the character ... Perceptual multistability ensures that neither of the two orders can stabilise themselves permanently. ... The shifts direct the attention on the dynamics of the perceptual process itself. The perceiving subjects begin to perceive themselves self-reflexively, thus opening up a further sphere of meaning and influence on the perceptual dynamics.⁶⁴²

Fischer-Lichte exemplifies perceptual multistability concretely as a perception alternating between an actor's presence and the character portrayed, creating an interplay. Transferring to a musical domain, from the performer's point of view, the perception wanders between myself with the instrument—the state of playing, and what I specifically play in the moment. This has an affinity with

641 Ibid., p. 59.

642 Erika Fischer-Lichte, *The Transformative Power of Performance*, trans. Saskya Iris Jain (Oxford: Oxford University Press, 2008), p. 149.

Polanyi's interplay between focal and subsidiary knowledge, in that there are two different kinds of awareness that are interdependent.

In *Opus breve*, the body must accurately tell the consciousness what to do, and the complexity of this relationship causes both parties to work at top speed. The awareness fluctuates between the specific details at hand and the larger picture of relating to the whole. The energy that emerges from this in performance, results in a huge mental and bodily pressure that becomes part of the work's expression.

Steen-Andersen introduces the body as an explicit parameter in his compositions. His project in the three *Studies* is to set up simple models as a framework to explore some specific contradiction between the auditory and the visual, sound and movement, body and instrument, technology and instrument, and the real and the virtual body. The body can be said to represent the unifying element of all these explorations. It becomes the main character in his dialectical methods. The implications of how to play, what to do, and how to move in his works, are in a way more important than how the work sounds, but these aspects are intrinsically connected. There is a hierarchy, in which the movements are most important in *Studies #1* and *#3*. In *#2*, the sonic outcome seems to be more important than in the others, but the interplay of movements between the cello and the whammy are still important to bring out.

Pression, introduces the decoupling of the two hands the way the bow stops while the left hand moves, at the work's beginning, is significant in the way that it displays the individual functions of the hands. In *Opus breve*, the decoupling processes are developed much further, and they take place on a hyper-detailed level. The separations of the performance actions mainly focus on finger- and hand-level, rather than arm-level. Finally, in Steen-Andersen's *Studies*, the decoupling from *Pression* is extended to the extreme: left and right arms and hands are completely detached, so we clearly perceive that they have different functions. The playing body comes into focus: we see, hear, and sense it in a new way. Just as Lachenmann used the alienation of sound in search for a new way of listening, Steen-Anderson causes the same effect when his unfamiliar and unexpected gestures make us see the performer in a new way.

In the general movement from descriptive to prescriptive notation, each musician's body, instrument, and movement patterns have had a major impact in

this process.⁶⁴³ The way the individual body interacts with the instrument is crucial not only to the way the notation is interpreted as sounding events but also to how the problems posed by the notation are physically solved. To follow the notated instructions is to follow an action plan, to carry out a sonic choreography.

Prescriptive notation often prescribes movements, and in such cases is a kind of sonic and instrumental choreography. It can also be seen as site-specific,⁶⁴⁴ works, as the music is performed with and upon a specific and unique body and instrument. Viewing the work as site-specific also helps to negate the notion of *Werktrue*, with its Platonic ideal of transcended time and context.

In “Musical motion and performance” from 1995, Shove and Repp write:

Many twentieth-century composers focus on sound qualities or on abstract tonal patterns, and performers of their compositions often neglect whatever kinematic potential the music may have. The absence of natural motion information may be a significant factor limiting the appreciation of such music by audiences. While compositional techniques and sound materials are subject to continuous change and exploration. ... the laws of biological motion can only be accepted, negated or violated. If more new music and its performers took these laws into account, the size of audiences might increase correspondingly.⁶⁴⁵

This encouragement to exploit kinematic potential in the new music is indeed taking place, as we have seen. The younger generation, here represented by Steen-Andersen, is leading the way in exploiting the interplay and interaction between movement and sound. In this music, the choreographic aspect has gained an autonomous role and is not merely a side-effect of the sonic work. Classical and romantic music’s “canon” of gestures and movements represents

643 This is obvious similar in performing descriptive notation as well, but the factors discussed here makes it more acute in certain types of contemporary music.

644 Although the term site-specific is traditionally used about art created to exist in a certain environment, the term has been used about performance art and music theatre, where the performance originates from a body. This has been associated with performance artists such as Marina Abramović, Diamanda Galás, Karen Finley, and Annie Sprinkle, who experiment and deal with their bodies in various ways in performance. In performance of the works in my project, the interface between body and instrument—the space itself, becomes a feature of the choreography. When I perform the music, my body is the specific place where the music unfolds. When someone else plays it, it becomes something else, in Nick Kaye’s words: “To move the site-specific work is to re-place it, to make it something else.” Nick Kaye, *Site-Specific Art. Performance, Place and Documentation* (London & New York: Routledge, 2000), p. 2.

645 Patrick Shove and Bruno H. Repp, “Musical Motion and Performance: Theoretical and Empirical Perspectives,” in *The Practice of Performance: Studies in Musical Interpretation*, ed. John Rink (Cambridge: Cambridge University Press, 1995), p. 79.

a limited repertoire of movements compared to the entire range of physical and choreographic possibilities. The music in my project has beyond a doubt expanded bodily movement and set new physical demands on the performer, opening up the performance practice in several new directions.

6.5 Idiomaticism

Feldman's longing for abstraction can be understood as a search for something "unidiomatic," but not of the kind found in the unfamiliar instrumental corners. It is rather a kind of filter that holds back the urge to create a "beautiful" cello sound with the customary vibrato. The approach represents a view of the instrument as an infinite number of possible sounds (hence his view on the piano as 88 different sonorities). Feldman's sensitive relationship to his instrument and the subsequent expectation of instrumentalists adapting this tactile awareness can definitely be described as a redefinition of idiomaticism itself.

With *Pression* the initial unfamiliarity of the score and techniques led me to regard the piece as unidiomatic, but when I actually played it, it actually felt highly idiomatic. In that way we can see the performance practice in *Pression* as something that expands and extends an established instrumental technical vocabulary, rather than as something that rebels against it. Although with radical difference in aesthetics, this is not unlike Feldman's concept of idiomatic by abandoning the prevailing idiomaticism and treating the instrument as a broad set of possibilities, without paying dues to traditional ideas about what does or does not suit the instrument. It may be perceived as unidiomatic because it goes against what has been seen as "natural" and taken for granted in a classical use of the instrument. But when the techniques are mastered, they are in no way contrary to conventional idiomaticism, but instead they add to the repertoire of possible playing techniques.

In composing *Opus breve*, Hübler, with his vision of expanding string techniques, used his intimate knowledge of the cello as his starting point. The three-stave score is indeed complex, but is based in concrete actions. In this way, Hübler radicalizes the concept of idiomaticism. By pushing and bending the idiomatic comfort zone, *Opus breve* expands the instrumental language to include new combinations of subtle techniques. My experience is that after working with the material over time, penetrating the notation and performing the piece numerous times, almost all other music seems technically easy and manageable.

Steen-Andersen's incorporation of movement as an autonomous parameter expands idiomaticism to include choreographic movements in addition to the sound-producing instrumental technicalities. Steen-Andersen uses the term "hyper-idiomatic" to denote movements "translated" from one instrument to another. When musicians perform the same movements on another instrument, there is a very different kind of sound, while the score is still being followed. The "same" piece has now been given completely different attributes than the "original," and the pieces may be perceived as more different than similar. In this way, Steen-Andersen redefines what idiomaticism means in a musical context when he translates it into the domain of movement. The score takes on a new function—this is action notation taken to an extreme, where movements independent of sound are described in a choreography in which the sound is unequivocally secondary—a by-product of the movements. For me, as a performer, hyper-idiomatic denotes the extraordinarily concrete approach this music calls for. The correlation between what I do and how it sounds seems to have no "detours." Due to the "surface" nature of the technique, I rarely take the cello's resonating body, which is always an important factor in playing, into consideration. I carry out the action in the right place: either the sound has "the right of way" or the movements do. The term hyper-idiomatic can thus also be applied to *Pression*, with its extremely instrument-specific writing, and in which most of the actions take place on the surface of the instrument.⁶⁴⁶ To a greater degree than Steen-Andersen, Lachenmann builds his idiomaticism on the history of the intimate relationship between performer and instrument—a historical idiomaticism.

The music in my project treats the action of playing in various ways, but they all relate to the concrete production of sound on a cello, with or without electronic expansion. *Pression*, *Opus breve*, and the *Studies* foreground the methods of sound production and cultivate what have been regarded as extra musical sounds: noises, squeaks, and cracks. Jennifer Judkins claims "much of what we

646 All actions can be seen to take place on the surface of the instrument, but in *Pression* and the *Studies*, there are a number of techniques acted out on various places on the body and parts of the cello, thus leading to a feeling of working on a surface. In conventional use of the cello, the string is set in motion, either by bow or finger (*pizzicato*) which creates the sound by becoming amplified through the resonating body of the instrument. The variety of actions performed without involving the strings vibration, I here describe as surface techniques. The fact that this cello piece in which the "techniques" can be seen to be constituent parts of the piece, has been "translated" and performed on a trombone, further shows the relationship between Lachenmann and Steen-Andersen. (Mike Svoboda performs *Pression* on trombone (see <http://mikesvoboda.net/compositions-all/articles/pression.html>].)

hear as musical noise develops from these unidiomatic passages, since usually the player must exert more effort in order to execute them.”⁶⁴⁷ This represents a common view, which directly couples extra musical “noise” with difficulty and effort, and thus with the non-idiomatic.⁶⁴⁸ However, her statement, “[m]usical noise reminds us of the means of performance and the close relationship of musician to instrument,”⁶⁴⁹ reverses the previous one, by pointing at the close relationship of musician to instrument, which is the nature of idiomaticism. The mechanical instrumental sounds foreground the performer, her body, and her instrument, and remind us of the human factor. This is music performed here and now, by a human being of flesh and blood, possibly virtuosic and skilled, but still a human being who takes enormous chances in performance with the implicit risk of failure and performative breakdown. This materiality in performance resembles the materiality we are able to see in the brushstrokes in paintings of for example expressionists and impressionists. We see the process even as we view the result. In the performance of his works, Feldman explicitly wanted to render audible the surface texture like brushstrokes in the compositional process.

A pressing question springs out of investigating the idiomaticism: what is a cello?

6.5.1 New music—new cello—new cellist?

The project focuses not only on the performer’s role in the new music, but also on the importance of the instrument as such. If we regard the project from the outlook of the cello, it opens up new perspectives on practice: what is actually taking place on the cello in this music? Common to all composers in my project is that they do not fix the cello in a preconceived frame, but regard it as a tool to express ideas, visions, sounds, and fantasies. They look at the cello as a laboratory for musical and physical experiments—sonic, timbral, and gestural examinations. All the works in my project are asking the same question set of questions: **What is a cello? What was a cello? and What can a cello become?**

647 Jennifer Judkins, “Silence, Sound, Noise, and Music,” in *The Routledge Companion to Philosophy and Music*, ed. Theodore Gracyk and Andrew Kania (London: Routledge, 2011), p. 15.

648 When I performed Beethoven Symphonies in The Stavanger Symphonic Orchestra under Franz Brüggen (1994–97), he placed the double bass players on a line behind the orchestra and requested as much noise as possible in their performance of their part. He wanted bring forward the raw energy from the human interaction with the instrument, rather than to bury the extra musical sounds in the clichéd conception of what a beautiful sound should be.

649 Judkins, “Silence, Sound, Noise, and Music,” p. 16.

The cello can be a venue for research, inventions, and interventions, an arena for different agendas, battles, discussions, and practices, and an organism with many voices, like an orchestra, a guitar, or in Richard Barrett's evocative phrase simply "a box with four strings":

I decided to treat the cello as more or less just a resonant box with four strings on it; then, the player has two hands, one of which holds the bow, both of which are able to move in three dimensions. This, one might say, is a "zero point" from which to begin thinking about the cello.⁶⁵⁰

The cello becomes an object we think with.⁶⁵¹ The performance discourse is inscribed on the instrument, through the actions performed on this old invention made of wood.

All the works are based on the very tradition with which they are simultaneously breaking—or which they are breaking down altogether. The music is inventing something new. It explores the instrument, the musician's body, potential, and limits—it shifts the balance and pushes beyond the boundaries. Where Feldman is relentlessly searching and teasing out the pure, soft, and rare cello sound, untroubled by ignorant instrumentalists, Lachenmann turns the cello inside out, presenting it a concert instrument with a total conceptual makeover. He makes the familiar alien, and the alien familiar with his new idiomatic cello language. Hübler expands the idiomatic language to encompass actions, which overlap and merge into composite performance parameters new to both the instrument and the performer. In problematizing what a cello can be, Steen-Andersen takes a further step when he turns the cello sideways, and ultimately upside down at the end of *Study #3*. The sounds have moved as far away from the "beloved" and classical cello-sound as can be imagined. In *#1*, the silent actions of the left hand echoes past music, in *#2*, the cello sound is guised and transformed by the whammy pedal, and in *#3* pure noise is produced by a modified bow, while the cello is treated like a dance partner, lifted up and spun around in the air.

By starting at "degree zero" with his notation, throwing the tradition and performance practice inextricably linked to notation, overboard, Feldman asks,

650 Richard Barrett and Arne Deforce, *The resonant Box with Four Strings. Interview on the Musical Aesthetics of Richard Barrett and the Genesis of his Cello Music*, http://www.arnedeforce.be/composerfiles_toelichtingen/BarrettResBox.htm, accessed December 16, 2013.

651 In Sherry Turkle's book, *Evocative Objects: Things we think with*, cellist-composer Tod Machover, working in the MIT lab, presents his cello as the prime thinking object that connects him to a creative state.

what can a cello do? In his search for purity and neutrality, he washes away the Romantic sound and creates his own expressive mode—a virtuosic expressivity unhampered by the heavy emotional baggage packed with the fashions of the Romantic concert tradition.

For Lachenmann, the cello is a historical object normatively loaded with masterpieces from the past. But for him, that past is a country to be fled. After World War II, the ideal of a beautiful cello sound has been perverted, he says, and the quest for beauty has “turned into a masquerade.” In his search for a new beauty, Lachenmann chooses the cello for his initial experiments, unsurprisingly, considering the instrument’s status as a particularly expressive solo instrument. The cello becomes the arena for the unknown, for unfamiliar sounds and actions; but, in spite of this defamiliarization, Lachenmann demands that each sound be executed with the same meticulous care for detail and quality of sound that one would bring to the classical cello. The cello is here a vehicle to promote a new form of listening, a listening to a strange and distorted new beauty, but in the familiar concert hall setting. Although the composer’s overarching aim is to change his listeners’ habits and expectations about the cello, the instrumentalist is also changed, as she must familiarize herself with, and take possession of this “new” cello. Lachenmann asks how a cello could be a concrete vehicle for his ideas. In redefining what a cello is and can be, he virtually “builds a new instrument,” calling into question the entire history and repertoire, and giving cello music and performance a more acute and urgent relevance to our own time and society.

Hübler, on his part, explores the geography of the notation, the geography of the instrumental practice and not least the geography of the performer’s mental capacity. His initial interest is⁶⁵² to expand the instrument’s possibilities—to orchestrate it by transferring and experimenting with decoupling techniques uncommon for cellists. The cello becomes an arena for the experiment to see what actions are possible to perform simultaneously on a cello. The experiment is taking place in the practice, in the actual interface between performer and instrument. In this way Hübler also asks, what is a cellist? The notation expands the cognitive capacity to perform the ultimate, developing the ability and the courage to dare to fail, and to surrender to the ambiguity in the uncertainty of the outcome.

652 Klaus K. Hübler, “Expanding String Technique,” in *Polyphony and Complexity*, 233–44.

A cello, for Steen-Andersen, is something he can use to develop his ideas, an object to play with. With the history as a backdrop, he chooses certain aspects he wants to investigate, he sets some rules, and he starts the “game.” He plays with history in the sense that playing with the absence of sound against movements can only work on an object that traditionally produces sound. The dialectic movement back and forth, to and fro is always present in his works. Steen-Andersen also questions performance practice and context, philosophically and materially, but the practice itself is entirely physical.

Each of the selected works in this study has developed new techniques and challenged the interface between performer and instrument; thus, the composers have contributed in a re-reading of the term idiomaticism. We have seen that the perception of what is idiomatic is dependent upon context and change over time. The goal of freeing the music from the traditional idioms leads to the creation of new styles with distinct features and attributes. But history also catches up with the innovators, new music inevitably ages and what was regarded as unidiomatic slowly becomes idiom. All four composers are pioneers and innovators. Each rejects history in his own way, seeking to break with it and invent something new, a recognizable modernist trait.

Historically, the cello gradually emerged from an accompanimental role to becoming a solo instrument. In the twentieth century, the cello and cellists have generated a large body of repertoire. Recent generations of performers and composers seem to be less conditioned, tied up and obligated by history, and they exploit their newborn freedom to treat the cello as an object we can use to think with, feel with, experiment with, and play with.

6.6 The polyphonic performer

This project has aimed to discuss a performance practice in contemporary music through performative, theoretical, and historical reflections,⁶⁵³ using analyses of specific examples. Out of my investigation has arisen a set of demands for the cellist performing contemporary music. I propose that performance practice of new music after 1950⁶⁵⁴ requires skills and expertise in four main cat-

653 The material investigated in the dissertation invites to a historical presentation, but due to the scope of the study, I have not chosen a historiographical representation.

654 These skills are naturally inherent in performance practice of any music, but the content and methods differ.

egories: technical skills, practicing skills, interpretational skills, and an experimental approach to idiomaticism.

Technical skills include the learning of new techniques, ways of moving, and ways of treating the instrument. Working with electronics is a part of this, including skills in handling of microphones, software, outboard effects, and video. These skills are concrete and often related to craftsmanship and instrumental control.

As several of the works break with traditional modes of notation and playing, they require new approaches to practice. Practice methods often require experimentation and thinking “outside of the box” to meet new challenges. This rich topic will be explored more fully in the next section of this chapter.

Extended interpretational skills are required in reading and understanding the vast variety of postwar scores. I divide this category into technical interpretation and aesthetic interpretation. Technical interpretation requires an understanding of the text and its context. The score tells us little in isolation, and we need its context as interpretational framework. Technical interpretation thus includes reading and interpreting scores with novel notation and playing techniques, drawing on previous involvement and experience with various types of notation and methods. Aesthetic interpretation acknowledges music as an artwork addressing something greater than ourselves. It questions whether music can point to meanings beyond itself or exists in a self-referential autonomy. It discusses the relationship between music and society, and the implications of that relationship. It recognizes the presence of a historical dimension and develops an understanding of music’s cultural and historical connections to other art forms. Its aim is to develop a basis for reflection about what music and performance is and can be.

The last skill I consider vital in this performance practice, is the willingness to explore the limits of idiomaticism. This approach requires explorative skills, a co-creative attitude, and an ability to avoid getting locked into a notion of what is idiomatic for one’s instrument. It requires skilled instrumentalists who have fully mastered their instrument, but who are also willing to “kill their darlings.” It requires viewing one’s attachment to this instrument as something that can be challenged, accepting that the instrumental practice also must oppose to tradition. The performer must leave the craftsmanship domain and take a step into the creative one, where instrumental skills are essential, but not sufficient alone. Each performer’s idiomatic position is closely connected to their

instrumental identity, a role highly governed by the implicit relationship to the idiomaticism.

Obviously these four categories overlap and intersect. For example, practicing skills clearly involve interpretation, and the distinction between technical and aesthetic interpretation is a matter of degree as much as kind. The radical idiomatic approach involves all of the above.

6.6.1 Practicing

Practicing has not been a main topic in my project, yet it has been central in the research I have undertaken. This statement nearly goes without saying since I have studied the seven works through practicing them, and since the act of practicing has been of fundamental importance to my access to the works. Certainly, each of the chapters of this dissertation treats practice, if in varying degrees. My practicing has allowed me to examine the music “from the inside,” a unique perspective not accessible through reading and analyzing the score or through listening to existing recordings. Practice thus permeates the whole project, since it is a necessary precondition in my examination of the four themes: notation, *Werktrue*, idiomaticism, and body. My practicing methods have differed for the different works, adapting to and in turn informing the issues presented by each one.

When failure or breakdown is deliberately composed into the score, as discussed in Chapter Four, practice takes on a new meaning. When the dichotomy of playable–unplayable breaks down and the aesthetic embraces ambiguity, the question becomes how we can incorporate ambiguity into practicing. What do we actually do when we know neither how the work should sound nor what exactly we should do? Practicing does not consist of clear and recognizable tasks, but rather takes form of a process, in which experimentation, evaluation, and consideration are significant traits. The practicing becomes a discussion of the material.

In practicing *Pression*, the greatest challenge was to find and refine the right sounds, and then to work on the phrasing and timing. In the Feldman, once the pitches had been decided, the practicing was devoted to developing the “non-phrasing,” that would achieve the composer’s aim of each sound sounding in itself. In the Steen-Andersen studies, the undoing of the connection between movement and sound, led to a practice method in which movements aimed to correspond with the visual intent.

In *Opus breve*, I experimented with two seemingly contradictory methods: the “global method,” incorporating as many parameters as possible, but as slowly as necessary, combined with a “play-through method,” aiming at playing through, even from an early stage. In addition, I used improvisation in my practicing, to make myself familiar with and cultivate the techniques and sound world of Hübler in a free setting. I actively used the “playing-through method” along with improvisation in an attempt to achieve an attitude toward performing that goes beyond the rigorously programmed concepts of right and wrong in performance practice.

6.6.2 Specialization and de-specialization

What we see happening in new music is both a specialization and a de-specialization. There is a specialization, in that ever-increasing technical skills are required of the instrumentalist. We live in a time when cleverness is in focus together with control and mastery. The general technical level is high, and performers’ virtuosity encourages the composition of intricate scores and new investigation into what an instrument can be and what it can achieve. At the same time, the cello carries with it the some 400 years of history and an inescapable aesthetic “aura.” It is interesting that it is used as a mean to communicate contemporary music, when we see how the instrument is being modified to a greater or lesser extent, and its traditional functions even abandoned altogether in this music. The extreme of de-specialization would be an instrumentalist without an instrument.⁶⁵⁵

Performance practice may be imagined as an interpretive space made up of the performer, her body, her instrument, practice, experiment, the composer and score, tradition and context, and any number of other elements that come in and out of play and any given moment. We are invited to be creative—to explore what the different elements “mean” when they are put together with the confidence that contradictions are not threatening, but only open up new

655 In his Artistic Research Project “This is Not a drum,” percussionist Håkon Stene explores “possible deconstructions of the role of the performer in contemporary music” at the Norwegian Academy of Music. He proposes “Musician” as an open category and investigates the role of “Instrumentalist without a fixed instrument.” Percussionists have been the most multi-tasking of all instrumentalists, but it is becoming more common for other instrumentalists within contemporary music ensembles to perform musical tasks outside of their main instrument.

opportunities. The polyphonic performer accepts the invitation to play this multi-layered role, in which the abstractly notated music, is handled through the concrete instrumental materiality and becomes meaning.

The metaphor of polyphony can help to recognize that the various, and sometimes conflicting factors that may occur in musical practice, are necessary and vitally important for music to be able to survive. The term “polyphony” refers to more than a harmonious sounding of multiple voices, it encompasses the possibility of conflicting, contrasting, and even antinomic elements. Essential to polyphony is the equality of the voices in a dialogic or multi-faceted discourse.

6.6.3 Performance practice in a state of becoming

In studies of performance practice, there is a tendency to view the past as something unified and coherent, whereas the present time is regarded as diverse and complex. This is a simplistic historical model as parallel practices always have co-existed. To be sure, a musical practice is an aesthetic practice, and several dimensions are evasive, they escape analysis. In my study, I have tried to identify which aspects of a musical practice we might capture and bring into the discourse. Knowledge about practice is embedded in the discursive communication that necessarily surrounds any practice at hand. We are born into a defined language, but it changes in use as new concepts can be said to emerge in interactive situations. In his “Philosophical Investigations,” Wittgenstein examined the connections between language and reality. Of rules he said, “[a]nd hence also ‘obeying a rule’ is a practice. And to *think* one is obeying a rule is not to obey a rule. Hence it is not possible to obey a rule ‘privately’: otherwise thinking one was obeying a rule would be the same thing as obeying it.”⁶⁵⁶ This distinction between thinking and doing in obeying a rule, implies that a rule becomes a rule only in action—or practice. As the repeated following of certain rules can be seen to constitute a practice, to follow a rule is thus to exercise a practice. According to Wittgenstein, each rule earns its identity from the context in which it is practiced. He further says: “We must let the use of words teach you their meaning.”⁶⁵⁷ Hence, in a performance practice, the meaning of a word would only emerge in the use of it by a sufficient amount of people doing certain things with a certain consistency over time and in a certain way that is intersubjective and shared. In this perspective, the words describing a practice will

656 Ludwig Wittgenstein, *Philosophical Investigations* (Oxford: Basil Blackwell, 1958). PI §201, p. 81e.

657 *Ibid.*, p. 220.

not discover anything entirely new, only what is already becoming established in a practice and—so to speak—reveals itself from within. These considerations point to the fundamentals of the performance practice of contemporary music—the laborious and slow processes that contribute to a practice that is living and evolving. This practice is a practice in the making.

A cello is an intentional object and a score is an intentional object. In “Blindness and Insight,” Paul de Man speaks of a chair as an intentional object as opposed to a stone that is a natural object: “The potential act of sitting down is a constitutive part of the object.”⁶⁵⁸ Regarding the cello, the potential act of playing is a constitutive part of the object. Cello is in this way the name of a practice. In this way, and in line with Wittgenstein, we do not necessarily label the practice with language, but with the implicit action.

Intentions are similarly embedded in culture. In this way, intentions are intrinsic in everything I have learned in music, in practice, in traditions, habits, and prejudices. I am bound by what I have learned, it is embedded; in music it is often embedded in speechless actions. The performance practice of music is a common practice with a large hidden curriculum. Many of the conditions that form the basis of practice are not explicitly pronounced, but they are nonetheless significant.

As an interpreter writing about music of the present time, I am not neutral. The discursive patterns affect me as an interpreter. I orchestrate the past by playing the music from the past and writing about it. I gain understanding through playing and writing, and the memory is hidden in the experience of the action. Performance practice can thus be seen as past experience. In the prevailing model for instrumental teaching at conservatories worldwide, that of *apprenticeship learning*, knowledge is transferred predominantly through action and imitation. Inherited skills and interpretations are transmitted through words and actions, to the next generation of performers. Much of this knowledge is transmitted without being explicated. A great deal of the knowledge in instrumental teaching and in performance practices is tacit knowledge.

658 Paul de Man, “Form and Intent in the American New Criticism,” in *Blindness and Insight. Essays in the Rhetoric of Contemporary Criticism* (University of Minnesota Press, 1983), p.24.

6.6.4 Musician as artist or artisan?

This leads me to a pertinent question: is an instrumental performer more closely akin to an artisan or to an artist? Are we—professionals who pursue our profession through guilds, practitioners of inherited traditions communicated to us through apprenticeship—best defined as craftsmen, who master our instruments through our fingertips, and work as humble servants happily to the honor of the composer? As instrumentalists, are we a simple conduit of another’s creative thoughts and ideas about what a musical work should be? Or, are we creative artists, who make our own decisions, wading knee-deep into the action, with a unique hands-on experience of musicking⁶⁵⁹—an artist who accordingly must make artistic choices? Are musicians artists who create music out of symbols on paper, who challenge and explore perception, who create live concert situations where the interplay of the instrumental body, the musician’s body and mind, and the resulting music all come together in a higher unity? Or are the artistic experiences that occur in a concert situation merely a by-product of the qualities in the musicians craftsmanship and a secondary result of the fact that the work is composed by an artist, a composer who has created a (master)work?

It is my experience that performers can easily become the composer’s mouth-piece. In preparing a piece, it is beyond doubt of great interest to the performer to know what the composer thinks. But this knowledge must be coupled with the performer’s own creativity, authority, and freedom of action. Then the performance becomes a blend of the performer’s own intentions with those of the composer. When the practice is recognized as part of the work, the work of the performer can thus be seen as part of the musical work itself. At the same time, the performer can take on the role as reader or listener, able to bring a critical ear to the performance. We have seen how the double presence of the composer in contemporary music, both in the score and work and as a physically present and living composer can lead to an emphasis on the composer’s intention that can easily override the performer’s intention completely.

659 “Musicking” is Christopher Small’s term, used to highlight that music is an activity and process, rather than an object. Christopher Small, *Musicking: The Meanings of Performing and Listening* (Hanover, NH: University Press of New England, 1998).

6.7 Conclusion

Is it not paradoxical that works aiming to examine ideas and critique past practices should be carried out by obedient and faithful servants?

What would happen if the performers showed a similar critical, rebellious, and creative attitude as the composers? What would happen if they saw the practicing and performance of a piece as a starting point to examine and create something, a process that is open and has an open outcome—that can involve cutting, altering, modifying, enlarging, reducing, revising and re-orchestrating the work at hand? We know that this practice is common in dealing with text in the theatre.⁶⁶⁰ And precisely this practice was common among musicians and conductors well into the early twentieth century,⁶⁶¹ but by the late part of that century it had become very uncommon and out of the ordinary when dealing with musical works in the Western classical tradition. Can we imagine performers adopting a similar position as a composer, which means not taking the material (for a performer that would be the score) at face value, but rather commenting and reflecting on it, turning it inside out, experimenting with it, cutting it, mutating it or recomposing it? Is it not a paradox that composers should be the only contemporary artists within music who are aware of and commit themselves to reflecting the changes in society, though performers live in the same time and work in the same environments—in the same artistic ecology? The fact that performers currently play such a limited proactive role seems to me to support the argument that the role of the performer is governed by tacit rules that are sadly static or even reactionary; classical music has not kept pace with the vibrant and innovative artistic practices we see in the visual arts, dance, theatre, and literature. In my view, this situation also reveals something about the strong position of the concept of the work, and the power structures that follow this concept.

660 In “Offending the Playwright: Directors’ Theatre and the ‘Werktreue,’” David Barnett investigates the concept of *Werktreue* within the theatre, where directors take great liberties with the text to the extent that playwrights have withdrawn their names and one director is facing legal questions. He concludes that the playwrights may have to accept this condition of interpretations getting out of their control, and writes: “Playwrights, like Barthes’ author, may have to stop taking offence and accept their symbolic deaths after all.” In *German Text Crimes: writers accused, from the 1950s to the 2000s*, ed. Tom Cheesman (Amsterdam: Rodopi, 2013), p. 92.

661 See for example Erling E. Guldbrandsen, “Performance Practice,” in *Cambridge Wagner Encyclopedia*, ed. Nicholas Vazsonyi (Cambridge: Cambridge University Press, 2013), 418–22.

6.7.1 The birth of the performer

In “The Death of the Author,” Roland Barthes invites the reader to take an autonomous interpretive stance, thus making the author of the text redundant. In musical performance, the performer inhabits the interpreter’s role and gains authority over the text, thus making the composer redundant. One can imagine that if the performers become dissatisfied with the lack of freedom to participate in this power constellation—if they tire of their role of executants of the composer’s intention—they might choose to make and play their own music, assuming the role of the composer themselves and thus circumventing or avoiding these hierarchies. Interestingly, many performers of contemporary music do compose their own music, both in written form and as improvisers.

We have seen in this project that less clearly defined notation—notation with more ambiguity in the writing, coupled with notation that indicates action rather than sounds—opens up a much more co-creative role for the performer. In this context, it is impossible to stay indifferent or act as a passive recipient. We have also seen that the notion of *Werktreue* in this context implies collaboration and engagement, rather than submission to a superior.

It is my hope that this project will encourage further exploration of the tension between work and performance, of the different ways the work is constituted in each context, and of the power structures in this field. As long as the work concept retains its hold as a contract and condition, the performer’s role will remain bound by the historical and contemporary regulation this entails.

Performance is not about rights, ownership or duties, a division of responsibilities or roles; it is a collaborative project that puts music—or better, musicking—at the center. It is a space in which emotions and incredible dreams and visions are possible within the aesthetic realm. A polyphonic performance practice can rediscover the creative possibilities of being a musician before the work-concept took hold and split music making into a hierarchical system of composers and performers. It can be a new take on the musician’s role from the time when musicians composed, taught, played several instruments, wrote criticism, and directed orchestras. In this multifarious space for maneuvering where friction and ambiguity are valued properties, there is room for critical investigation, varying approaches, and, above all, experimentation: experimentation with instruments, with sounds, with the scores on all levels, and with old and new repertoire; experimentation with technology and electronics, with extended instruments and hyper-instruments; experimentation with what it means to

be a performer. A polyphonic performance practice is a practice in the state of becoming.

When asked about the still-prevalent hierarchy between composers and performers of new music, pianist Mark Knop answered that he was “more interested in the power than the glory,” and pointed out that the debate notwithstanding clarified that when a performance takes place on stage, “the performer has the last word!”⁶⁶² Knop’s words capture what Abbate calls the “drastic”⁶⁶³ aspect of music, the unique state of live performance where discussions about hierarchies are absent and irrelevant.

Charles Rosen said: “In any case, the most successful performance of contemporary works, as of the music of the past, are those that only give the illusion of remaining faithful to the text while they hide a genuine and deeply rooted freedom of interpretation.”⁶⁶⁴ Is it not high time we performers stopped pretending and took the full step into an integral freedom of interpretation?

6.7.2 Knowledge and knowing

What knowledge has come out of this project? Can this knowledge, descriptive and reflexive, benefit others? Or is it just one musician’s interpretation of the performance practice of the seven works?

The term performance practice embraces a wealth of knowledge, contexts, actions, and concepts. My study highlights the “inner life” of my practice in close encounters with other performers’ practices, where processes, procedures, and internal contradictions give us new knowledge about what a musical practice may entail. My choice of works has raised some particular problems regarding performance practice, which might shed light on important aspects of the performer’s role in contemporary music. The diverse natures of the works reflect the diversity of our time, and the composers’ varied aesthetic approaches will inevitably reflect the diversity in the field.

662 Mark Knop, “Musicianship in the 21st Century; New Roles for the Classical Performer” (lecture, “Vinterlydfestivalen,” The Norwegian Academy of Music, 2013).

663 Carolyn Abbate speaks about the drastic potential of music, as physical presence, authentic musical domain, which she contrasts with “tactile monuments in music’s necropolis—recordings and scores...” in “Music: Drastic or Gnostic?,” *Critical Inquiry* 30/3 (2004): p. 510.

664 Charles Rosen, “Freedom of Interpretation in Twentieth-Century Music,” p. 73.

I have explored the practice by carrying it out, examining it, and writing about it. The project represents an epistemic complexity due to the variety of sources, methods, performance knowledge, and experience upon which I have drawn. The study has produced performance-related knowledge, which I have fed back continuously into the loop: my own learning circle. The cyclic method presented in relation to artistic research in Chapter One, has forced me to reflect upon issues and elements, some of which I previously have not had seen the need to make explicit as long as they were a “natural” and inherent part of my living practice. Thus the process of writing my way through reflections, considerations, and experiences related to the material, and of discussing the performance choices made under certain conditions, I have produced a different kind of knowledge than the purely performative. I have made explicit a knowledge and way of knowing that usually remain implicit within the practice.

In my research, I have at times felt like cartographer, comparing the existing musical maps to the new terrain, and arguing the case for new—or at least partially redrawn—mapping. The most surprising discovery has been how old-fashioned the performer’s role seems still to be, even in contemporary music. Many of the traditions and inherited conceptions from older music are alive and well in contemporary music—something that is remarkable when comparing music to other contemporary arts.

This research should be directly relevant for cellists undertaking study of these seven works. And although the project has been thematically limited to the cello repertoire, my ambition is to contribute to the broader discussion within the field of performance practice in a way that will be valuable to performers, composers, conductors and musicologists alike.

A relevant question is what impact this research may have on my own practice as a performing cellist. My investigating gene has probably always been more or less present, also prior to the research-period, but with the increasing knowledge, I have gained a growing awareness of what I do, and why I do it. The performance practice in itself, in the discussed works, poses acute questions that require a critical approach from the performer’s side. It is a characteristic of these works that critical questions are raised through the practicing of them. In this way, the critique can be seen as an intrinsic part of the works, a critique also encompassing the practice itself.

Alastair Williams writes about Lachenmann’s practice:

Lachenmann demonstrates clearly that when we engage with music, whether through composition, performance or reception, we engage with a range of opinions, practices and assumptions, whether these are our own or operate at an institutional level. His music tells us this in an embodied and intellectual sense, thereby creating opportunities to reconsider established responses.⁶⁶⁵

To study central contemporary works that provided a range of challenges has resulted in valuable experience that can be transferred to other works. In my experience, practicing and performing key works, provides me with tools to tackle other scores. In the current diversity of styles, each work poses unique challenges, making it necessary for the performer to gather a great variety of experience in order to build a professional understanding.

For me, this dissertation project has been a personal journey, both in a musical and an academic sense. I find myself in a different place now than when I started five years ago with my conceptions of *Werktreue*, notation, idiomaticism, and body. For five years, I have been on a journey with these seven works, and I have met various challenges, different for each of the works. I have encountered difficulties and resistance, and I have struggled to capture my experience in writing. Along the way, I have continuously problematized how I should conduct the research, describe it, and write about it in a scholarly context.

The two facets of my dual role as cellist and researcher are, despite a shared investigative attitude, very different in nature, and they relate to representation in different ways. Trying to merge these has been a challenge. As a performer, I have a different access to the music than I would as a listener. The musical object does not exist in itself outside performance—it must be played in order to be constituted. This applies to all music, of course, but in the new music I have examined, the ambiguity of the notation makes need for performance to give life to the work all the more salient. My project belongs to the direction of artistic research within the performative turn, since important parts of my research have been conducted through the act of music-making. I have come out of the research period to a different place, both as cellist and researcher, by working my way through this matter. I have found something that initially was unpredictable and unforeseeable.

Through this work, I have come closer to an awareness and reflection when knee-jerk reactions occur—by not accepting inherited conventions and truths

665 Alastair Williams, *Music in Germany since 1968*. Cambridge: Cambridge University Press, 2013.

without questioning them first. After investigating how certain mechanisms and power structures work, and the effects they have on the performers, it is clearer to me why we have a range of possible choices that do not seem apparent in the *Werktreue* paradigm. I think several new and more interesting interpretations may result when performers let go of simply tracing what they *believe* are the ideal intentions of the composer.

6.7.3 Future research

The dissertation has covered central topics in the performance practice of contemporary music, each of which has scope for investigation on deeper levels. The domain of performer's proficiency have only recently started to receive serious attention in current research, and performance practices are still often being studied exclusively at the level of technical or work-specific issues. Hence, natural directions for future research include the investigation of various performance perspectives.

In studying performance practice of early music, prevailing research has concentrated on reconstructing trustworthy scenarios about what the music might have sounded like in its times. Conversely, in contemporary music, we have one hundred years of musical recordings available, in addition to a practice with live concerts and living performers and composers. Just as performance practice is a field in the making, it would be true to say the same about the research on this practice.

The hierarchical structure that prevails even in contemporary music, which gives a strong and authoritative position to the composer and the score offers a continuing challenge and a natural guide to future research. We have seen that the practice is conditioned by regulations and conventions, such as styles and "truths," the investigation of which could prove fruitful for a deeper understanding of current musical practice.

There are many other important future directions including different aspects of the collaboration between performers and composers, as well as experimentation⁶⁶⁶ and investigation of interpretational approaches. An interesting direc-

666 The Orpheus Research Centre in Music [ORCiM] is conducting a five-year research project named MusicExperiment21: Experimentation versus Interpretation: Exploring New Paths in Music Performance in the Twenty-First Century, aimed at "Combining theoretical investigation with the concrete practice of music, this project presents a case for change in the field of musical performance. Alongside critical reflection on the state-of-the-art, it proposes

tion for exploration is the performative and interpretational limits of musical works—how far can a work be stretched before it ceases to be the original work and becomes something else? I believe that bold and creative investigation of these transitions and thresholds between works and interpretations has much to offer our knowledge about musical potential, performers, and performance practice.

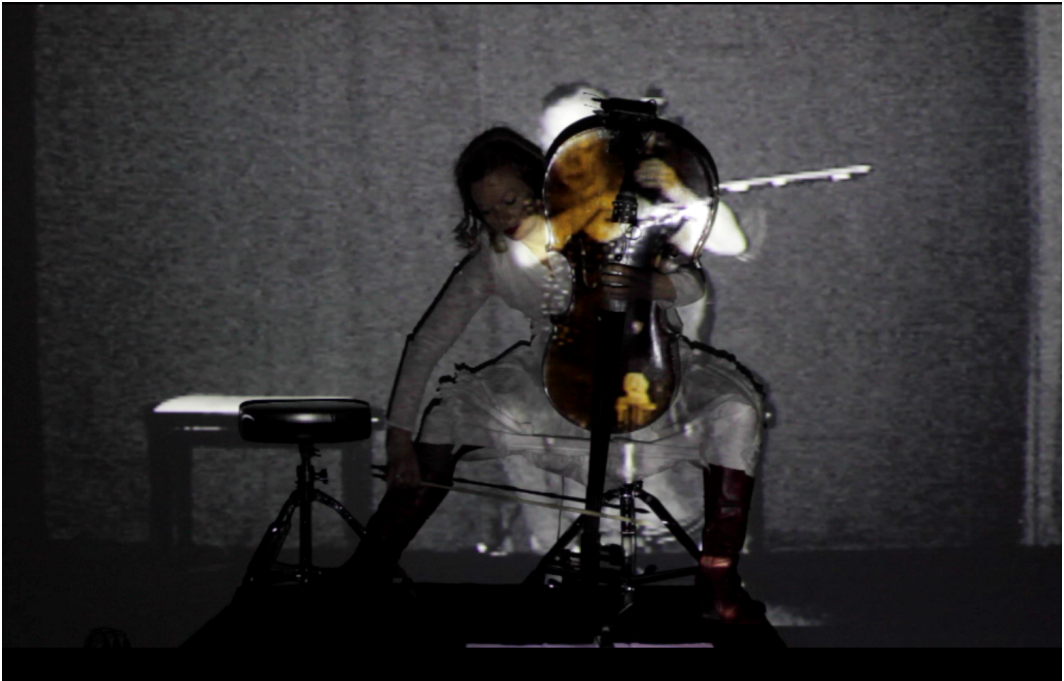


Figure 40: From a performance of *Study for String Instrument #3*.

a graspable and ‘audible’ alternative to traditional understandings of ‘interpretation’ in musical performance.” “Experimentation Versus Interpretation: Exploring New Paths in Music Performance in the Twenty-First Century,” <http://musicexperiment21.wordpress.com/about-abstract/about/>.



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Appendix I

Morton Feldman, *Projection I*

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page 344 - 348

Morton Feldman, *Intersection IV*

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page 349 - 352

Morton Feldman, *Intersection IV* (My realisation)

page 353

Klaus K. Hübler, *Opus breve*

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Helmut Lachenmann, *Pression*

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(5 pages plus preface)

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Simon Steen-Andersen, *Study #1*

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(3 pages)

page 363 - 365

Simon Steen-Andersen, *Study #2*

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page 366 - 368

Simon Steen-Andersen, *Study #3*

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PROJECTION 1

FOR SOLO CELLO

Morton Feldman

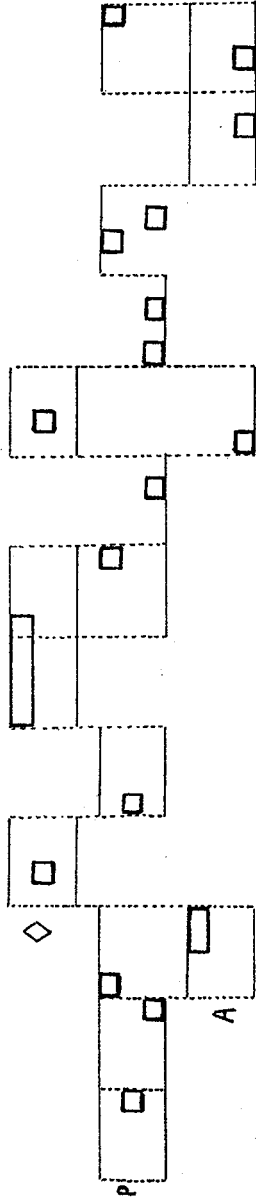
TIMBRE IS INDICATED: \diamond = HARMONIC, P = PIZZICATO, A = ARCO
 RELATIVE PITCH (HIGH, MIDDLE, LOW) IS INDICATED: $\overset{H}{\square}$ = HIGH, \square = MIDDLE,
 \square = LOW. ANY TONE WITHIN THE RANGES INDICATED MAY BE SOUNDED.
 THE LIMITS OF THESE RANGES MAY BE FREELY CHOSEN BY THE PLAYER.
 DURATION IS INDICATED BY THE AMOUNT OF SPACE TAKEN UP BY THE
 SQUARE OR RECTANGLE, EACH BOX (\square) BEING POTENTIALLY 4 ICTI.
 THE SINGLE ICTUS OR PULSE IS AT THE TEMPO ♩ OR THEREABOUTS.

6845

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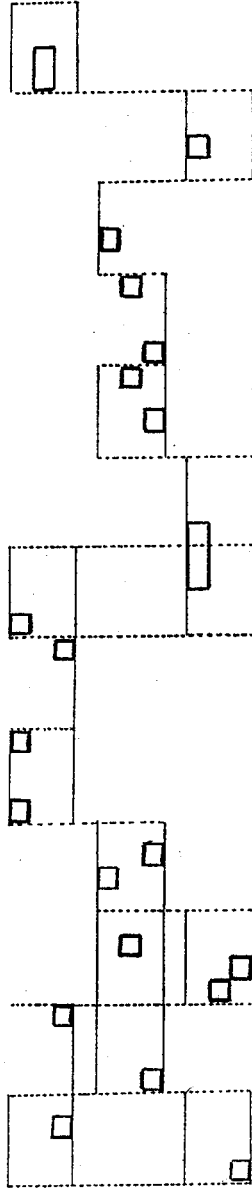
PROJECTION 1

Morton Feldman

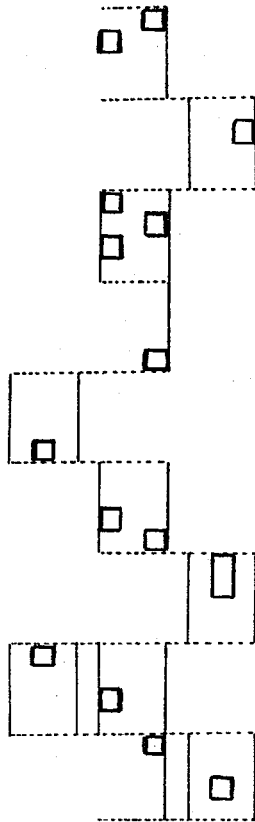
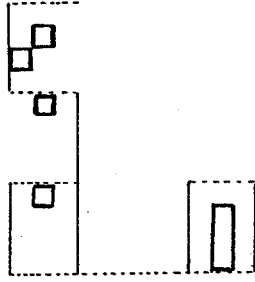


1.

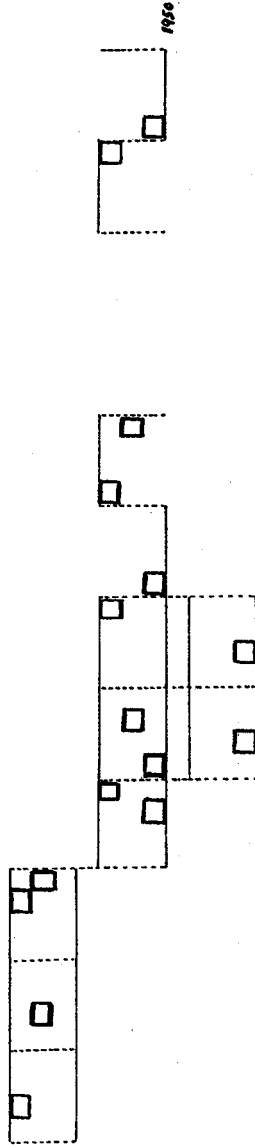
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2.



3.



4.

Each box is equal to MM 80. Each system is notated vertically as regards pitch: high, middle, low. The player is free to choose any dynamic and to make any rhythmic entrance within the given situation. Numbers indicate the amount of sounds to be played simultaneously (if possible). Sustained sounds, once played, must be held at the same dynamic level to the end of the given duration. All sounds are pizz. unless otherwise notated.

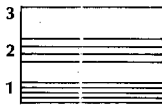
♦ har.; A arco; etc. etc.

INTERSECTION IV

The musical score is written on ten staves, alternating between bass and treble clefs. It features a variety of rhythmic values, including eighth and sixteenth notes, and rests. Performance markings include 'pizz' (pizzicato), 'arco' (arco), and 'sul pont' (sul ponticello). Fingerings are indicated by Roman numerals (I-IV) and numbers (1-5). A note marked with an 'x' is defined as 'x = approx pitches'. The score concludes with a double bar line and a final chord in the bass clef.

Remarks on the notation

Staves 1 – 3



1 This is where the actions of the left hand are notated. These stopping actions are to be seen as a musical layer on their own; the audibility of the pitches and rhythms notated here – what, how much and in what manner they are to be heard – depends on the composed coordination or discordance of the bow motion.

Only when the left hand and right hand proceed simultaneously (= traditional performance technique) was the normal note head drawn in this staff. When the left hand is led independently of the bow, this is indicated by a diagonal notehead (◄).

Further symbols:

× produce tone by tapping the fingertip

◇ harmonics

◄ half-harmonics


Harmonics and half-harmonics are used, whether the stopped tone falls on a vibration node or not. The acoustical result varies accordingly.

2 These four lines represent the four strings of the instrument. The notated rhythms determine the movement between the strings. Whenever a tone is produced only by a change of string, it results from the extremely slight accompanying shifting motions. *Arco battuto* is indicated by a wedge-shaped note head (>).

3 The back and forth motion (↔) of the bow is notated on this line. It can be identical with the rhythm of the bow change, or rhythmically independent of it. In the first case, the note stems are drawn from staff 2 to staff 3; in the second case, each staff is given its own rhythm.

Further symbols

c.l. col legno

c.l./ord.  trill-like change between col legno and arco ordinario (produced by rapid rotation of the bow)

s.p. sul ponticello

s.t. sul tasto

Fr. at the nut

M. middle of the bow

Sp. tip of the bow

G.B. full bow

→ Arrows signify uninterrupted transitions between the various forms of articulation.

Dynamics

Wherever a traditional dynamic mark affecting the result is required in this work, it is indicated in larger print; more frequent, however, are dynamics in smaller print, which refer to the intensity of the action; they are arranged as follows in staves 1 – 3:

1 intensity of the finger attack (only at X)

2 intensity of the bow pressure

3 speed of the bow motion

These three dynamic parameters can be changed independently from each other and lead to results diverging more or less from the traditional sound.

Vorwort

Die Notation dieses Stücks zeigt – mit Ausnahme der Stellen, wo die übliche Tonhöhen-Notation angedeutet ist – nicht an, was klingen soll, sondern, was der Spieler tun soll; das heißt: an welcher Stelle des Instruments der Bogen (= rechte Hand: Notenhäse nach oben) und wo die linke Hand (Häse nach unten) agieren soll. Zur Orientierung diene jeweils die Zeichnung am linken Rand bzw. weitere Anweisung im Notentext selbst. Aus der Zeichnung ist zu ersehen, daß der obere Rand dem unteren Corpus-Ende, der untere Rand dem oberen Corpus-Ende entspricht.

Ein Teilstrich entspricht einem Viertelwert, wenn nicht ausdrücklich anders angegeben.

Dieses Stück sollte möglichst auswendig gespielt werden, auf jeden Fall aber so, daß a) nicht geblättert werden muß, b) die Noten nicht die Sicht auf Instrument und Bogen verdecken. Das Cello kann ad lib. elektrisch verstärkt werden.

Preface

Except for places where pitches are notated in the traditional manner, the notation of this piece does not indicate the sounds, but the player's actions, i. e. at what place on the instrument the right hand (bowing: note-stems point up) and left hand (stems point downwards) should operate. The drawings in the left margin and other indications in the musical text serve as a guide. In the drawings, the upper edge corresponds to the bottom of the body of the instrument; the lower edge of the drawing corresponds to the top of the body.

A division line represents a quarter-note value if not expressly indicated otherwise.

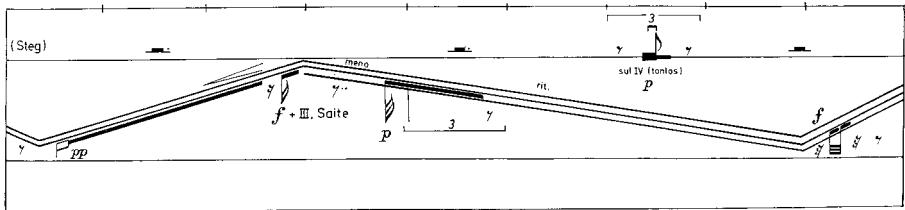
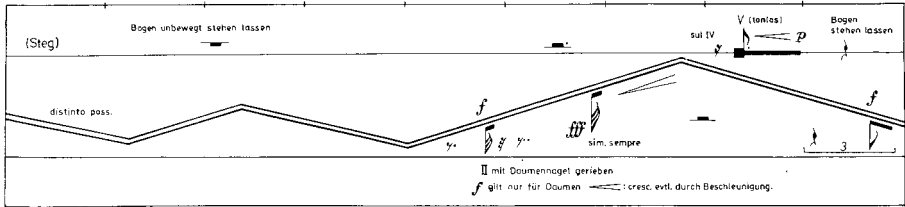
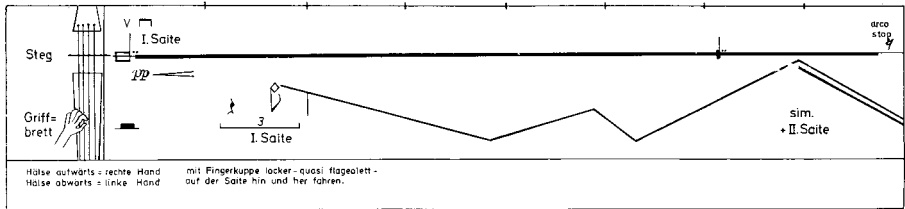
If possible, this piece should be played by heart, or at least in such a way that (a) the pages do not have to be turned, and (b) the score does not block the view of the cello and bow. The cello may be electrically amplified ad lib.

Für Werner Taube
PRESSION
 für einen Cellisten / for one Cellist

Helmut Lachenmann, 1969



ca. 86 (Bogen wird zumeist in der geschlossenen Faust gehalten)



4

1/8-Haarlänge 1/4
 1/2 → 1/8
 1/2 → 1/2 → ganze Haarlänge
 am Frasch
 zwischen Steg und Seitenhalter
 dicht am III
 Saitenhalter
 f
 f pass.
 molto distinto
 mit Fingerkuppen
 (wie anfangs)

Klemmstellen zum Frasch hin verlagern
 Klemmstellen zur Spitze verlagern
 Bogen (in der rechten Faust) zugleich steil quetschen und nach rechts ziehen
 (Linke greift „as“)

am Frasch beginnend, mit viel Bogendruck
 I II III IV
 ff legato
 pizz.
 pizz.
 meno f
 sf

hintern Steg
 immer dicht am Seitenhalter auf Umspinning
 Bogen ad lib. etwas herauf- bzw. herunter verlagern,
 Bogen in Faust.

mindestens 60 Sek.
 molto rit.
 pizz.
 sf
 intensiver Druck
 circa unter den Saiten auf Stegwand
 legno-Schlag auf Stegfuß
 sf p
 Bewegung verlangsamen
 Schlag auf Corpus

Bogenwechsel ad lib.
 Dauer ad lib. (ca. 60 Sek.)
 Schlag (plötzlich) aufs Griffbrett und schnelles lockeres Reiben der Saiten an der Aufschlagstelle

*) Bogen mit Haaren normal streichend auf Corpus bis herauf direkt unter die Saiten verlagern

Bogenwechsel ad lib.
 I II III IV
 Stegwand
 Corpuswand vor Steg
 molto espr.
 Pizz.
 col legno salt.
 I II III IV
 sf

Bogenstange von unten gegen die Seite prallen lassen. Tonhöhenveränderungen durch Verlagerung der springenden Saite zum Steg (höher) bzw. vom Steg weg (tiefer).

*) Linke berührt leicht die Saiten (quasi flag.) um sie am Klingeln zu hindern.

(LH. $\begin{matrix} \circ \\ \circ \\ \circ \end{matrix}$) sempre legno, einzelne staccati durch sofortiges Entfernen des Bogens von der Saite nach Aufschlag.

(LH. $\begin{matrix} \circ \\ \circ \\ \circ \end{matrix}$) auf I und IV. sempre legno
auf Steg und Corpluswand: mit Haar

hellere bzw. dunklere Klänge auf der Stegfläche durch Aufschlagen näher zur Bogenspitze (und umgekehrt)

alle haltend dicht nebeneinander

Bogen weiterziehen

Spitze der Bogenstange an der I. Saite vorn und zum Steg hin kreiseln lassen.

Bogen (Haar) an der Spitze ohne Druck auf Corplus fallen lassen

dasselbe auf Stegfläche

hellere bzw. dunklere Klänge auf Corplus durch Aufschlagen näher zur Bogenspitze (und umgekehrt)

auf rechtem F-Loch beginnend → zum linken F-Loch

sub
harter Schlag

6

Diagram 1: Musical score for violin. It shows a sequence of techniques: starting from the left F-hole, moving to the right F-hole, and playing arco on the strings. The score includes dynamic markings like *feroce*, *sf*, *p*, and *ppp*. A note indicates 'auf Saitenhalter (dolcissimo) kaum Bogenruck'. The left hand (I.H.) is shown with a diagram of the hand on the neck.

mit Bogenhaar unter den Saiten auf Carpus scharren

Linke schlägt auf Carpus, links vom Griffbrett, dann Scharren mit geschlossener Fingertfläche

*) von der Aufschlagstelle aus gleich mit Scharren beginnen

kein schnelleres Zeitmaß, nur engere Notation!

Diagram 2: Musical score for violin. It shows a bow change (*Bogenwechsel ad lib.*) and playing on the strings with the left hand (*Corpus l.i.h.*) and a distinct bow stroke (*sim. auf Saiten distincta*). The score includes dynamic markings like *ppp*. A note indicates 'Bogen auf Saitenhalter immer weiter abwärts verlagern'. A diagram shows the hand on the neck with the note '(in Schulterhöhe) Hand nicht von den Saiten nehmen'.

Diagram 3: Musical score for violin. It shows playing on the strings with the left hand (*auf Carpus*) and a distinct bow stroke (*sim. auf Saiten distincta*). The score includes dynamic markings like *ppp*. A note indicates 'hintern Steg geräuschhaft, immer möglichst tonlos'.

Diagram 4: Musical score for violin. It shows playing on the strings (*auf Saiten*), simple wrist movement with the hand flat on the strings (*einfache Wärbewegung mit Handfläche auf Saiten*), and playing with upright fingernails (*mit aufgestellten Fingernägeln*). The score includes dynamic markings like *ppp*. A note indicates 'auf Steg III'.

Study for String Instrument #1

- if played in a very big or noisy hall amplification may be used.
- can be played on any string, but I recommend the 4th string.
- always use as much bow as possible and always move between the lowest possible position and the very highest (the end of the fingerboard)
- the harmonics should be artificial quarter harmonics
- the *forte* should be a very loud *forte* (~*fff*)
- the signs and techniques are explained as they appear

Simon Steen-Andersen 2007

$\bullet = 60-80$

bow

frog

point

high

deep

move bow back in position

(inaudible or whatever sound the movement of the hand makes)

f

f

Strong downbeats ∇

f

f

f

f

f

f

f

f

f

f

f

f

(very exponential movements, crescendi and diminuendi)

f

pppp

f

33

bow

str.

pppp *f* *pp* *f* *pp* *f* *pp* *f*

41

bow

str.

(small break in the sound,
when returning to the point,
but within the time)

48

bow

str.

(hands practically touching each other)

56

bow

str.

65

bow

str.

(inaudible, don't active the tone - only the sound of sliding the finger, if any)

74

(not too short)

bow

str.

82

(Strong downbeats)

bow

mp mf f

str.

(the hands practically touching each other)

90

bow

str.

100

bow

f p f p f p f p f p p f p

str.

(inaudible - only the sound of the finger, if any)

(sim.)

108

Slower sul pont. estremo! ("as if dancing")

bow

f p f p f pp mf pp

str.

114

First tempo

bow

mf pp mf pp mf pp f

str.

120

c.l. = col legno; 100% wood

Slower (according to the room; find a tempo where the smallest sounds are still audible...)

c.l. ord. c.l. ord. c.l. c.l. c.l. c.l. → ord. → c.l. c.l.

bow

pp f pp f pp f pp f pp f pp < ff > pp c.l.

str.

(tapped)

(scratch several strings with fingernails)

3

Study for String Instrument #2

for string instrument and whammy pedal

- Set whammy pedal to 2 octaves upward glissando.
- Use a contact microphone (on the body) - possibly in combination with a miniature dpa - or any other mics that are able to make the "whammy melody effect" of the ending (m. 121).
- The amplified forte should be loud but not unpleasant.
- The acoustic sound of the cello should be barely audible - use a practice mute if it is too audible.
- The whammy pedal can be played by the cello player or by a second player on stage as a duo.
- All glissandi should be even; starting right away and arriving at the other extreme on the next beat.
- The whammy glissando is not linear - when there is time try to compensate so that the result is as even a glissando as possible (when the same tone is played on the cello) or as steady a tone as possible (when the cello is playing a glissando in the opposite direction).
- The piece can be played by several string instruments in unison.
- Instrument system: Choose one string to play on, lower line means deep tone (not the open string), upper line means the same tone two octaves higher.

Simon Steen-Andersen 2009

♩ = ca. 60

dotted glissandi:
silent position change

15va
deep
p

whammy
15va (toes down)
unison
(heel down)

legato!
(audible change as fast as possible)

poco a poco crescendo

instr.

wha.

even gliss:
TRY to keep the same
resulting tone all the time

mf poco a poco diminuendo

instr.

wha.

♩ = ca. 50

ppp

mp sub.

instr.

wha.

instr.

wha.

(TRY to keep the same tone) *senza arco* *col legn.* (lh.) (along string) *senza arco* *col legn.* (lh.) (along string) *senza arco* *col legn.* (lh.) *col legn.*

74

instr.

wha.

79 (lh.) (legn.) (lh.) (legn.) (lh.) (legn.) (lh.) (legn.) (lh.) (legn.) (lh.) (legn.) (lh.) (legn.) (lh.) (legn.)

instr.

wha.

86 (legn.) (body) *f* *p*

instr.

wha.

93 (body) (along string) (body) (body) *f* *p* (lh.) (body) *senza arco*

instr.

wha.

98 *senza arco* (body) (lh.) *f* *p* *f* *p* *f* *p*

instr.

wha.

104 *f* *p* *f* *p*

Study for String Instrument #3

(for cello and video)

Preparation:

- 1st-3rd string dampened close to the bridge with a piece of cloth or with masking tape
- 4th string tuned down about one octave
- wooden side of bow prepared with 5-7 pieces of masking tape placed with irregular distances and widths, one being at exactly the middle of the bow

Staging:

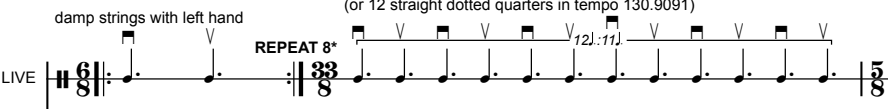
- player sitting back against a screen or a white wall with the instrument barock-style, as vertical as possible, keeping the instrument as close as possible to the screen/wall
- the video (preproduction with the same player) is being projected onto the player, live-size
- the instrument should be amplified, sound level matching the recording (fx with a contact mic.)
- the room should be completely dark, the only light should be from the projector
- the video is recorded with a click track, the live version is played with a click track
- the notstand used should be well below the bridge, pref. a bit to the side or enlanged on the floor
- the piece could be played by other string instruments like a smaller strings or a guitar and the piece could be played as a duo with the second player sitting right behind the first player

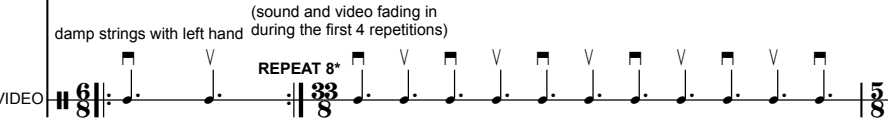
Bowing:

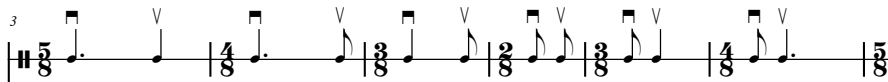
- the bow is always played col legno from the very point till the screw(!) on the the 2nd and the 3rd string (bow so far to the point that the point slides down on the 4th string)
- keep the bow perfectly horizontal and 90 degrees on the audience
- if nothing else is written, the dynamics should be what comes naturally and relaxed


♩ = 120 **Simon Steen-Andersen 2011**

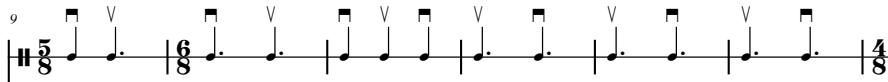
(or 12 straight dotted quarters in tempo 130.9091)

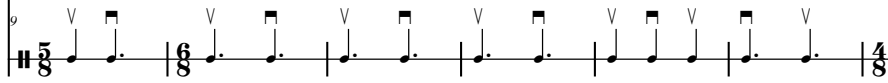
LIVE damp strings with left hand REPEAT 8* 

VIDEO damp strings with left hand REPEAT 8* 

3 

3 

9 

9 

15 $\frac{1}{2}$ BOW $\frac{1}{1}$ BOW $\frac{1}{2}$ BOW $\frac{1}{1}$ BOW $\frac{1}{2}$ BOW

(only go to the middle of the bow) (use the whole bow again)

21 $\frac{1}{1}$ BOW $\frac{1}{2}$ BOW mov. rit. acc. $\frac{1}{1}$ BOW mov. rit. acc. $\frac{1}{1}$ BOW

21 $\frac{1}{1}$ BOW $\frac{1}{2}$ BOW mov. rit. acc. $\frac{1}{1}$ BOW mov. rit. acc. $\frac{1}{1}$ BOW

29 $\frac{1}{2}$ BOW mov. rit. acc. $\frac{1}{2}$ BOW mov. rit. acc. $\frac{1}{2}$ BOW mov. rit. acc. OTHER 1/2

29 $\frac{1}{2}$ BOW mov. rit. acc. $\frac{1}{2}$ BOW mov. rit. acc. $\frac{1}{2}$ BOW mov. rit. acc. OTHER 1/2

(continue on the other half of the bow)

36 rit. acc. rit. acc. rit. acc. rit. acc.

36 acc. rit. acc. rit. acc.

(trem. with the bow at the metal winding at the frog, quasi LP scratching)

43 rit. acc. rit. acc. OTHER 1/2 1/1 BOW

43 rit. acc. rit. acc. rit. acc. OTHER 1/2 MET. WIND. 1/1 BOW

50 MET. WIND. MET. WIND. MET. WIND. MET. WIND.

50 MET. WIND. MET. WIND. MET. WIND. MET. WIND.

55 MET. WIND. MET. WIND. MET. WIND. MET. WIND.

55 MET. WIND. MET. WIND. MET. WIND. MET. WIND.

60 MET. WIND. MET. WIND. MET. WIND. MET. WIND. MET. WIND. MET. WIND. MET. WIND. MET. WIND.

60 1/2 BOW MET. WIND. MET. WIND. MET. WIND. MET. WIND. MET. WIND. MET. WIND. MET. WIND. MET. WIND.

put bow aside and turn the cello to "guitar position" perfectly horizontal, head pointing to the right ...

(take tone with the l.h. from above the finger board) (press down string with r.h. close to bridge for a sustained buzz)

65 **PIZZ.** IV (gliss. from lowers to highest position) **1/1 BOW**

65 MET WIND. (sempre F)

69

69 MET WIND.

74

74 (sempre met.)

79

79 put bow aside and turn the cello to "guitar position" perfectly horizontal, head pointing to the left ... (as the live part in m65)

Appendix II

CELLOPRAXIS

The idea behind the concert series was to create a kind of laboratory where I could try out the works in the project together with other works in different contexts and with different focus. I wanted to play the works repeatedly over a long period of time, in order to get a close knowledge that would contribute to my writing about the music. I started with two concerts at the Academy, but soon integrated the works in my solo concerts during festivals and tours.

CELLOPRAXIS v.1

The Norwegian Academy of Music, Levinsalen, May 16, 2009.

Performers: Tanja Orning, cello, Natasha Barrett, sound design and electronics

Pression (1969) by Helmut Lachenmann (amplified)

Rhizaria (2008) for cello and electronics by Natasha Barrett

MYR-S (1996) for cello and electronics by Horacio Vaggione

DR.OX, improv duo with Natasha Barrett, electronics and Tanja Orning, cello

CELLOPRAXIS v.2.0

Vinterlydfestivalen 2010, March 4 – lecture recital

The Norwegian Academy of Music, Levinsalen.

Performers: Tanja Orning, cello, Håkon Stene, percussion

Pression (1969) for solo cello by Helmut Lachenmann

Rost for solo cello and electronics by Sergej Newski (first performance)

Beside besides (2003/2005) for cello and flute by Simon Steen-Andersen

Langsamer als ich dachte (1990) for cello, percussion and dias by Carola Bauckholt

Ai limiti della notte (1979) for solo cello by Salvatore Sciarrino

Tour arranged by RIKSKONSERTENE¹

Galleri ROM, Oslo, February 23, 2011; TOU scene, Stavanger, February 24, 2011; Landmark, Bergen, October 5, 2011; Sigurd Køhn's hus, Kristiansand, October 12, 2011; Dokkhuset, Trondheim, October 13, 2011.

Performer: Tanja Orning, cello

Pression (1969) by Helmut Lachenmann

Projection I (1951) by Morton Feldman

Hommage à Anna-Eva Bergman (2010) by Tanja Orning

Opus Breve (1987) by Klaus K. Hübler

2 F (2011) by Maja S. K. Ratkje (first performance)

Opus Breve (1987) by Klaus K. Hübler

Study for String Instrument #3 (2011) for cello and video by Simon Steen-Andersen

BOREALIS Festival

March 25, 2011. Norsk Vasskraft og Industrimuseum, Odda.

Performer: Tanja Orning, cello

¹ Concerts Norway is Norway's largest communicator of live music, and owned by the Ministry of Culture.

Pression (1969) by Helmut Lachenmann
Projection I (1951) by Morton Feldman
Hommage à Anna-Eva Bergman (2010) by Tanja Orning
Celeciel (2011) by Tanja Orning
Battare (2011) by Tanja Orning
Opus Breve (1987) by Klaus K. Hübler
2 F (2011) by Maja S. K. Ratkje
Vier kurze Studien (1970) für violoncello by Bernd Alois Zimmermann
Susan's purple (2005) by Christopher Fox

FRISTIL, Victoria Jazzscene

April 13, 2011.

Performer: Tanja Orning, cello

Pression (1969) by Helmut Lachenmann
Projection I (1951) by Morton Feldman
Hommage à Anna-Eva Bergman (2010) by Tanja Orning
Celeciel (2011) by Tanja Orning
Battare (2011) by Tanja Orning
Estragos (2011) by Tanja Orning

ULTIMA festival

September 17, 2011. Exit, KHIO.

Performer: Tanja Orning, cello

Pression (1969) by Helmut Lachenmann
Projection I (1951) by Morton Feldman
Hommage à Anna-Eva Bergman (2010) by Tanja Orning
Opus Breve (1987) by Klaus K. Hübler
2 F (2011) by Maja S. K. Ratkje
Celeciel (2011) by Tanja Orning
Battare (2011) by Tanja Orning
Vier kurze Studien (1970) für violoncello by Bernd Alois Zimmermann
Susan's purple (2005) by Christopher Fox

Performances of *Studies for String Instrument #1-3*

I have also performed *Studies for String Instrument #1-3* (2007, 2009 and 2011) by Simon Steen-Andersen in concert with asamisimasa or in a duo-concert with the composer in the following concerts:

Ultrashall, Berlin, Sophiensaele, January 28, 2011 (*Studies #2 and #3*)

Ultima, Oslo, Lindemansalen, September 13, 2011 (*Studies #2 and #3*)

Danish Radio, performance on TV for the shortlist of "Pretty Sound" for DR "lyt til nyt" prize (*Study #2*)

Other Minds Festival, San Francisco, March 1, 2012 (*Studies #2 and #3*)

Biennale Musiques en Scène, Lyon, March 9, 2012 (*Studies #2 and #3*)

Hindsgavl Festival, Denmark, June 29, 2012 (*Studies #1, #2 and #3*)

November Music, Holland, November 11, 2012 (*Studies #1, #2 and #3*)

Huddersfield contemporary music festival, England, November 26, 2011 (*Studies #2 and #3*)

Akademie Der Künste, Berlin, March 18, 2013 (*Studies #2 and #3*)

Appendix III

List of videos (<http://prosjekt.nmh.no/orning-polyphonic-performer/>)

- 1 *Projection I* by Morton Feldman (*Werktreue* interpretation)
- 2 *Projection I* by Morton Feldman (*Texttreue* interpretation)
- 3 *Intersection IV* by Morton Feldman (*Werktreue* interpretation)
- 4 *Intersection IV* by Morton Feldman, multitrack
(*Texttreue* interpretation)
- 5 *Pression* by Helmut Lachenmann
- 6 *Opus breve* by Klaus K. Hübler
- 7 *Opus breve* by Klaus K. Hübler
- 8 *Improvisation I* (inspired by *Opus breve*)
- 9 *Improvisation II* (inspired by *Opus breve*)
- 10 *Study for String Instrument #1* by Simon Steen-Andersen.
Duo with Karin Hellqvist
- 11 *Study for String Instrument #2* by Simon Steen-Andersen.
Duo with Simon Steen-Andersen
- 12 *Study for String Instrument #3* by Simon Steen-Andersen

All videos, Tanja Orning, cello.

Video #10, Karin Hellqvist, violin, Video #11, Simon Steen-Andersen, whammy.

Video #1–9 recorded in Levinsalen, Norwegian Academy of Music, July 4–5 2013.

Video #10–12 recorded in U1010, Norwegian Academy of Music, June 1–2 2013.

Sound recording, editing and mixing by Morten Brekke Stensland.

Video recording June 1–2, Peter Ballo.

Video recording July 4–5, editing and synchronization, Ignas Krunglevicius.

