NORTHWESTERN UNIVERSITY

LICKS AND BRAINS:
Klas Torstensson's reimagining of the saxophone

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ABSTRACT

This document contains an overview of Klas Torstensson's *Licks & Brains* triptych written from 1987-88 and an analysis of the work *Solo* (1988) for amplified bass saxophone, as well as discussion of extended performance techniques and notation solutions, performance practice issues, biographical information, and a bibliography.

Biographical information primarily concerns Torstensson's self-taught compositional background, a move to Amsterdam and subsequent interactions with the Asko Ensemble, and the experience of being a Swedish-born composer living in the Netherlands. Consideration is given to the large-scale stylistic evolution of Torstensson's music.

The overview of the *Licks & Brains* triptych will include practical information for the performer, a detailed look at the notation, and a discussion of how the three works connect conceptually and serve different artistic purposes. Emphasis is given to Torstensson's compositional technique and philosophy.

An analysis of *Solo* will illustrate the manner in which Torstensson's processes interact on a large, medium, and small scale to influence the listener's perception. The theatricality and physicality of the piece will be discussed, as well as the composer's conceptualization of the bass saxophone as a large "machine". Over the course of the work, the composer slowly builds an extensive sound library which then collapses upon itself at the work nears its climactic moment.

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I am especially grateful to Marcos Balter, who, through musical, intellectual, and moral support, made this document possible.

Recognition goes to my colleagues in Anubis Quartet – David Wegehaupt, Allison Balcetis, and Sean Patayanikorn – for our collective growth in tackling Torstensson's music. Our shared musical experience provides the foundation for this document.

Finally I must acknowledge Kristofer Covlin, a brilliant interpreter and saxophonist who introduced me to Torstensson's music and who has profoundly influenced my life.

DEDICATION

To my mother Denise Bowshier,
Leslie Hull,
and
Amanda Maynard McCormack, who always drove.

CONTENTS

INTRODUCTION

From 1987 to 1991, Swedish-born Amsterdam-based composer Klas Torstensson created – between the ages of 36 and 40 – four monumental works for saxophone that have gained little exposure to this day. And despite having been commissioned by leaders in contemporary music, including Ensemble Intercontemporain, IRCAM, Nieuw Ensemble, the Royal Philharmonic of Stockholm, and the Asko Ensemble, as well as a full opera, *The Expedition*, finished in 1999 and premiered at the Royal Concertgebouw, the depth of Torstensson's masterful oeuvre remains nearly untouched in North America.

The author first became interested in Torstensson's music in 2008 after hearing a performance of *Hamra* (1991) for solo soprano saxophone by Canadian saxophonist Kristofer Covlin and soon after discovered the other saxophone works *Solo* (1988), *Licks & Brains I* (1987), and *Licks & Brains II* (1988), which together constitute the *Licks & Brains* triptych. At the time of this document, the author has given two performances of *Solo* and four performances of *Licks & Brains I*.

The objective of this document is to present information concerning the music of Klas Torstensson with emphasis on his works for saxophone. It will help the reader understand his musical style and philosophy through general considerations of his oeuvre, a closer look at the *Licks & Brains* triptych, analysis

of *Solo* for amplified bass saxophone, and practical considerations for potential performers of Torstensson's saxophone music.

There is no definitive source for biographical information on Klas Torstensson aside from himself. At the age of 61, he is in the midst of a vibrant career as one of the Netherlands' most visible composers. The works examined in this document, though, are now distant enough to place within the broader context of his compositional output.

While it may be out of the ordinary to focus a major document on a composer merely 60 years of age or, for that matter, a work written only 24 years previously, this document comes at a time when saxophonists have begun breaking through the barriers of contemporary classical music. There is a communal sense of urgency amongst saxophonists to explore non-stereotypical repertoire and with this document, the author hopes to encourage members of North America's saxophone community to learn and program Torstensson's music.

This document consists of four main sections:

Chapter One will examine Torstensson's background, training, and relocation from Sweden to the Netherlands, highlighting the importance of his interactions with members of the Asko Ensemble and the experience of being a Swedish-

born composer living in the Netherlands. Major musical achievements and changes in style will be discussed, including his eventual transition to writing for voice and a rediscovery of melody in his oeuvre.

Chapter Two provides an introduction to the *Licks & Brains* triptych, including a look at Torstensson's writing and notation for the saxophone. This chapter first examines pieces individually then considers the triptych as a whole, noting the manner in which the works connect conceptually while each focusing a different musical problem. This chapter will illustrate Torstensson's overall compositional goals and how they guide his aesthetic choices.

Chapter Three includes an analysis of *Solo*, with detailed descriptions of Torstensson's compositional processes and solutions on the large, medium, and small scales. Special attention will be given to how Torstensson attempts to manipulate the listener's perception.

Chapter Four considers performance-related issues and how saxophonists can best approach Torstensson's music, with emphasis on physicality, endurance, rhythmic notation interpretation, rehearsal techniques, and practical advice for working with bass saxophones. The full score of *Solo* appears in Appendix A[1]. At the conclusion of this document the reader can also find a bibliography and full list of Klas Torstensson's works up the time of this document.

[1] The full score of *Solo* appears by permission of the Music Center of the Netherlands.

CHAPTER ONE

Biography and Career

Klas Torstensson was born in Nässjö, a small city located in the south of Sweden, on January 16, 1951, and grew up in the village of Gamleby. He would become the only member of his family to participate in musical training, having begun private composition lessons in 1969 with Per Johannes Hartmann upon enrolling at the Ingesunds Musikhögskola (Community College for Music) in Arvika, Sweden[1]. Hartmann, born in 1945 and only six years older than Torstensson himself, had studied with Luigi Nono in Venice and Otto Siegl and Alfred Uhl at the Akademie für Musik und Darstellende Kunst in Vienna[2], and was interested in beginning Torstensson's studies with music written after World War II.

> "The first thing he said was, 'I am willing to teach you, but only if we begin [with music] after 1945.' So it was agreed, although later it turned out that we did go back to much earlier music.[3]"

Despite the small size of the conservatory[4], it had a symphony orchestra, a wind ensemble, and numerous chamber groups including a brass band. Torstensson had weekly access to the orchestra's rehearsal time, with ample opportunity for readings and rehearsals of his own works.[5]

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[1] Asbjørn Schatthun, "As vague as this goal may be…," *Periodical for nya Musikk*, 3 (1992): 15.
[2] "Per Hartmann," *Edition HH Music Publishers*, http://www.editionhh.co.uk/ab_pjh.htm (accessed January 9, 2012).
[3] Schaathun, 15.
[4] Klas Torstensson, interview by author, Amsterdam, Netherlands, Nov. 11, 2011. Torstensson estimates the conservatory had a total of 120 students at the time.
[5] Ibid.

In 1971, Torstensson's studies stopped when Hartmann relocated to London to start an electronic music studio, Synthesizer Music Services. Following Hartmann's relocation, Torstensson traveled to London for a week to visit and study with Hartmann, during which time his introduction to new synthesizers and music technology would be profound.

Hartmann's London studio housed a VSC3 analog synthesizer[6] (Figure 1). Invented at Electronic Music Studios in London in 1969, this instrument was revolutionary in the integration of music and electronic technology, experimented with by classical and popular genres and appearing in albums by Pink Floyd and on the television series *Dr. Who.*[7]

Figure 1: VSC3 Synthesizer, "Putney"

[6] Klas Torstensson, interview, Nov. 11, 2011.

[7] Gordon Reid, "All About EMS, Part One," *Sound on Sound* (November 2000), http://www.soundonsound.com/sos/nov00/articles/retrozone.htm (accessed January 9, 2012).

During his visit, Torstensson used the VSC3 synthesizer to create a new piece – his first for an electronic instrument. The experience left a strong impression on the composer, who then began considering the potential of electronic music.[8] Later, Hartmann would help create the "first microprocessor-based polyphonic synthesizer[9]," more simply described by Torstensson as "the first analogue synthesizer with a mixing console attached to it[10]."

In 1973, at the age of 22, Torstensson finished studies at the Ingesunds Musikhögskola and the University of Göteberg (Sweden) and decided to pursue additional training in electronic music at the Elektron Musik Studion (Electronic Music Studio) in Stockholm, Sweden, which was the country's most advanced institution for research and production of electronic music and sound art. However, he was denied on account of his young age and a lengthy waiting list.[11]

This rejection led Torstensson to the Institut voor Sonologie (Institute for Sonology) in Utrecht, Netherlands, where he began studying electronic and computer music in 1973. Torstensson notes that the Institute for Sonology did not offer normal composition studies; instead, the courses were part of a musicology curriculum. Furthermore, Torstensson estimates that 90% of the

[8] Klas Torstensson, interview, Nov. 11, 2011.
[9] "Per Hartmann," *Edition HH Music Publishers*.
[10] Klas Torstensson, interview, Nov. 11, 2011.
[11] Ibid.

students were international, with many Americans, Canadians, Scandinavians, and Germans.[12]

Formed in 1960, the Institute for Sonology was originally established as a studio within the acoustics department of Philippe Research Laboratories, a private studio specializing in research pertaining to design of loudspeakers and microphones, amplification, reverberation, and stereophony. In 1960, the Institute was transferred to the University of Utrecht, where it increasingly served the needs of young composers and sound artists as opposed to corporations.[13]

In 1964, the composer Gottfried Michael Koenig became leader of the Institute for Sonology in Utrecht and in 1966 established an international electronic music course, which still exists. In 1967, the studio received international attention with the acquisition of the PDP-15 (Figure 2), a computer used to "develop programs for algorithmic composition and digital sound synthesis.[14]"

> "In our studio, you could work with the first generation of computers designed as compositional tools. It was called the PDP-15. It was a huge machine which covered the whole room – and the room next to it for cooling. You had to feed it punch cards. Nowadays you can do much more with a laptop than you could with that huge machine.[15]"

[12] Klas Torstensson, interview, Nov. 11, 2011.
[13] "History," *Institute of Sonology*, http://www.sonology.org/UK/frameset-uk.html (accessed January 11, 2012).
[14] Ibid.
[15] Klas Torstensson, interview, Nov. 11, 2011.

Figure 2: PDP-15 studio at the Institut voor Sonologie, Utrecht

Torstensson, who had never seen a computer before entering the studio in Utrecht, had a profound realization when the new technology intersected with his music composition.

> "It was important on a conceptual level because it forced you to think of music not as a historical study of musical topics, but instead in terms of organizing music to have it computerized. It had much to do with the way Xenakis worked, and at the same time it was grounded in the old German serial school, working with musical parameters apart from each other and then combined within a framework. It was very healthy to be forced not to think only about the historical aspects of composing, but about the material itself and the organization of that material.[16]"

At that time, Utrecht was one of a handful of European cities investing in the boom of music technology. While large research centers and studios existed in Milan, Cologne, and Stockholm, the Institute for Sonology in Utrecht was the only place where students could apply for scholarships and follow a curriculum

[16] Klas Torstensson, interview, Nov. 11, 2011.

of study[17]. Despite his desire for training in electronic music – a very common pursuit of young composers from that generation – Torstensson was not attracted to purely electronic music. "But I never became an electronic music composer," he says, "Pure loud-speaker music is nothing for me; it shall be a combination of meat, blood, and music. I don't want to just look at some loud-speakers.[18]"

In understanding Torstensson's musical development and influences, one must consider the events in his life outside formal academic studies. Upon moving to the Netherlands in 1973, Torstensson quickly came into contact with performers and composers of the Asko Ensemble.

Now regarded as one of the world's most established contemporary music ensembles (and currently under the name Asko | Schönberg) the Asko Ensemble began in Amsterdam in 1965 as the Asko Student Chamber Orchestra, a group comprised mostly of amateur performers that exclusively performed new contemporary music. Soon after beginning studies at the Institute for Sonology, Torstensson came into contact with the American composer and conductor Cliff Crego, a fellow student at the studio in Utrecht who had began conducting the Asko Ensemble. Crego expressed interest in holding a reading session of

[17] Klas Torstensson, interview, Nov. 11, 2011.
[18] Marcus Boldemann, "Glaskar tonsättare," (trans. S. Peterson) *Dagens Nyheter*, Feb. 8, 2009, Culture section.

Torstensson's music, thus propelling him into the milieu of young contemporary musicians in Amsterdam.[19]

Torstensson recalls that after several years of the Asko Student Chamber Orchestra, which had become a highly capable ensemble that performed music by Varèse, Xenakis, and composers of the Netherlands, there was a need "for a more professional, smaller ensemble to be able to closely work with composers and musicians as one collective." As a result, Torstensson and several composers established a collective that worked with performers in weekly workshops. *De Workplaats* ("The workshop") began meeting in 1979 and was in existence for nearly four years[20]. The other composers of *De Workplaats* were Jan Vriend, Cliff Crego, Jos Kunst, Robert Rowe, Willem Boogman, and Ernst Oosterveld[21].

For Torstensson, the collective "was very fruitful and has meant much more to my way of thinking and writing music than learning lists of composers' names.[22]" As the ensemble became increasingly professional, it won subsidies from the Dutch government and began paying the performers for their services, which eventually led to the model of a professional music ensemble without composers.

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[19] "Asko | Schönberg," *Asko Schoenberg*, http://www.askoschoenberg.nl/index.php?page=asko_schonberg (accessed January 11, 2012); Klas Torstensson, interview, Nov. 11, 2011.
[20] Klas Torstensson, interview, Nov. 11, 2011.
[21] Klas Torstensson, e-mail to the author, April 13, 2012.
[22] Schatthun, "As vague as this goal may be…", 16.

For Torstensson, connecting with new musicians and collaborating with a contemporary music ensemble was more influential than academic studies at the Institute for Sonology. Working with the Asko Ensemble, there was time to explore the technical capabilities and qualities of individual musicians; Torstensson was able to write music specifically suited for a certain performer, a practice which would become instilled in Torstensson's compositional style throughout his career. The practical considerations of writing for specific performers helped balance Torstensson's abstract, formalistic approach to composition, which had been a largely conceptual act before moving to Amsterdam[23]. With the exception of his orchestra work *Stick On Stick* (1990), all of Torstensson's pieces are written with specific performers in mind[24].

In *De Workplaats*, there was a highly collaborative sense of governance and awareness that the composers needed the performers and vice versa. Since the composers valued the inclusion of each performer – as well as the sense they should be musically "nourished" – the division of commissions and labor often led to strange instrumental combinations. According to Torstensson, this meant that the social climate within the group had deeply-rooted musical implications, a notion which the collective embraced.[25]

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[23] Erik Voermans, "The Composer," Klas Torstensson. http://klastorstensson.com/composer.htm (accessed January 11, 2012).
[24] Erik Voermans, "Torstensson, Klas." *Grove Music Online*. *Oxford Music Online,* http://www.oxfordmusiconline.com.turing.library.northwestern.edu/subscriber/article/grove/music/47311 (accessed June 23, 2010).
[25] Klas Torstensson, interview, Nov. 11, 2011.

> "Through ASKO I learned to look at the role of a composer in a way that, above all, had a lot to do with the emphasis placed by this environment on the composer as one who provides nourishment to the musicians. To sum up: the cooperation between composers and musicians was good.[26]"

When reflecting on Torstensson's formative days, one must note that he is largely self-taught, without formal training or having followed a formal composition curriculum. Aside from the two years of private lessons with Per Hartmann during his teenage years, Torstensson had little extra training beyond occasionally auditing a composition class at the Stockholm Conservatory.

Torstensson recollects that, upon entering Holland, he thought his formal education was finished. The idea of studying with a composition teacher did not appeal to him since he had not been versed in the practice of formal composition. Instead, most of his education came from interacting with colleagues, working with musicians, and by studying non-compositional topics at the Institute for Sonology, where he studied "algebra and perception and logic and philosophy – and not music.[27]" When considering the opportunities of his formative studies, including weekly opportunities to hear his music played by the orchestra at the Ingesunds Musikhögskola, the composer does not feel to have missed anything by not having a formal composition education.

[26] Schatthun, "As vague as this goal may be…," 16.
[27] Klas Torstensson, interview, Nov. 11, 2011.

To this day, Torstensson considers himself an independent composer, far more interested in the creation rather than consumption of music.

> "I do not have to feed my own knowledge with input from other composers. I know exactly what I want to do and think it is necessary I'm doing it. So, I rarely have time with other people's music.[28]"

Asking Torstensson about his teachers or role models is not the best way to understand his influences. Instead, one might look to Edgar Varèse and Iannis Xenakis, both composers studied by Torstensson throughout his youth to whom stylistic connections might be made. As noted by Erik Voermans, Torstensson's point of departure is "strictly modernistic[29]," and one can hear this in the earliest works of his catalogue.

The oldest remaining work is *Redskap* ("Tools") written in 1976, which Goran Bergendal describes as a "composed counterpoint between distinct pairs of opposites.[30]" Torstensson uses opposing forces in terms of timbre (xylophone and marimba, hard and soft, wet and dry), physicality (fast and slow), and rhythm (regularity and irregularity) to create a work of contrast and extremes. The next oldest piece in Torstensson's catalogue is *Pedaal* (1979) for amplified violin, which remains his first published piece[31].

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[28] Goran Bergendal, "Klas Torstensson," *33 nya svenska komponister*. (Stockholm, 2001) 325.
[29] Klas Torstensson, interview, Nov. 11, 2011; Voermans, "Torstensson, Klas."
[30] Bergendal, "Klas Torstensson," 325.
[31] This work was originally published by Donemus but is now available from the Music Center of the Netherlands, which was formed in 2008 by merging Donemus, Gaudeamus, De Kamervraag, the Dutch Pop & Rock Institute, Dutch Jazz Connection, Netherlands Jazz Archive, and De Jazzorganiste.

This affinity for contrast and extreme, as well as the physical engagement of the performer required in Torstensson's music, are characteristics that fundamentally permeate his oeuvre and compositional style. In *Grove Online*, Erik Voermans describes Torstensson's early works as "radical explorations of musical boundaries," noting the way in which the composer seeks extremes "in a detailed manner in terms of dynamics, registers, density, stasis and movement, degrees of dissonance and consonance, and physical and spatial effect.[32]"

One major point of Torstensson's style, considering his affinity for extremes, is the "fluctuations" between those extremes – for example, intense motion in the form of "nervously repeated rhythmic figures, and wild, glowing, volcanic eruptions of sound" against total stasis "in which sounds appear to freeze.[33]" This fluctuation is an element of formal structure in Torstensson's music, and the resulting sense of musical stability and instability is of significance.

The environment in 1960s-80s Netherlands was ripe for a contemporary music revolution. Torstensson and his colleagues attempted to change the way musical life was organized and find an alternative to the symphony orchestra model. The large, traditional institutions showed no interest in the music of the younger generation; and the young generation of musicians showed little desire

[32] Voermans, "Torstensson, Klas."
[33] Voermans, "The Composer."

to have their music played by those ensembles. In striving to present alternatives to what they considered "a false way of making music[34]," a generation of young artists created and developed, in a relatively short amount of time, a thriving contemporary music scene.

In addition to the Asko Ensemble, groups included Louis Andriessen's Orkest de Volharding, the Schönberg Ensemble, the Nieuw Ensemble, which was unique for using strange instrumentations and string instruments like the guitar and mandolin, and the Ives Ensemble, an Amsterdam-based group that specialized in music by experimental American composers Charles Ives, John Cage, and Morton Feldman[35]. For Torstensson, the rich field of musical opportunity combined with Dutch government subsidies for composers and artists made the Netherlands a prosperous place for a composer during the 1970s and 80s.

Throughout the 1980s, Klas Torstensson's visibility and importance in the Netherlands continued to increase, with major commissions from Hoketus, Orkest de Volharding and the Netherlands Saxophone Quartet. His *Licks & Brains* triptych, comprised of *Solo for Bass Saxophone* (1988), *Licks & Brains I* (1987) for saxophone quartet, and *Licks & Brains II* (1988) for saxophone quartet and chamber orchestra will be examined in further detail in later chapters and

[34] Klas Torstensson, interview, Nov. 11, 2011.
[35] Klas Torstensson, interview, Nov. 11, 2011; "Biography of the Ives Ensemble," *Ives Ensemble*. http://www.ives-ensemble.nl/english/biography.htm (accessed January 11, 2012).

marks Torstensson's first family of major, breakthrough works that reflect his mature compositional voice.

One trait of Torstensson's compositional style is to create families of pieces bound by shared musical material, as seen in the triptych mentioned above. According to the composer, he created families of works because "theoretical problems in music often point to multiple solutions." In these families, an "overall compositional ideal is elaborated in an increasingly radical way.[36]" In performance, each work is meant to stand independently; rarely is an entire family of works played in one concert.

One prominent family in Torstensson's oeuvre consists of *Urban Solo* (1991, solo soprano), *Urban Songs* (1992, solo soprano, large ensemble, and computers), and *Urban Extra* (1994, music box), and yet another is entitled *Lantern Lectures*, a large-scale cycle of five movements, or *volumes*, written between 2000 and 2006 for large ensemble. Jointly commissioned by Le Nouvel Ensemble Moderne, Asko Ensemble, KammarensembleN, and Klangforum Wien, the *Lantern Lectures* cycle has been performed over thirty times since its creation[37].

[36] Voermans, "Torstensson, Klas."
[37] "Biography", *Klas Torstensson*, http://www.klastorstensson.com/biography.htm (accessed January 11, 2012).

In 1991, Torstensson was commissioned by IRCAM to write *Urban Songs*, a large piece for the Ensemble Intercontemporain with computers. Premiered in 1992, the piece was programmed in subsequent years by the Ensemble Modern (Frankfurt), Asko Ensemble (Amsterdam), and KammarensembleN (Stockholm).

Urban Songs would become a large-scale reworking of Torstensson's earlier work *Urban Solo,* written in 1991 for his wife, vocalist Charlotte Riedijk. For this commission, Torstensson spent six months in residence at IRCAM composing *Urban Songs*, and explains the relationship between the two pieces as follows:

> "I wrote *Urban Solo* was because of the commission by IRCAM. I wanted to have something to start with – not having to start from scratch – when I arrived at IRCAM. So, I thought that if I brought a piece with me that would act as the basis for a larger work, that might make things easier, which turned out to be true[38]."

These works mark the beginning of a period when Torstensson composed extensively for voice. In *Urban Solo*, Torstensson employs a sampling technique, heard in the first movement, which utilizes a processed recording of the Lebanese singer Dunya Yunis[39]. The second movement of *Urban Songs* contains references to rap and pop music by artists Wee Papa Girl Rappers[40] and Silk Tymes Leather[41][42].

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[38] Klas Torstensson, interview, Jan. 30, 2012.
[39] Fritz van der Waa, Fritz. "No substance, but to give direction to thought", *Nutida Musik*. No. 2 (1991); 15.
[40] Wee Papa Girl Rappers was a British female rap duo comprised of twin sisters Sandra and Samantha Lawrence. They were successful in the late 1980s.
[41] Silk Tymes Leather was a female trio that mixed urban ballads with dance pop. They recorded one LP for Geffen Records that was, according to vh1, "mostly unsuccessful."

The same year Torstensson composed *Urban Songs*, he was awarded the Matthijs Vermeulen Prize, Netherland's most prestigious prize in music composition, for his 1990 work *Stick on Stick*[43]. Premiered to controversy in 1993 at the Holland Festival, *Stick on Stick* shocked the audience with brutal and uncanny orchestral sounds[44]. Torstensson amplifies the orchestra's bass register by using bass guitars and bass clarinets. Additionally, musicians execute physical percussive acts like stamping, which disrupt musical gestures occurring elsewhere in the orchestra, and repetitive hand clapping gestures makes the orchestra sound as if it is "stuck"[45]. With the intense, violent music of the *Licks & Brains* family and *Stick on Stick* appearing within three years, Torstensson became known for his intense and unruly compositional style.

Having secured his place as a major figure in Netherland's classical music scene, Torstensson continued to field larger commissions in the mid-1990s, including *The Last Diary* (1994) for reciting male and large ensemble as well as his monumental opera *The Expedition* (1994-99), to which he fashioned the libretto exclusively from text of the expedition members' diaries. The opera was premiered in concert form in the 1999 Holland Festival by the Amsterdam Concertgebouw and conducted by Peter Eötvös[46].

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[42] Klas Torstensson, *Urban Solo*, Donemus (Amsterdam, 1991), i.
[43] "Biography", *Klas Torstensson*.
[44] Bergendal, "Klas Torstensson," 321.
[45] F. van der Waa, "No substance, but to give direction to thought," *Nutida Musik*, 2 (1991); 17.
[46] "Biography", *Klas Torstensson*.

The subject matter of these two vocal works involves an important moment in Swedish history rooted in the extreme climate and landscape: the events surrounding Salomon August Andrée, Swedish balloonist and explorer who undertook an ill-fated attempt to reach the North Pole via hydrogen balloon, resulting in the deaths of all members of his expedition team. This story had left a strong impression on Torstensson since the age of nine, when he discovered a book about the failed expedition, *With the Eagle Towards the Pole*[47], at his grandparents' house in Gamleby, Sweden[48].

These works mark an important turning point in Torstensson's music in that his use of the human voice results in an evolution of his composition style toward lyricism. The ideals of conflict, extremes, motion, and physicality take subsequence to lusciousness, accessibility, tonality[49], and lyricism – all stylistic traits that Torstensson had, until then, purposefully dodged[50]. Since then, his compositional style has been primarily led by intuition, resulting in a style described by the composer as more "sensitive," illustrated in his song cycle *In großer Sehnsucht* ("In great longing") (2004), scored for soprano and piano trio[51], the title referring to the composer's homeland of Sweden.

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[47] *With the Eagle Towards the Pole* was originally printed in Swedish under the title *Med Örnen mot polen* by Editions Bonniers, Stockholm, Sweden, 1930, and contains the original chronicle, diaries, and notes of the expedition, as well as some photographs.
[48] Bergendal, "Klas Torstensson," 323.
[49] In Erik Voerman's article "Between Reason and Intuition," he notes the final aria of the opera for its "Pucciniesque vocal melody and the intermittent strings in parallel motion."
[50] Erik Voermans, "Between Reason and Intuition," *Klas Torstensson: A Portrait.* Music Center of the Netherlands (Amsterdam, 2011) 2.
[51] Voermans, "Between Reason and Intuition," 2.

Torstensson notes that, only at this point in his career, was he "ready to deal with non-musical ideals in music.[52]" Having rejected the non-musical throughout his youth with the understanding that music was "far too important to be used – or misused – for non-musical purposes", Torstensson became married to a singer, the renowned Dutch soprano Charlotte Riedijk. He admits that his youthful ideas were prejudiced toward the use of text in music and the expectations of collaborating with singers, commenting, "Once you start a relationship with a singer, it's really hard to maintain that attitude… I started to write music for [Charlotte] and then I was really on my way to writing an opera."

This attention to geographic subject matter, which is found in other recent works *Fastlandet* (2007) ("Mainland") and *Polarhavet* (2008) ("The Polar Sea"), has led multiple authors to describe Torstensson's music as having a sense of homesickness.[53] Goran Bergendal, in his article *33 nya svenska komponister* ("33 New Swedish Composers") attributes this homesickness to the lack of seasonal variance, nature, and ice in the Netherlands. He quotes Torstensson as saying:

> "[In Sweden] there was a complete silence and loneliness, a smallness of the Earth, and such feelings are more difficult to experience in such a densely populated country like Holland. The longing back to the absolute silence and desolation was the driving force behind writing *Barstend IJS.*[54]"

[52] Klas Torstensson, interview with the author, Amsterdam, January 30, 2012.
[53] K. Aronsson, "Möte med Klas Torstensson", *Berwaldhallens programtidning,* January 2009; Bergendal, "Klas Torstensson," 325.
[54] Bergendal, "Klas Torstensson," 325.

However, attributing too much emphasis to the effects of homesickness is problematic for Torstensson. His family spends each summer in a summerhouse in Sweden and attempts an annual winter return unless prohibited by extreme snowfall[55].

> "I've been asked many times, 'Don't you want to come back up North with us for this Polar Expedition?' No. I already know in my head what it *sounds* like and what I want it to stand for – like loneliness, emptiness, silence. I experienced that when I was a kid, so I don't have to go to the North Pole to hear what it sounds like. I know what it sounds like. And if I didn't know what it sounded like, I could put it in my piece anyway.
>
> There are many, many people who live here in Holland. If I want to be totally alone in nature, there are not many places I can go. But, very close to where we live, I can go walk in the dunes – so I can get the illusion of being alone, even in Holland. But this contrast between the crowded small country and the wide, open spaces in Sweden is something that I don't have to experience on a daily basis. But, I still make it a source of inspiration for my music. That's not really homesickness, though, is it?[56]"

Torstensson's music is born of ideas and artistic impulse more closely related to sound and construction than geography and longing. He notes the difference between "construction principles and perception principles" and the difficult of some composers to understand the difference, choosing most often to not speak about construction and technique but rather let the music take an assigned meaning[57].

> "How often have we not read program notes describing construction principles which have nothing to do with the audible result – or at the least, very little. In any case, when composers

[55] Klas Torstensson, interview, Nov. 11, 2011.
[56] Ibid.
[57] Schatthun, "As vague as this goal may be…," 16.

> verbause their ideas about a piece, they often speak pure pretentious nonsense in the first place, and in the second place, they do not have the ability to separate between the two levels. Nor are they able to describe the relationship or relationships between these construction principles and why they actually exist: What is it one attempts to accomplish with the utilization of certain construction principles? For some composers it is more about just being able to find a way of composing.
>
> For me composition is also, of course, very important, but what is the most important is knowing *why* I compose. It is first upon this knowledge that one can choose construction principles, 'scaffolding' and 'building materials', appropriate to the result one wants to achieve. As vague as this goal may be.[58]"

Torstensson's duality, in terms of being Swedish citizen and Dutch resident, tends to provide an advantage in building a career exclusively as a composer. He receives commissions and scholarships from both Sweden and the Netherlands, which has allowed him to build a career without teaching in Holland's conservatory system. Torstensson notes that he is "very much a part of Swedish musical life.[59]" Days before an interview with this author, he was in Stockholm for the for the premiere of his *Pocket Size Violin Concerto*, which had been commissioned by The Peärls Before Swïne Experience, one of Scandinavia's most innovative chamber ensembles. Nevertheless, he feels at home in Holland.

> "I don't believe the Dutch consider me a foreigner. Cultural life in Holland is very open; it is a kind of conglomerate that results, among other things, from the country's geographic situation and from the old tradition of having many "non-Dutch" active here. I was, of course, also very young when I arrived, but after having grown into the musical scene here, working with various

[58] Schatthun, "As vague as this goal may be…," 16.
[59] Klas Torstensson, interview, Nov. 11, 2011.

> ensembles, I believe that I am considered today a Dutch composer despite my Swedish passport.[60]"

According to Torstensson, the advantage of dual identity is counterbalanced by his unwillingness to compromise in taking work he is not passionate about doing. This is further complicated by the constant sense of competitiveness perpetuated by commissioning programs and a generation of younger, driven composers who also seek funding for projects and living expenses in the face of drastic cuts in the Dutch government's cultural spending[61].

Although currently in the midst of the mature period of his compositional career, Torstensson's achievements include several major awards and honors. In addition to the 1991 Matthijs Vermeulen Prize, he was presented the 1999 Stora Christ Johnson Prize, Sweden's major composition prize awarded by the Swedish Royal Music Academy. He garnered a nomination for the 2006 Nordic Council Music Prize for his opera *The Expedition*.

Torstensson's works have been a significant presence in most of Europe's major new music festivals, including Huddersfield Contemporary Music Festival, Ultima Festival in Oslo, Steirischer Herbst in Graz, Wien Modern, Stockholm New Music, Nordic Music Days in Reykjavik, Malmö, and Berlin, Gaudeamus Festival in Amsterdam, Holland Festival in Amsterdam, Internationale

[60] Schatthun, "As vague as this goal may be…," 16.
[61] Klas Torstensson, interview, Nov. 11, 2011.

Ferienkurse für Neue Musik Darmstadt, and Festival van Vlaanderen in Belgium, amongst others. He was a featured composer at Stockholm New Music in 1999 alongside Mauricio Kagel and György Kurtag, at Time of Music 2001 in Viitasaari, Finland, and in 2003 at Montréal Nouvelles Musiques.

Since 2007, Torstensson has been working on a large-scale set of orchestral pieces, *A cycle of the North*. *Fastlandet* ("The Mainland") was premiered in 2007 by the Radio Filharmonisch Orkest in the Concertgebouw, Amsterdam, having been commissioned by the ZaterdagMatinee (NTR Radio Saturday Matinee). The cycle's second work, *Polarhavet* ("The Polar Sea") (2008), commissioned by the Sveriges Symphony Orchestra and the Stavanger Symphony Orchestra, was premiere in Stockholm at the Baltic Sea Festival[62]. The third piece of the cycle, *Himmelen*, has been commissioned by the Royal Philharmonic Orchestra of Stockholm and the Dutch Brabants Orkest and will be premiered in 2012. Recently non-orchestral projects include a violin concerto written in 2010 for Jennifer Koh and Nieuw Ensemble, and a chamber version of the same piece, *Pocket Size Violin Concerto*.

At the date of this document, Klas Torstensson is 61 years old and has been named 2012-13 composer-in-residence of the Muziekgebouw aan 't IJ[63], which is Amsterdam's cutting-edge, technologically advanced "Concert Hall of the 21st

[62] "Biography", *Klas Torstensson*.
[63] Klas Torstensson, interview, Jan. 23, 2012.

Century[64]" dedicated to contemporary music, which will present an eleven-part concert series of his music during the 2012-13 season. In the midst of his mature compositional period, he now writes for major orchestras, accepts large-scale commissions, and has settled into the role of "established composer" in both the Netherlands and Sweden. When reviewing Torstensson's oeuvre to this point, one will notice stylistic output of considerable variety. His early works, guided by intellect and an affinity for contrast as well as a budding relationship with Amsterdam's close-knit circle of young contemporary music performers, are brought to life by the extremes of instrumental technique and physicality, exuding an intense style rife with violence and shock. In the early 1990s the human voice becomes a primary medium for Torstensson's music, while the use of sampling techniques allow elements of other genres – including jazz, rap, and Middle Eastern music – to assimilate into his own.

In the mid-1990's a striking change in Torstensson's style – aided by his musical relationship with the human voice – results in the subsidence of violence and the rise of lyricism, luscious harmonies, and increased sensitivity. The crowning achievement of his mid-career, *The Expedition*, thrust Torstensson onto a highly visible tier of European operatic composers, and subsequently he has focused more on large-scale orchestral works and cycles. In recent years themes of climate and geography have become important, a subject which points to the

[64] "Series," *Muziekgebouw aan 't IJ*. http://www.muziekgebouw.nl/agenda/Series/?p=3 (accessed April 12, 2012).

complex relationship of Torstensson to his surroundings: a Swedish native who has become a Dutch artist.

Although the sound of his music has evolved, certain compositional and philosophical traits have remained permanent. Torstensson has always composed with specific performers or ensembles in mind, making collaboration an integral part of his process. In his early years, this took the form of weekly workshop sessions with members of the ASKO Student Orchestra and was, in many ways, the driving force of his early musical development. Additionally, the idea of writing in families of pieces has remained an important part of his process not for matters of economy, but more so because Torstensson views his composition as “problem-solving”. And when a problem suggests multiple solutions, Torstensson feels they must be explored.

CHAPTER TWO

Introduction to the *Licks & Brains* Triptych

This chapter offers an overview of Klas Torstensson's works for saxophone, including background and practical information as well as a description of their musical content and overall artistic goal. Emphasis is given to some performance-related issues in an effort to benefit future performers. Furthermore, it is explored how the works converge in their musical material yet diverge in their goals. The ideas presented in this chapter are meant to be broader in scope; in Chapter Three, an in-depth analysis of *Solo* will examine more detail in Torstensson's compositional techniques.

The Triptych

The three works of *Licks & Brains* were written simultaneously between 1987 and 1988. They do not constitute a narrative trilogy as in the genre of novel or film, i.e. a series of works that progress chronologically; instead the works of Torstensson's triptych exist conceptually alongside one another. While they can stand alone in a concert program, they are ideally heard together in performance. The works of the triptych are:

Solo (1988) for amplified bass saxophone

Licks & Brains I (1987) for saxophone quartet

Licks & Brains II (1988) for saxophone quartet and large ensemble

Each of the works was written with specific musicians in mind; in the case of *Solo* and *Licks & Brains I*, it was saxophonist Leo van Oostrom and his ensemble, the Netherlands Saxophone Quartet, respectively. *Licks & Brains II* was written for the Netherlands Saxophone Quartet and the Asko Ensemble. Each work was funded by support of Het Fonds voor de Scheppende Toonkunst (The Fund for Creative Music) in Amsterdam. The dedicatee members of the Netherlands Saxophone Quartet are Leo van Oostrom (soprano saxophone), Ed Bogaard (alto saxophone), Adri van Velsen (tenor saxophone) and Alex de Leeuw (baritone saxophone)[1].

Solo

The first piece in the *Licks & Brains* triptych, *Solo*, was the second piece to be finished. It was completed in 1988 and premiered on October 8 the same year. The work's dedicatee, Leo Oostrom, a Dutch saxophonist born in 1942 in The Hague, has taught saxophone performance at the Royal Conservatory in The Hague since 1981 while leading a performance career specializing in contemporary music[2]. In 1969 he became a founding member of the Netherlands Saxophone Quartet and performs regularly with the ASKO/Schoenberg Ensemble and Royal Concertgebouw Orchestra[3].

[1] "De Musici," *Nederlands Saxofoon Kwartet*, www.nederlandssaxofoonkwartet.nl/het-kwartet/de-musici/ (accessed April 12, 2012).
[2] "Welcome," *Leo van Oostrom*, www.leovanoostrom.com (accessed January 26, 2012).
[3] Ibid.

It was Leo van Oostrom's inquiry to Torstensson that eventually led to the *Licks & Brains* triptych. In 1985, when the two were mere acquaintances, van Oostrom asked Torstensson to write a new piece for the Netherlands Saxophone Quartet, a highly visible ensemble at the time. Torstensson accepted the project and, according to the composer, their friendship came later[4].

It appears that *Solo* was not the original title of this piece. On page ii of the score to *Licks & Brains I*, which was finished in 1987 and subsequently published by Donemus ahead of *Solo*, one finds the following note:

> "*Licks & Brains I* is part of the triptych *Licks & Brains* which includes:
> 1. *TRST* for bass saxophone
> 2. *Licks & Brains I* for saxophone quartet
> 3. *Licks & Brains II* for saxophone quartet and large ensemble
>
> (In the last two compositions the saxophone parts are identical)[5]"

At some point following the completion of *Licks & Brains I* and before that of *Solo*, Torstensson decided to change the title. To this day, the change has not been reflected in the published version of *Licks and Brains I* [6].

In *Solo*, Torstensson requires the bass saxophone be heavily amplified and held on a platform, thus enhancing the physicality of the saxophone and objectifying

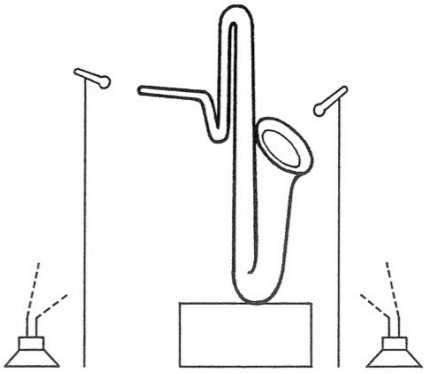
[4] Klas Torstensson, e-mail to the author, April 16, 2012.
[5] Klas Torstensson, *Licks & Brains I*, Donemus (Amsterdam, 1987) ii.
[6] In *Licks & Brains II,* which was finished in 1988 and published the same year by Donemus, the triptych works are listed on page iv and shows the correct title for *Solo*.

the instrument as a large, machine-like device. The score indicates the following instructions with regard to amplification:

> "The bass saxophone and the voice should be amplified and approximately three seconds of reverberation should be added to the signal. All amplified signals should be sent to all loudspeakers. Both the tone production (including the voice) and the mechanism should be amplified almost out of all proportion, evoking the sensation of an extremely heavy and complex piece of machinery being revved into motion. *Solo* should be performed standing up, the instrument resting on some (non-resonating) object of the appropriate height[7]."

A correct performance of this piece will require at least two microphones: one for the instrument and voice each. Torstensson recommends that the saxophone microphone be placed at or pointed into the instrument's bell, and provides the following illustration:

Figure 1: Amplification diagram



[7] Klas Torstensson, *Solo*, Donemus (Amsterdam, 1988): i.

If additional technical resources are available, the performance will likely benefit from multiple microphones for the bass saxophone; the instrument is difficult to amplify on account of its extreme size and shape. If available, this author recommends that a second microphone be placed near the left hand of the saxophonist in proximity to the upper stack tone holes.

By indicating the instrument should rest on a platform, Torstensson further emphasizes the saxophone's role as a machine. By detaching it from the neck of the saxophonist, the instrument ceases to be an extension of the player's body or voice, thus becoming a performer itself.

This imagery permeates the musical structure. The opening section of the work is performed without the mouthpiece and each phrase begins with an explosive tongue ram. Phrases start very short and gradually lengthen, which gives the sonic impression that the saxophone is a large, clunky machine operated by the performer that is slowly gaining momentum.

The climactic moment of the piece, an ascending chromatic scale, is achieved at the work's end, and reaching this point displays a struggle between the performer and the instrument. There are passages that seem to be literally "stuck" by repeated, mechanical gestures, as well as the use of intense vocal sounds including grunts and closed-mouth screams. The physicality of

performing *Solo* accurately results in real physical exertion on part of the performer, which is an important aspect of the work.

Goran Bergendal, in his article *33 New Swedish Composers*, describes *Solo* as "a kind of grotesque and theatrical overture to *Licks & Brains I*[8]," noting the importance of physicality of the piece as the performer combines breath, vocal, and glottal sounds, with the machine-like workings of the instrument itself.

In the piece, the composer starts with a large machine that makes relatively few sounds before continually dropping off. The phrases grow and the machine revs into motion, gaining momentum at the expense of the performer's struggle. When the music and machine finally reach the point of "lift off", the piece quickly ends, or, continues into the second piece of the triptych, *Licks & Brains*. In that respect, *Solo* is an introduction to the triptych, an etude to prepare the listener for the larger works, and a warm-up for the performer.

The pieces in the triptych are motivically connected; a distinct three-note motive is introduced at the climactic moment of *Solo*, which is then heard throughout *Licks & Brains I* and *II* in a recognizable way.
With regard to physical performance, Torstensson indicates in the score of *Solo* the importance of highlighting the physical and theatrical nature of the work.

[8] Goran Bergendal, "Klas Torstensson," *33 nya svenska komponister*. (Stockholm, 2001) 322.

> "It is advisable to re-assemble the pages in such a way that the entire score will cover no more than two or three pages. In that way the music will fit onto two music stands, and no page turns (which may conflict with the "theatrical" continuity) will be necessary.[9]"

As the work is published in horizontal landscape format, the saxophonist's best option is to perform from memory or arrange two stands at a 90-degree angle so that pages can be flipped downward, as opposed to turned or dragged across adjacent stands.

Torstensson divides *Solo* into three major sections, delineated in the score with large monolith Roman numerals. These delineations, while perhaps less structurally clear cut than their visual appearance in the score, divide the piece into nearly equal thirds. The first section, which is played without the saxophone's mouthpiece, ends at measure 18. At this point, the saxophonist is instructed to place the mouthpiece on the instrument, beginning section two. The final section begins at 31.

Torstensson's scores can be visually arresting and appealing, and often suggest the detail of visual art. The composer attributes this to two things: first, he had not been pleased with methods of notation, especially for wind instruments, which led him to develop new ways of notating sounds. Second, before becoming a composer Torstensson was very interested in visual artist, which he

[9] Klas Torstensson, *Solo*, i.

discontinued when a lack of time necessitated his complete devotion to music composition[10].

Additionally, Torstensson was trained in clarinet performance and to an extent, saxophone, having played baritone saxophone in a street band and having taught the instrument[11]. Although he did not develop into a virtuoso saxophonist, his intimate knowledge of the instrument is inherent in the specific, detailed construction of sounds and playing techniques.

A look at Torstensson's notation will benefit any further examination of specific musical concepts and will also illustrate connections between pieces of the triptych. In general, the notation is extremely detailed; each action is prescribed with regard to time and performance technique in a visually acute manner.

The composer uses both proportional notation and traditional rhythmic notation in *Solo*, and presents very specific instructions about the interpretation of both:

> "The two different rhythmic notations used in *Solo* – proportional notation (Part I) and traditional notation (Parts II/III) – are more closely related than might be expected. The proportional notation requires an extremely exact interpretation. The traditional rhythmic notation on the other hand may be interpreted with some freedom.[12]"

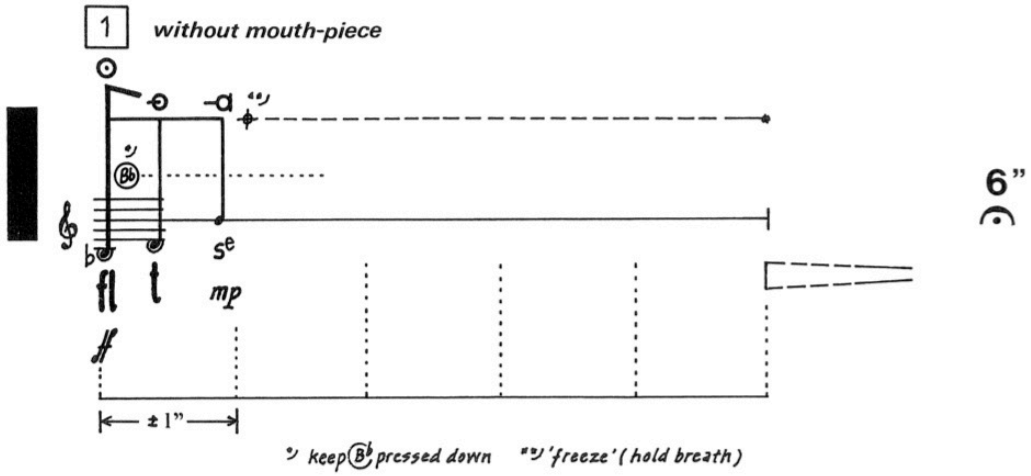
[10] Klas Torstensson, interview by author, Amsterdam, Netherlands, January 30, 2012.
[11] Ibid.
[12] Torstensson, *Solo*, i.

Torstensson writes this to discourage the performer from the attitude that proportional notation implies temporal flexibility.

> "[Proportional notation] forces one to make decisions in a manner as seriously as when he or she is dealing with clear-cut rhythm. And as a performer, that's the sort of ambition you should have when interpreting the notation.[13]"

In the proportional notation, vertical dotted lines delineate one-second increments while rest lengths at phrase endings are given in seconds (Figure 2).

Figure 2: Opening of *Solo*



In the opening section of *Solo*, Torstensson employs an innovative vocabulary of sounds which are executed without the saxophone mouthpiece. The following section of this chapter is meant to describe the sounds and their notation so that the reader will have an understanding of the sound vocabulary as well as a

[13] Torstensson, interview, Jan. 30, 2012.

concept of how the sounds are executed on the saxophone. While it may be impossible to prove, this represents one of the first instances in classical saxophone writing where a composer has employed a completely alternative method of saxophone playing – a sonic landscape comprised entirely of extended techniques.

The non-mouthpiece sounds in Part I of *Solo* can be divided into four different categories:

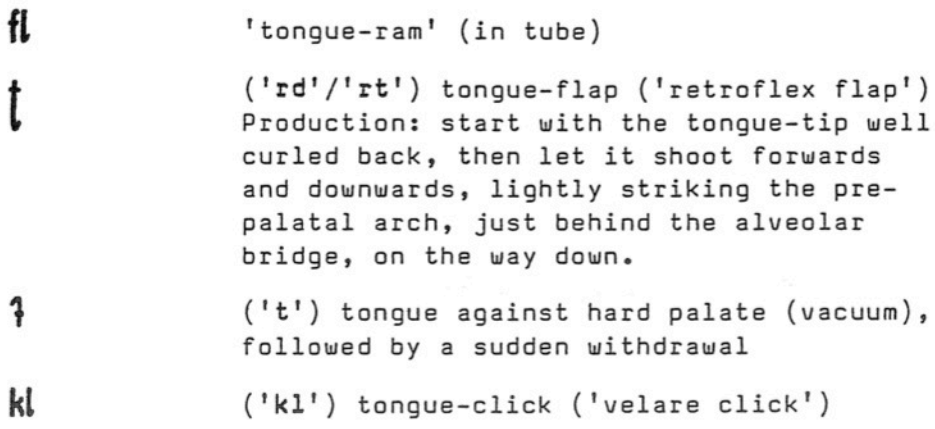
1) Plosive tongue sounds
2) Voiceless syllabically colored air sounds
3) Key clicks
4) Suppressed screams

Each of these categories contributes to the overall sound environment in its own way; some sounds are used structurally while others are more ornamental in nature. These roles will be examined in depth in Chapter Three's analysis.

The first category of sounds is comprised of plosive sounds created by the tongue. These sounds are used for their percussive qualities; the "tongue-ram" requires the performer to thrust the tongue onto the neck pipe aperture during an intense exhalation resulting in a powerful, bass drum-like effect with resonance. The other tongue actions are executed without any element of the

saxophone and are equally percussive yet less powerful than the tongue-ram. Figure 3 illustrates the symbols used.

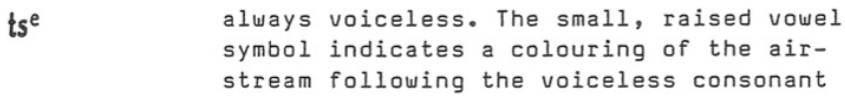
Figure 3: Symbols for tongue actions



The first two symbols (tongue-ram and tongue-flap) are shown in context above in Figure 2, where they appear under the note heads. In this example, the piece opens with a fortissimo tongue-ram while fingering a low B-flat followed by a tongue-flap while fingering a low D adding the low B-flat key. Chapter Three will illustrate how the tongue sounds help create a sense of structure in Part I of *Solo.*

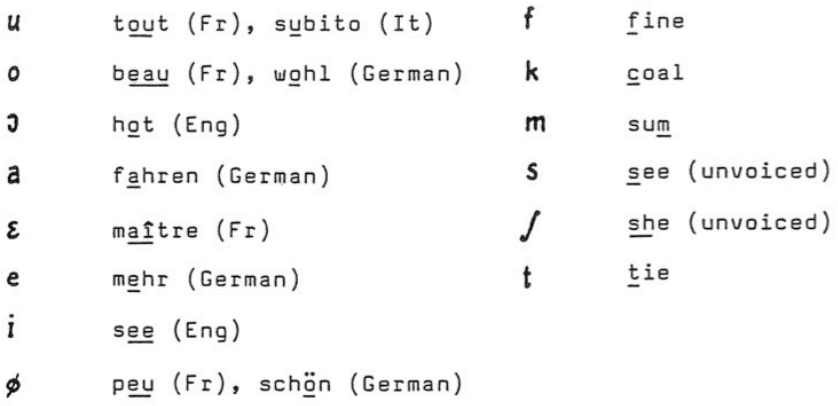
The second category of sounds is voiceless syllabic air sounds. Above, Figure 2 illustrates the notation: a small black note head, above which rests a symbol from the International Phonetic Alphabet. Figure 4 includes Torstensson's description of how to execution the sound.

Figure 4: voiceless syllabic air sounds



The composer gives actual words (in several languages) as pronunciation guides to these sounds, which are then represented by symbols from the International Phonetic Alphabet (Figure 5).

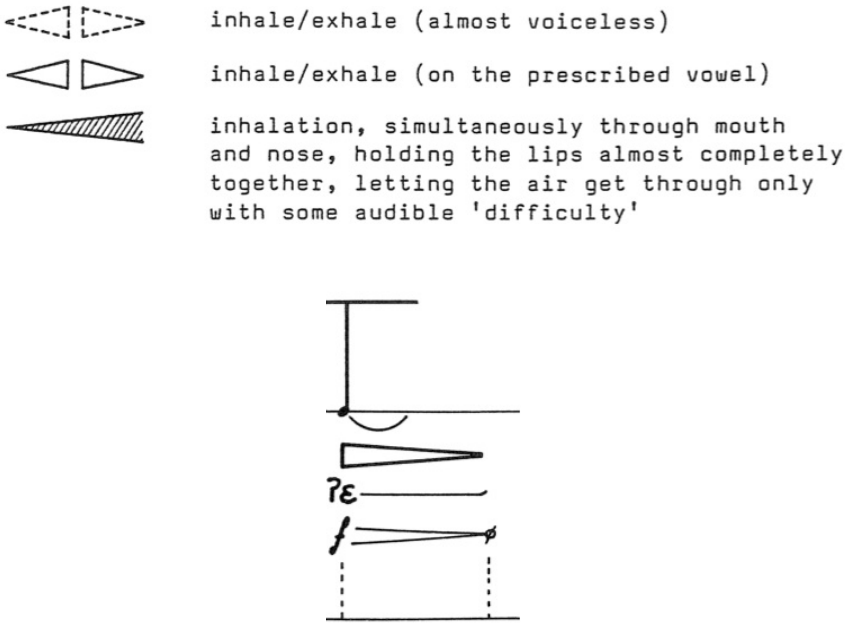
Figure 5: pronunciation guide of voiceless air sounds



The syllabic air sounds have a dual quality; on one hand they are percussive in nature and lend to the machine-like sound environment. On the other, they provide a link to the human voice and integrate the performer's body as a noise-making device.

This sound category also includes sustained syllabic air sounds made by inhalations and exhalations (Figure 6). The question mark before the **ɛ** in figure six signifies a glottal articulation.

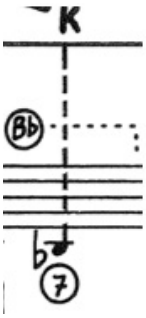
Figure 6: notation of inhalations and exhalations



A third category of sounds is comprised of key slaps that are colored by specific fingering combinations. Figure seven shows that the performer will finger a low B-flat (designated by the circumscribed “Bb” with horizontal dashed line) and slap key number seven, which happens to be the low C key (designated by the circumscribed “7” beneath the note head). The key slap is notated above the staff with the letter “K” and a dotted stem, which indicates that there should be no pitch resonance. Later in the piece, Torstensson combines key slaps with

plosive tongue sounds; he uses solid vertical stems to indicate pitch resonance in addition to the percussive sound of the key-slap.

Figure 7: key click notation, bar 2a, *Solo*



The sound of key noise is an inherent characteristic of saxophone playing, exacerbated by large tone holes that must be closed via pads instead of fingers. This noise becomes increasingly apparent with larger members of the saxophone family. In *Solo*, the composer capitalizes on the presence of these sounds and the multitude of fingering combinations that create pitch resonance via key slap. These effects highlight the machine-like quality of the saxophone and are highly visual.

The fourth category is comprised of vocal sounds, which are notated by a letter between two question marks. Torstensson describes this effect as a "suppressed scream[14]." The superscript tilde shows a nasalization of the sound; a subscript tilde (Figure 8) indicates the performer should use a "creaky" voice[15].

[14] Torstensson, *Solo*, p. ii
[15] Torstensson, *Solo*, p. ii

In Figure 8, the fortissimo in parentheses indicates the prescribed action, while the mezzo piano indicates the resulting dynamic. The resulting sound is intense and startling when amplified correctly and serves as a manifestation of the performer's struggle.

Figure 8: notation of voiced sounds ("suppressed screams")

These four categories comprise the sound palette of one of the saxophone repertoire's most imaginative and unique uses of the instrument. The categories help illuminate (or complicate) the relationship between the instrument, the performer, and the resulting musical discourse, ultimately playing into the piece's theatricality.

Additionally, Torstensson uses the symbol  to indicate the performer should freeze any physical activity, including breathing. This act serves two purposes; first, it adds to the piece's highly physical nature and theatricality. In that way, all

physical movement becomes an integral part of this piece, which explains the composer's previous instruction to avoid page turns. Second, he uses this symbol to immediately arrest all sound.

Early into the piece, Torstensson begins controlling the duration of the inhalations and exhalations. Since they become an integral part of the sound environment, he uses the freeze symbol to eliminate any chance the performer will disturb the musical discourse with a misplaced or audible breath, which might lessen the impact of later occurrences. Figures 9 and 10 illustrate Torstensson's notation for breathing.

Figure 9: indications for breathing

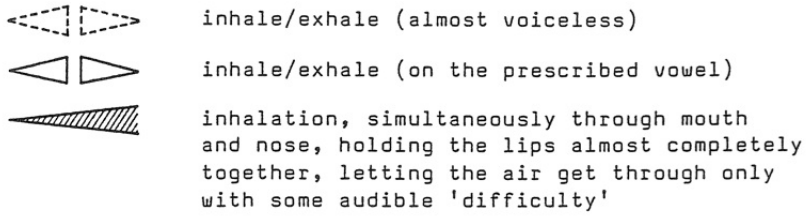
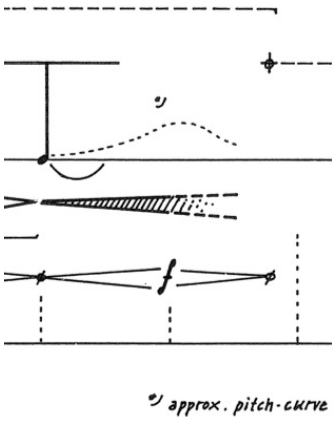


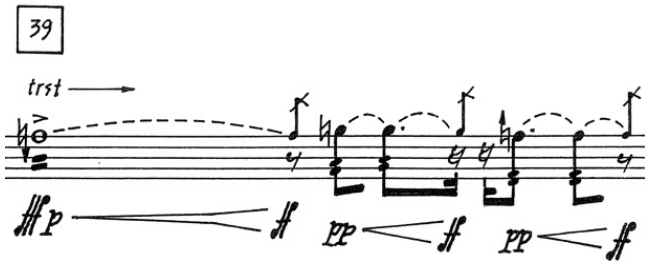
Figure 10: breathing notation in context



In Figure 9, Torstensson notates the inhalation with the shaded crescendo sign, and adds the resultant dynamic below. The performer should realize these are resultant dynamics of the breath, since the volume of the inhalation will naturally decrease at the performer fills with air. The attempt to decrescendo the inhalation is not necessary.

Another essential sound element of this work, and perhaps one that creates the strongest link between the three pieces of the triptych, is the "tremolo-staccato" notated by the symbol *trst*, which makes its first appearance in bar 21 of *Solo*. This technique is executed by repeatedly tonguing a sustained pitch as fast as possible for the note's entire duration. The resulting sound is a series of short, rapid notes which "join forces" to create a longer pitch – similar in principle to the effect of a pianist executing a rapidly repeated pitch while depressing the sustain pedal. During the whole note F in Figure 11, the performer will repeatedly tongue the reed as fast as possible for the duration of the note. The tremolo-staccato should not contain a perceivable rhythm, and is therefore better understood as a textural element.

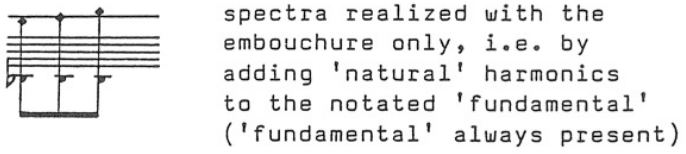
Figure 11: tremolo-staccato, bar 39, *Solo*



As mentioned previously, the original title of *Solo* was *TRST*, which might be further evidence of this sound's importance. As Chapter Three will explain in depth, the tremolo-staccato is important to Torstensson's aesthetic because it acts as a unifying element not only for the separate works of the triptych, but also within in each work, acting as a point of convergence for other musical elements. Torstensson ties together both large- and small-scale issues by using the tremolo-staccato.

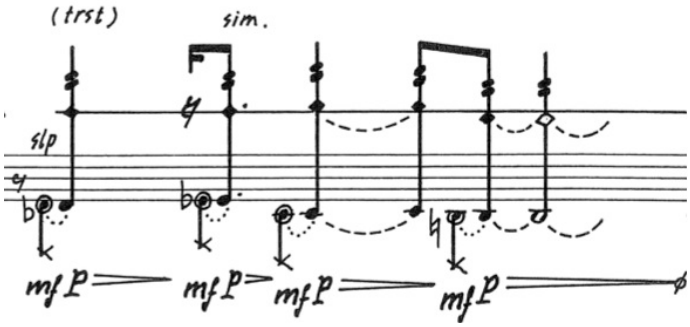
Finally, one cannot ignore the prominent roles of slap tongue and natural harmonics. Especially on the lower saxophones, which Torstensson favors in the triptych, natural harmonics create a complex and rich sound that is stable in execution. In addition to using these sounds alone, the composer combines them with other techniques at loud volumes including voice, flutter tongue, and growl to create barbaric noises. Torstensson's use of harmonics in *Solo* is confined to natural (or "spectral") harmonics that utilize the instrument's natural overtone series, not multiphonics, which are sometimes referred to by composers as "artificial harmonics" (Figure 12).

Figure 12: indication for harmonics



After introducing individual elements, Torstensson combines them in numerous configurations to create variation. Figure 13 illustrates an instance where slap tongue, harmonics, and tremolo-staccato are used cooperatively in the same passage. The slap tongue is notated by a circumscribed note head and the letters, “slp”. Each of these elements affects a different aspect of the saxophone sound: the slap tongue is articulatory, the tremolo-staccato is textural, and the harmonics affect the timbral quality of the sound.

Figure 13: example of slap tongue, multiphonics, and tremolo-staccato



In comparison to *Licks & Brains I* and *II*, Torstensson says that *Solo* is “set a little apart” and best considered as a compositional exercise used to reach the musical material in *Licks & Brains I* and *II*[16]*.*

> “You can look at it from different angles. You could say that the smaller piece is a seed for the larger work. You could also say that through the solo piece it’s easier to grab the larger piece because material from the solo is already recognizable.

[16] Asbjørn Schatthun, “As vague as this goal may be…,” *Periodical for ny Musikk*, no. 3 (1992): 16.

> Ideally, you would hear the whole family of pieces consecutively. They would make sense as they interrelate in the distance, at least, in your memory. But, I also wanted them to be self-fulfilled, not having to relate to the pieces coming before them or after them. I would say that's the nicest thing working with larger families or cycles of pieces: to have them make sense as a cycle – as a whole – and also as the individual building stones of that cycle.[17]"

Fritz van der Waa, in his article "No substance, but give direction to thought," states that *Solo* is a perfect, succinct illustration of Torstensson's musical thoughts, as well as "the close-up phenomenon of the saxophone – and not to forget, the saxophonist himself.[18]" Van der Waa references the composer's use of vocal grunts and screams to argue this piece marks the "beginning of abstraction[19]" in Torstensson's music; he believes the breathing, sighs, and groans of the player have the initial effect of a literal illustration but soon lose their literal quality and take on an independent musical meaning[20]. If this is true, the sound vocabulary illustrated in this chapter blends into a discourse that transcends the physicality of the performer.

On the other hand, Goran Bergendal writes that the physical aspects of this music are always at the forefront – so much that they "design the parameters of the piece." He notes that in the mingling of the physical aspects with those that

[17] Torstensson, interview, Jan. 30, 2012.
[18] F. van der Waa, "No substance, but to give direction to thought," *Nutida Musik*, 2 (1991); 15.
[19] Ibid.
[20] Ibid.

are purely musical, like pitches and changing textures, one finds the “real content of Klas Torstensson’s instrumental music.[21]”

This author finds merit in both of these perspectives but more readily agrees with Bergendal. For the performer, the physicality of the work is of supreme importance and clearly defines the work's musical problems and goals. In this way, the sense of physical accomplishment upon reaching the climatic moment is profound. Consequently, it is each listener's perception that finally shapes the relationship between the performer and instrument. Just as easily, the piece can be experienced as a discourse of sound that transcends flesh and metal. The extent to which a listener assigns the saxophone a literal role of "large machine" is up to the individual, and Torstensson carefully crafts the piece so that it can be perceived in a number of ways. As explained later in this chapter, playing with and predicting the listener's perception is a fundamental goal of the composer.

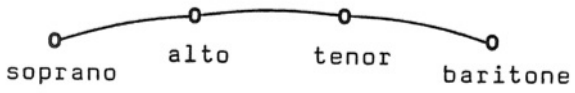
Licks & Brains I

Licks & Brains I, the second piece of the trilogy, is scored for standard saxophone quartet consisting of B-flat soprano, E-flat alto, B-flat tenor, and E-flat baritone saxophones. The work’s duration is approximately 20 minutes, which is twice that of *Solo*. Torstensson indicates in the score that all performers should play with no vibrato and that the “quartet should be standing

[21] Bergendal, “Klas Torstensson,” 326.

up, forming as straight as possible a line facing the audience; the distance between players being as large as possible.[22]"

Figure 14: Torstensson's physical setup for *Licks & Brains I*



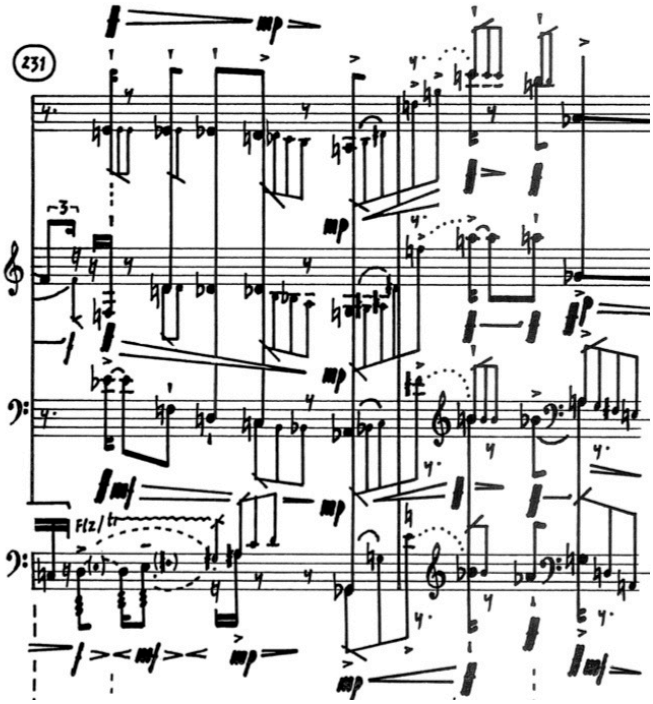
This detailed and unusual stage plot illustrates Torstensson's desire to manipulate sound within an acoustic space. In an interview with Asbjørn Schatthun, Torstensson stated his preoccupation with "defining the timbral body and acoustic space" and manipulating "from where the sound shall strike the listener." By manipulating the sound within a space, Torstensson's ability to influence the listener's perception is increased – a helpful tool when considering the homogenous sound of the traditional saxophone quartet.

> "All of my scores include notes on how the stage arrangement shall be and from where the sound will strike the listener, if one can say it that way. I work with this a lot – both depth and extreme left/right stereophonics. So it not only has to do with instrumentation, but also with pure perception.
>
> And perception is obviously of crucial importance to the composer. The hard-hitting sound sculptures of *Licks & Brains* pierce themselves into the brain and uncover a personality with a strong reluctance to melt into its surroundings. Just like the rapid moving saxophone quartet in the piece refuses to bend down and give way to the acoustical environment.[23]"

[22] Torstensson, *Licks & Brains I*, i.
[23] Schatthun, "As vague as this goal may be…," 17.

The notation techniques for *Licks & Brains I* are nearly identical to that of *Solo*. The variety of sounds is somewhat restricted due to the fact that no sections of *Licks & Brains I* are performed without the mouthpiece. Torstensson uses standard rhythmic notation throughout, with an occasional instance of proportional notation (that looks similar to standard grace note notation). In Figure 15, the saxophone parts show different speeds of proportional notation heading into bar 232; the baritone saxophone (lowest staff) has a slower velocity of notes than the soprano saxophone (top line).

Figure 15: Proportional notation in measures 231-232, *Licks & Brains I*

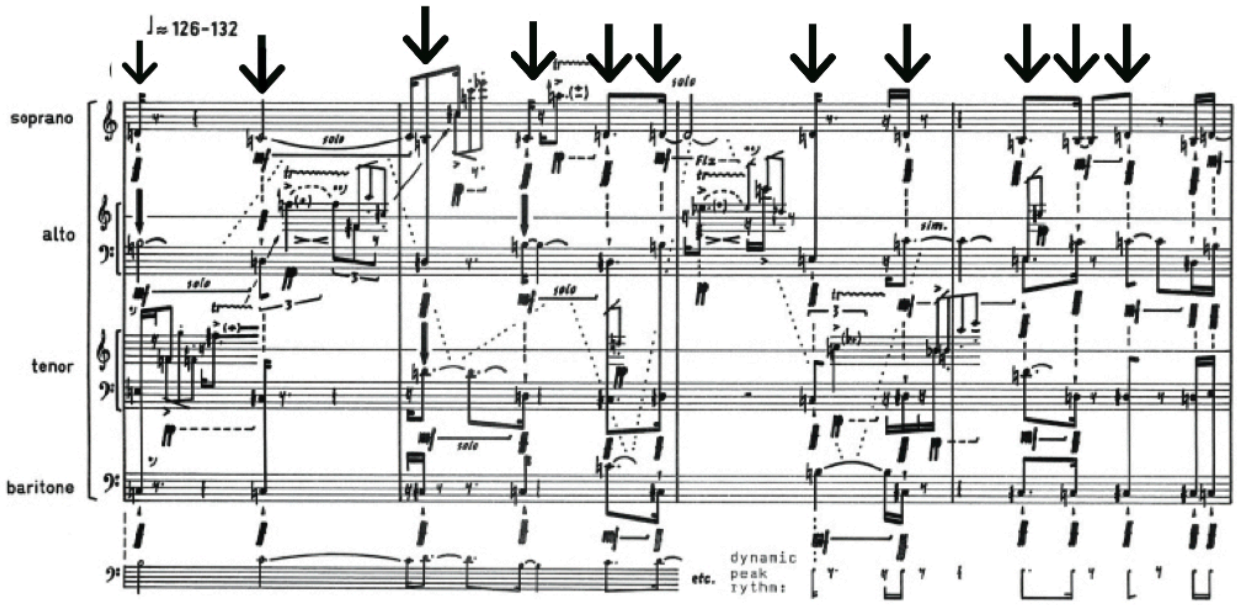


One critical and guiding piece of information for both the performer and theorist appears on page two of the score under the opening bars:

> Note the dynamic contrast between:
> 1. "network" attacks
> 2. sustained notes
> 3. "remainder"[24]

Here Torstensson draws attention to three layers of musical activity, described below and illustrated in Figure 16.

Figure 16: Opening bars, *Licks & Brains I*



[24] Torstensson, *Licks and Brains I*, 2.

The first layer, a series of "network" attacks, are short and aggressive notes generally played by three or four parts simultaneously. These can be found in Figure 16 under the black arrows, on bar one on beats one and three, in bar two on the second 16th note of beat one, fourth sixteenth note of beat two, directly on beat three, and the fourth sixteenth note of beat four, and so on. Torstensson indicates these network attacks in the score with vertical dotted lines. An additional performance direction states that these attacks must be "always extremely short and aggressive.[25]" This layer creates a sense of rhythmic structure and togetherness.

The second layer Torstensson mentions is comprised of "sustained pitches", which jump amongst the four saxophone parts and outline the main melodic idea, a three-note repeating motive whose intervallic content is one ascending half-step followed by one ascending whole step (see bottom staff of Figure 16). This motive is introduced at the climatic moment of *Solo*; when it appears in *Licks & Brains I*, no saxophone plays two consecutive sustained pitches. Additionally, the sustained pitches are always triggered by network attacks. See the bottom staff of Figure 16, where the composer lays out the composite rhythm and presents the melodic motive.

The third layer, referred to by the composer as "remainder" is, quite literally, everything else. This layer is generally comprised of fast, virtuosic passages with

[25] Torstensson, *Licks and Brains I*, 2.

trills and acrobatic feats generally executed at a much lesser dynamic than the network attacks and sustained notes. The "remainder" creates a sound of complex polyphony; this layer often appears in proportional notation independent of network attacks. This creates a conflict between figures that happen at exact moments in time (networks attacks) and those that do not ("remainder").

The struggle between the three layers, which will carry on throughout the piece, and points to important element of Torstensson's aesthetic. Asbjørn Schatthun, in his article *As vague as this goal may be…*, suggests that *Licks & Brains I* exists "at the point of intersection of a monolithic idea and a kind of a polyphonic shape.[26]" This suggests that the three layers are monolithic and static on account of their omnipresence – perhaps led by the layer of network attacks – yet remain polyphonic in their shape, which develops and changes throughout the piece.

Torstensson responds to this idea saying that *Licks & Brains I* about two extremes: "identity music" and "developing music.[27]"

> "With 'identity music' – what [Schatthun] calls 'monolithic' – I think that the identity is actually very static. The piece has a certain identity, and this is maintained throughout. There is the one extreme. The other extreme is that music must consist of change.

[26] Schatthun, "As vague as this goal may be…," 16.
[27] Ibid.

> Without change it is not music to me at all. And [the piece] swings between these two extremes. This is the movement which is the most interesting for the listener; his possibility to experience continuity of discontinuity is influenced to a large degree by this pendulum movement.[28]"

This author agrees with that sentiment. The "monolith" is omnipresent in *Licks & Brains I* and can be perceived in a number of ways: the incessant vertical attacks, nonstop energy, or even the heaviness of sound. Even as the material transforms, the monolith characteristics can always be heard. In that regard, highlighting the work's "polyphonic shape" takes more attention from the performer and means he or she must study the way Torstensson constantly varies the musical material – even on a micro level – to result in an overall shape for the piece as a whole.

Jonathan Goldman, in his article *Klas Torstensson in conversation*, makes a similar point in describing the composition as simultaneously "maximalist and minimalist", suggesting minimalist tendencies[29] in the repeated three note motive and maximalist tendencies in the "dense slag of quick, repeated notes,[30]" illustrated in Figure 17.

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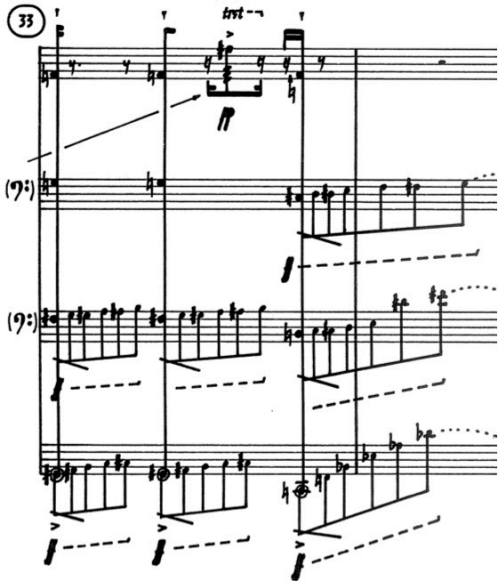
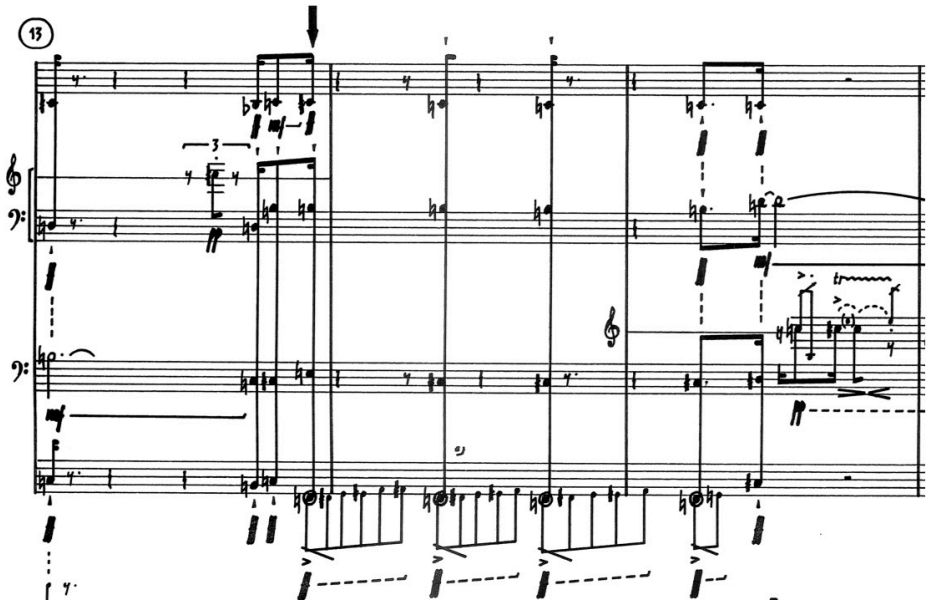
[28] Ibid.
[29] While Torstensson agrees with this suggestion, appreciating some of the qualities of minimalism ("groundedness, earthiness, as well as things like some of its instrumentation and use of bass line) and admitting to his own incorporation of these elements into his own music, he dislikes minimalism in general and its popularity, referencing the manner in which the "Hague school" and students of Louis Andriessen remain "profoundly touched by minimalism."
[30] Jonathan Goldman, "Klas Torstensson in Conversation," *Circuit: musiques contemporaines*, Vol. 14, no. 2 (2004), 50.

Figure 17: bar 33



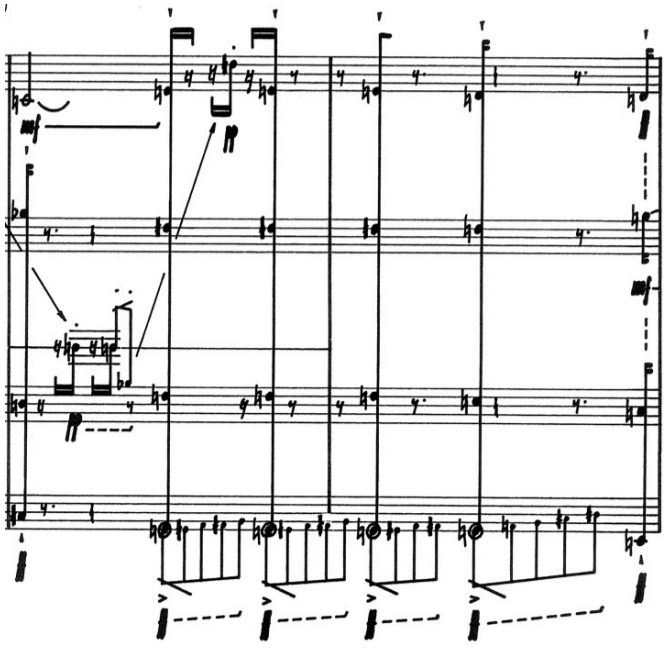
Torstensson elaborates this idea through variation, which is one of his most important compositional techniques. Figure 18 shows an early instance of the quick repeated low passage found in the baritone saxophone.

Figure 18: bar 13, *Licks & Brains I*



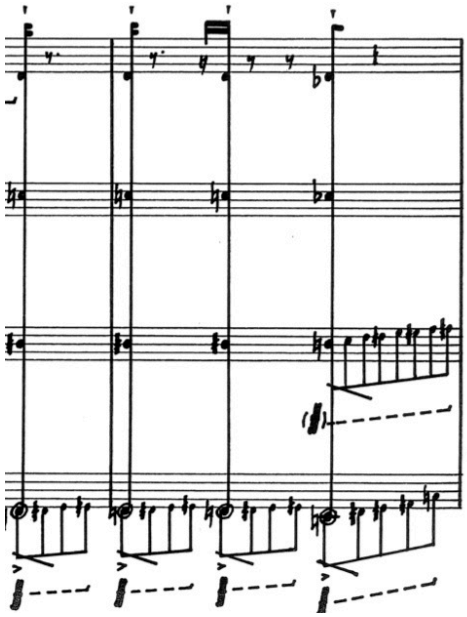
When this musical idea recurs in bar 19 (see Figure 19), Torstensson varies the starting pitch, number of pitches per repetition, and rhythmic durations between network attacks, yet the gesture's identity remains the same.

Figure 19: bar 19, *Licks & Brains I*



These elements are again varied in bar 27 (Figure 20).

Figure 20: bar 27, *Licks & Brains I*



When comparing the three previous examples, one will notice how the composer gradually moves toward rhythmic regularity in terms of space between network attacks and the rapid passages in the baritone saxophone part. In *Licks & Brains I*, the constant repetition of musical material presents many opportunities for variation.

> "The point at which a new variation starts is the 'reset' point. It is the point at which we recommence with a (relatively) blank slate… You find this in *Licks and Brains*: I develop the material until I come to an end point, then I start again. I often use sociological concepts in describing and constructing my music. You have, for example, two musics which compete with each other, which are in an antagonistic relationship. There is a winner and a loser; one is defeated, and is possibly eaten up by the other.[31]"

[31] Goldman, "Klas Torstensson in Conversation," 50.

In shifting emphasis between large-scale form and detail through variation of the three layers, physical spatialization of the performers, as well as repetition of musical ideas, Klas Torstensson attempt to "promote a flexible, active attitude on the part of the listener[32]" by first predicting the way a listener will perceive, then presenting options as to how he or she can go about it[33]. This might help explain his predilection for extremes; which seem to facilitate the shift between various levels of listening.

As a result, the minute detail within Torstensson's music requires several hearings before it will fully reveal itself, and the audience can experience the piece in a number of ways. In presenting the individual listener more then he or she can perceive at once, Torstensson describes the essence of his music as "a series of listening scenarios.[34]"

For the performer, this detail will emerge during the rehearsal process. In preparing *Licks & Brains I*, the players must not focus on how their line relates to another in the quartet, but instead how their part fits into a particular musical layer (as described above) and how those layers interact and relate with each other. As a result, each saxophonist is not a part of the puzzle, but instead a part of a part of the puzzle.

[32] Schatthun, "As vague as this goal may be…," 16.
[33] Ibid.
[34] van der Waa, "No substance, but to give direction to thought," 15.

Although the music is complex with many layers, Torstensson admits that the processes that govern it are often far simpler than the highly detailed notation might suggest[35]. He has commented in several interviews that his compositional process is not about outlining a piece and filling in details. Rather, it is "about how the large form and detail influence each other[36]." As mentioned in Chapter One, Torstensson's starting point is always the realization of *why* he is composing or the discovery of the goal of a specific musical work. In understanding the composition's objective on the simplest level – for example, how to get from stasis to speed or from disagreement to agreement – on can then start to fashion the musical structures from the foundation upward[37].

> "A composer should see problems, and if he doesn't, he should 'problematize' things. You should always begin a piece by asking yourself, 'what problems am I trying to solve with this piece?' and if you can't answer that question, maybe there's no need to compose at all. There are two key ingredients for writing music: passion and necessity. Necessity is the problem which needs to be solved; passion is what drives you to write the piece at all. Once you have chosen the musicians, the ensemble, then the music comes. You set premises, and then you write: that is where the passion comes in; otherwise, there's no motivation. Otherwise, you might as well leave it aside. Of course you have to make compromises, with institutions, and so on, but passion is still the most important element.[38]"

Once these fundamental questions have been answered, Torstensson begins a new work with graphic sketches that indicate a general form and flow of

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[35] van der Waa, "No substance, but to give direction to thought," 15.
[36] Schatthun, "As vague as this goal may be…," 16.
[37] van der Waa, "No substance, but to give direction to thought," 16.
[38] Goldman, "Klas Torstensson in Conversation," 50.

intensity[39]. In later versions of the sketch, which the composer calls "generations[40]", he makes more detailed decisions about timbre, rhythm, registers, articulation, and dynamics. In the final stage of composition, Torstensson begins to work on pitches[41]. This may seem an unusual order in which to add musical details; it is because Torstensson aims keep pitch from becoming too important in the listener's perception of his music.

With regard to *Solo*, Torstensson uses dissonant intervals because he does not want the pitch structures to sound significant[42].

> "I don't want the pitches to sound important. But, in doing so, I have to be very secure in choosing the right pitches. You see, it's paradoxical. By trying to avoid something, I really have to stress the construction and choosing of pitch not to give the impression the piece is constructed using some series or some pitch theme. It's like trying to not create a certain perception.
>
> I'm keen on the focus of pitch not because I want it to play an important role in perception, but because I want something artistic to arise from making use of those pitches, which means I have to be very specific. You could imagine have the first part of this score – without the mouthpiece – notated in relative pitch without music staves at all. You could say, "low", "high", "medium", and let the player decide the pitch himself. But, I think the pitch is too important and since I don't even want it to be perceived in those terms, I have to be specific.
>
> I still work like that, even when I'm writing for orchestra. I write the whole thing without pitch – only relative pitch with direction of sounds. When the piece is finished, then I start dealing with

[39] Erik Voermans, "Torstensson, Klas," *Grove Music Online*.
[40] Schatthun, "As vague as this goal may be…," 16.
[41] Bergendal, "Klas Torstensson," 324.
[42] Klas Torstensson, interview, Jan. 30, 2012.

specific pitches, because they are too important to be dealt with right from the start.[43]"

Licks & Brains II

The final piece of the triptych, *Licks & Brains II*, was completed alongside *Solo* in 1988. The work is 30 minutes in length – the combined length of *Solo* and *Licks & Brains I*. While the protagonist-antagonist relationship of *Licks & Brains I* is dealt with by means confined to four saxophones, *Licks & Brains II* approaches the conflict through instrumentation in which the saxophone quartet becomes swallowed by a large ensemble including four percussionists, seven brass instruments, electric guitar, woodwinds, and amplified strings. The use of the saxophone quartet as a concerto-grosso type of group soloist is perhaps the most traditional concept of musical antagonism found thus far in the triptych.

Considering his affinity for writing families of pieces, Torstensson notes that *Licks & Brains II* was not economical – that is, turning one piece into two – but rather it posed an intriguing problem as a composer[44]. In this work, Torstensson's compositional problem is discovering if the listener will interpret the old material in the same way when placing it in a new context.

In his series of *Chemins*, Italian composer Luciano Berio (1925-2003) rearranged pieces from his *Sequenza* series into new pieces with a soloist-and-ensemble

[43] Klas Torstensson, interview, Jan. 30, 2012.
[44] Schatthun, "As vague as this goal may be…," 16.

setting. For example, the seventh *Sequenza* for solo oboe, written in 1969, was re-orchestrated for solo oboe with eleven string instruments in 1975[45]. In an interview with Asbjørn Schatthun, Torstensson commented that he "occasionally suspects" Berio was trying to make more out of *Sequenza* works by turning them into *Chemins*[46]. This idea suggests that in Berio's reworked pieces, layers are added yet the piece ultimately retains its original identity. Schatthun comments that, "Berio's technique is, in a way, much simpler, in that it is a kind of acoustic extension of an already written solo voice. Here [Torstensson] has actually composed another piece around the first."

Unlike Berio, Torstensson's objective is to create a new identity while using the same musical material. As can be expected, the relationship of the saxophone quartet to the large ensemble is constantly shifting. Later in his interview with Schatthun, Torstensson comments:

> "The goal is to make the quartet a complete piece, [and] at the same time make it function in the larger context. I must admit that the quartet is very important for the orchestral work – you cannot really remove the quartet.
>
> At certain places in the score, it is actually the quartet that is expanded and re-orchestrated for a larger ensemble. That is one extreme. The other extreme is that the quartet is being played, only with new layers added to it.[47]"

[45] Luciano Berio, *Chemins IV*, Universal Edition (Vienna, 1975).
[46] Schatthun, "As vague as this goal may be…," 16.
[47] Ibid.

The orchestral part, written for the Asko Ensemble upon the twentieth anniversary of the Foundation Asko of Amsterdam, is scored for the following instrumentation:

2 piccolos (doubling alto flute)
oboe
English horn
E-flat clarinet
B-flat bass clarinet
B-flat contrabass clarinet
bassoon
contrabassoon
trumpet 1 (in D)
trumpet 2 (in C)
2 horns in F
tenor-bass trombone 1
bass trombone 2
contrabass trombone 3
4 percussion
2 violins
viola
cello
contrabass
electric piano
bass guitar

Due to balance issues, Torstensson instructs that the five string instruments are to be amplified. All instruments are to be played without vibrato throughout. The following indication regarding ensemble setup appears on page i of the score:

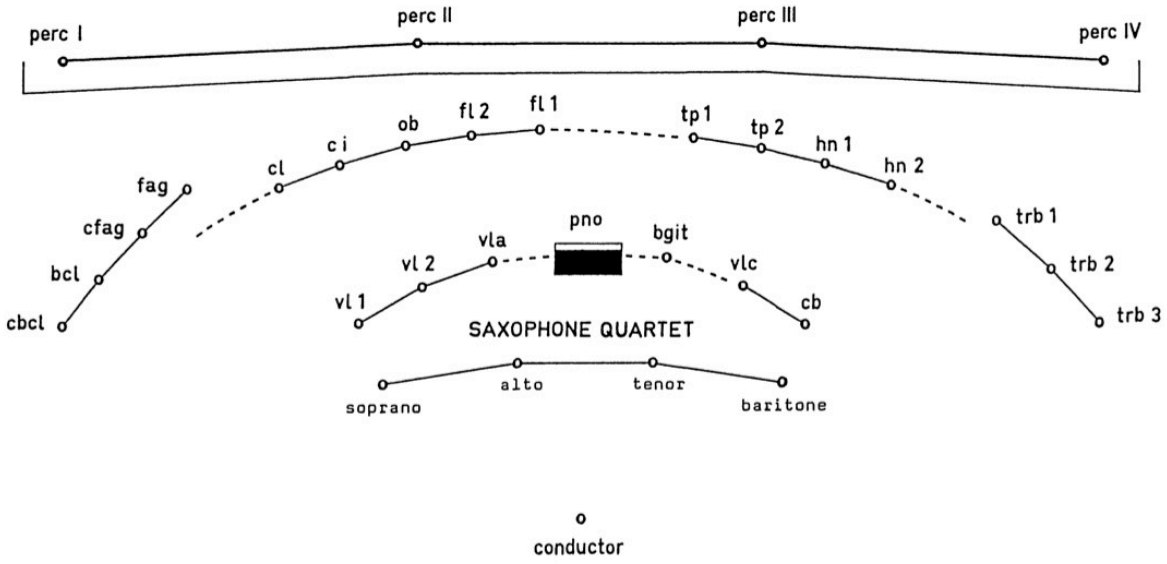
> "The saxophones should be standing up, forming an as straight as possible line facing the audience; the distance between the players being as large as possible.
>
> The seating of the ensemble should be as wide as possible (not less than approximately 12 meters). Because of the intended

spatial movement of sound, the relative positioning must under no circumstances be altered.

The percussion should be placed on a higher level than the rest of the ensemble.[48]"

Figure 21 provides the specific seating diagram.

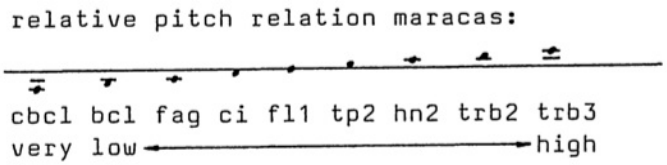
FIGURE 21: Seating Diagram, *Licks & Brains II*



Several players (flute 1, E-flat clarinet, bass clarinet, contrabass clarinet, bassoon, trumpet 2, horn 2, trombone 3, and trombone 3) also play maracas, whose pitches are noted relatively from low to high in the score (Figure 22).

[48] Klas Torstensson, *Licks & Brains II*, Donemus (Amsterdam, 1988), i

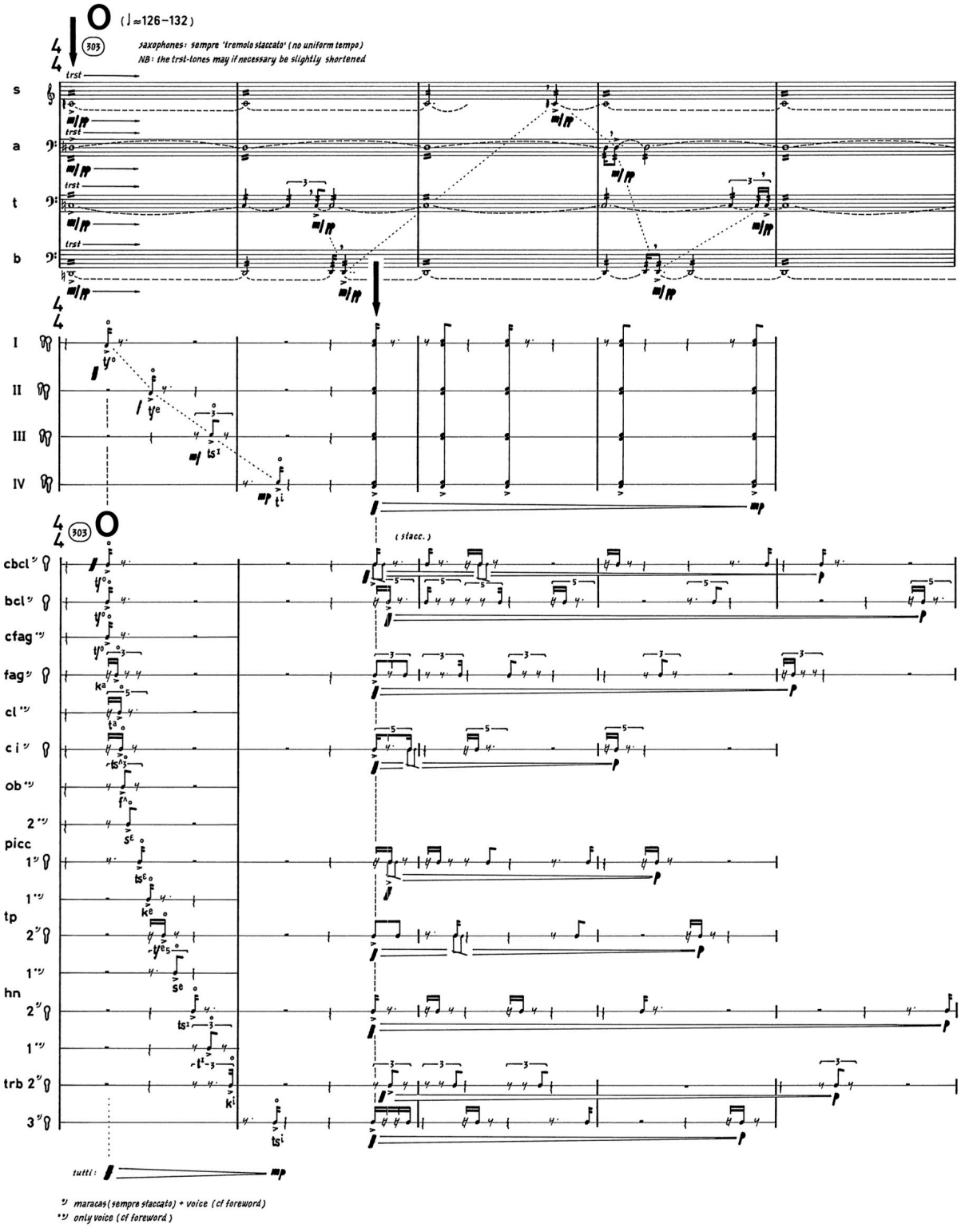
Figure 22: Distribution of Maracas, *Licks & Brains II*



A comparison of the maracas assignment (Figure 22) with the players' physical placement (Figure 21) will illustrate the composer's practice of manipulating the manner in which the sound travels within the acoustic space[49]. In this instance, the sound of the maracas will travel from the left to right side of the ensemble. This is illustrated in Figure 23 at rehearsal marker "O".

[49] Torstensson's first use of maracas played by ensemble members comes from the work *Isogloss* (1985) a multimedia project for 12 male voices and 12 female voices who play maracas and megaphones, amongst other devices.

FIGURE 23: Rehearsal marker "O", *Licks & Brains II*



The following indication about the saxophone writing appears on page iv of the score:

> The saxophone music from Part II (p. 34) onwards is – with the exception of the inserted measures 121B, 127B, 138B, 154B, 202B-Q – identical to *Licks & Brains I* for saxophone quartet (1987)[50].

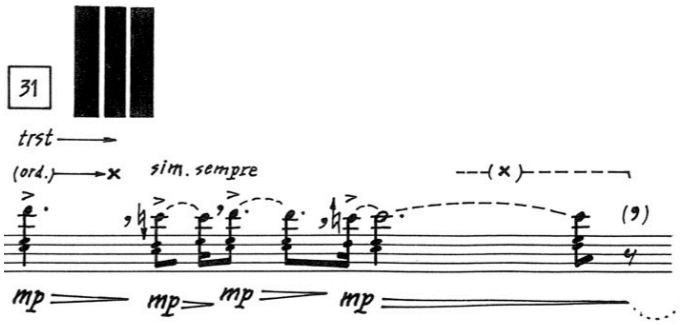
As a result, the listener familiar with *Licks & Brains I* will unquestionably recognize the musical material of Part II of *Licks & Brains II*. As the piece unfolds, the listener will experience instances of reprieve in which the saxophone quartet appears alone, thus exposing verbatim passages from *Licks & Brains I*, as well as moments of conflict when the quartet struggles to be heard over the large ensemble. The relationship between the quartet and the large ensemble, always in flux, is the prominent feature (and compositional "problem") of *Licks & Brains II*.

The opening of the piece (Part I) is an introductory section approximately six minutes in length in which the listener is bombarded with the sound and energy of the new performance force. In this opening section, an antagonistic relationship between the saxophone quartet and ensemble is displayed.

[50] Klas Torstensson, *Licks & Brains II*, iv.

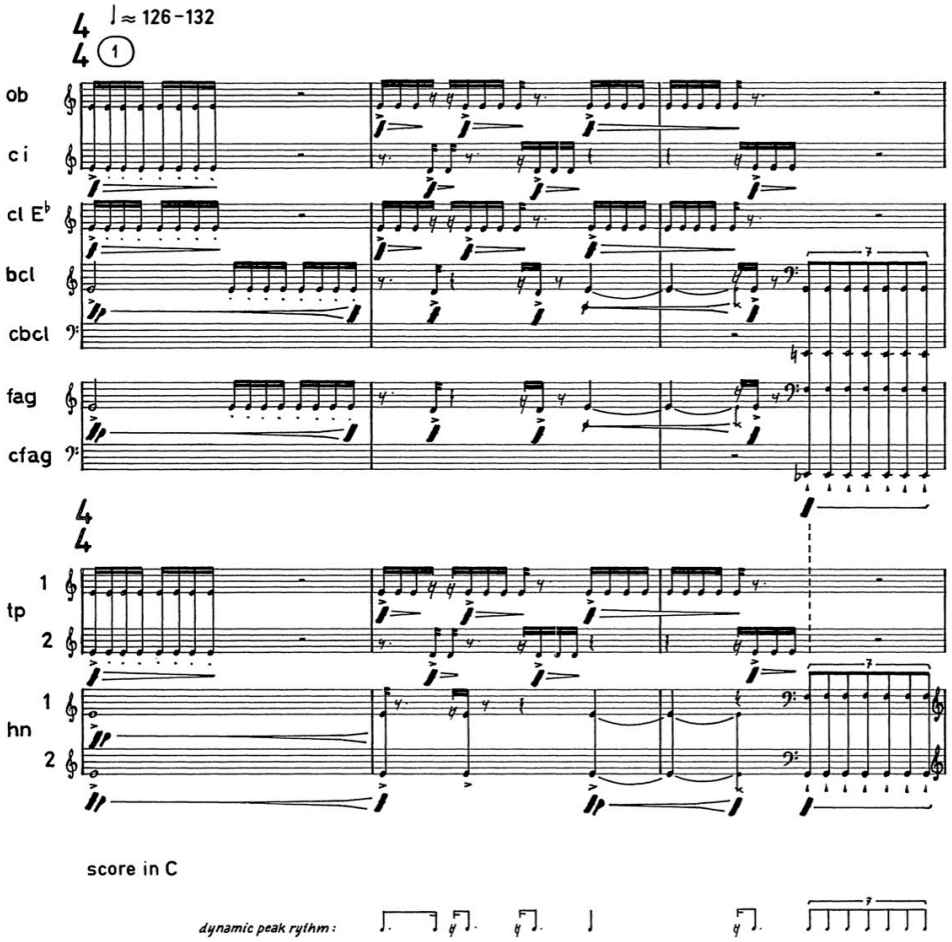
Although the material of this section may sound new, many elements are derived from material found in *Solo* and *Licks & Brains I*. From the beginning of *Licks & Brains II*, the listener will hear a connection to musical material of *Solo*. Figure 24 shows the opening of Part III in *Solo*.

Figure 24: bar 31, opening of Part III, *Solo*



The opening three bars of *Licks & Brains II* are seen in Figure 25. The bottom staff shows the "peak" (composite) rhythm, which is similar to the rhythmic profile evident in Figure 24. Additionally, the ensemble-wide pitch content alternates between a concert E and D, which is one whole step. This pitch profile is also similar the excerpt in Figure 20, which alternates between a concert C and microtonal tunings of a concert B-flat. Although the material has been varied and orchestrated in *Licks & Brains II*, the Torstensson presents a link that is easily perceived.

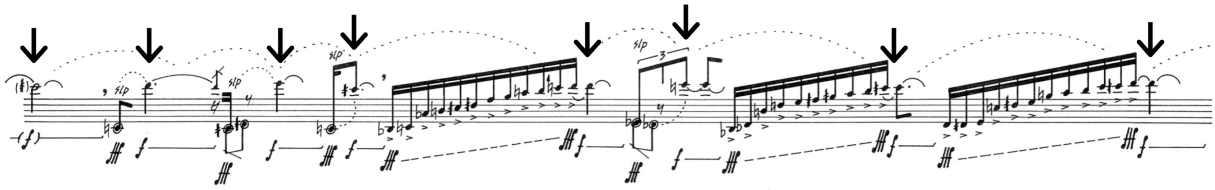
Figure 25: opening of *Licks & Brains II*



As mentioned, the unifying melodic feature in the *Licks & Brains* triptych is the three-note motive containing the intervallic content of one half-step followed by one whole step. Torstensson treats this motive differently from piece to piece of the triptych; the motive highlights a different type of "conflict" in each setting.

In *Solo*, the first statement of the three-note motive appears at the climactic moment of the work, as seen below in Figure 26.

Figure 26: bar 42, *Solo*



The motive is comprised of a written high C-sharp (half note), D (dotted quarter note), and E (quarter note), which are designated in Figure 26 by arrows. The composer uses dotted slurs to indicate the notes should be played like a phrase; they are one voice in a polyphonic texture. In this instance, the top voice, or motive, struggles with the bottom voice, which is comprised of low register slaps and ascending sixteenth note passages that appear at a louder dynamic. This challenges the performer, who is responsible for executing these sounds in a way that brings forth the polyphonic texture.

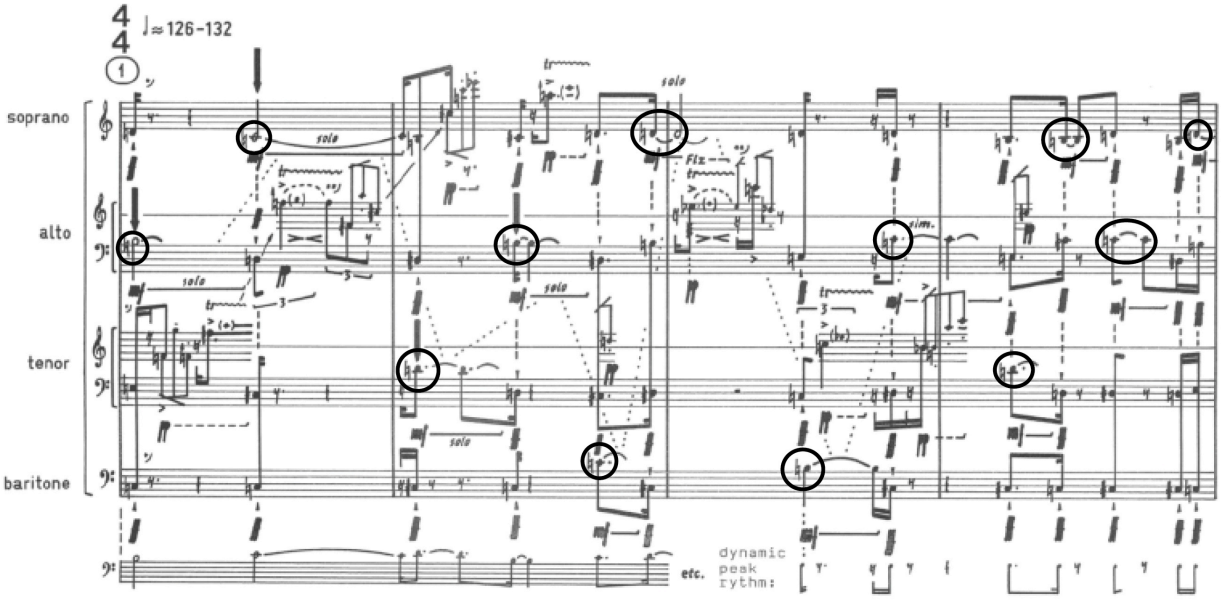
In the opening measures of *Licks & Brains I*, the motive jumps between saxophone parts. In Figure 27, the melodic notes have been circled by the author in addition to being connected visually with a dotted line by the composer. The pitch content, a repeating concert B-C-D, is exactly the same as the motive's appearance in *Solo*. *Licks & Brains I* begins with no introduction and instead jumps straight into the densely layered discourse.

Considering that *Solo* concludes abruptly once the motive is introduced, and that *Licks & Brains I* begins with the motive and no introductory material, one

might perceive the piece to begin immediately where *Solo* ends; in many ways, *Solo* is the introduction to *Licks & Brains.*

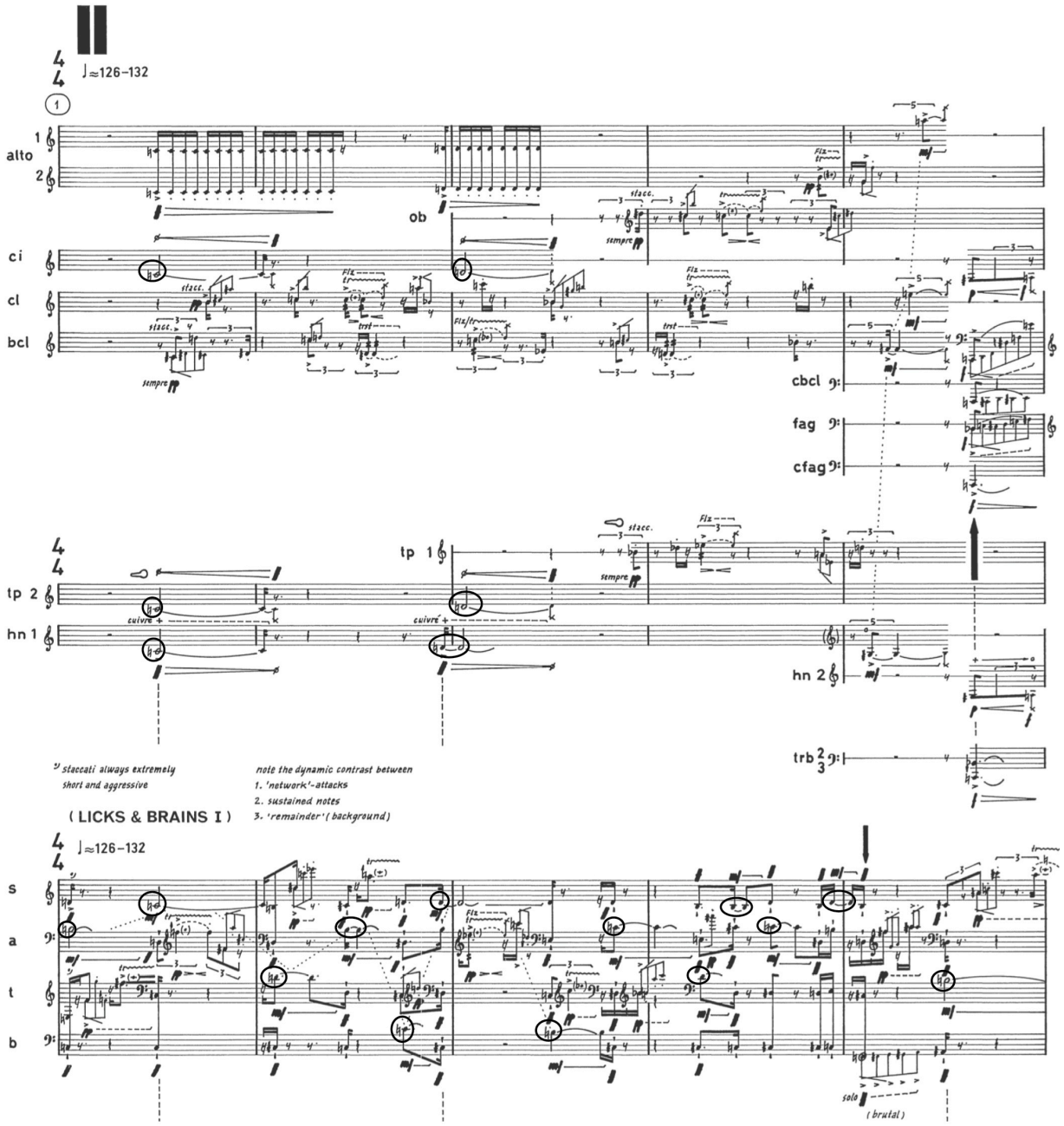
Figure 27 will illustrate the conflict inherent in *Licks & Brains*. Here, the three layers of material struggle simultaneously, whereas in *Solo* the conflict was placing the motive in a polyphonic texture played by a solo instrument.

Figure 27: Opening of *Licks and Brains I*



In *Licks & Brains 2*, the same saxophone passage occurs at the arrival of Part II on page 34 (Figure 28). Torstensson uses additional voices from within the ensemble to reinforce the melodic pitches heard in the saxophone. In the figure below, these pitches have been circled.

Figure 28: Opening of Part II, woodwinds and brass only, *Licks & Brains II*



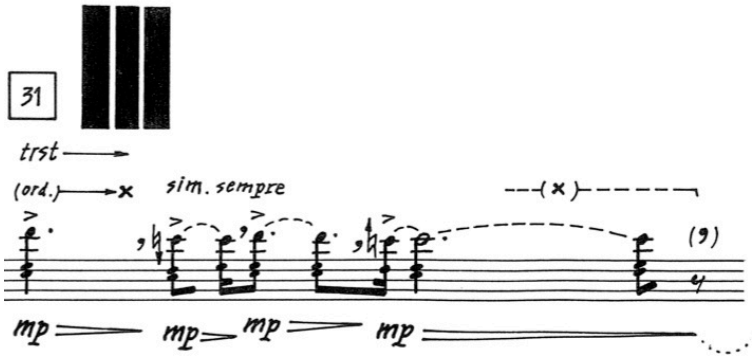
In this setting, Torstensson creates a competitive environment that forces the saxophones to fight with other instruments. For example, at beat three in the first bar of Part II, the melodic pitch in the soprano saxophone is also found in

the second trumpet and first horn. The horn attacks at fortissimo while the muted trumpet executes a crescendo from niente to fortissimo on the same pitch, resulting in an exchange of color that emphasizes the horn's articulation and the muted trumpet's sustain. The soprano saxophone is indicated to play mezzo forte, which creates a issue of balance between the parts. Aurally the saxophone will struggle to be heard and visually the listener will grapple with seeing the performer working yet producing little result. It is Torstensson's goal that this will cause the listener to perceive the material differently in comparison to *Licks & Brains I*[51].

A look at the composer's use of the tremolo-staccato ("*trst*") in conjunction with syncopated rhythms will illustrate further connections between the three works. In Part III of *Solo*, which begins at rehearsal marker 31, Torstensson uses the tremolo-staccato texturally while each pitch is attacked *ordinario* and fades to silence/breath (Figure 29). The tremolo-staccato does not cease throughout the transformation of each note.

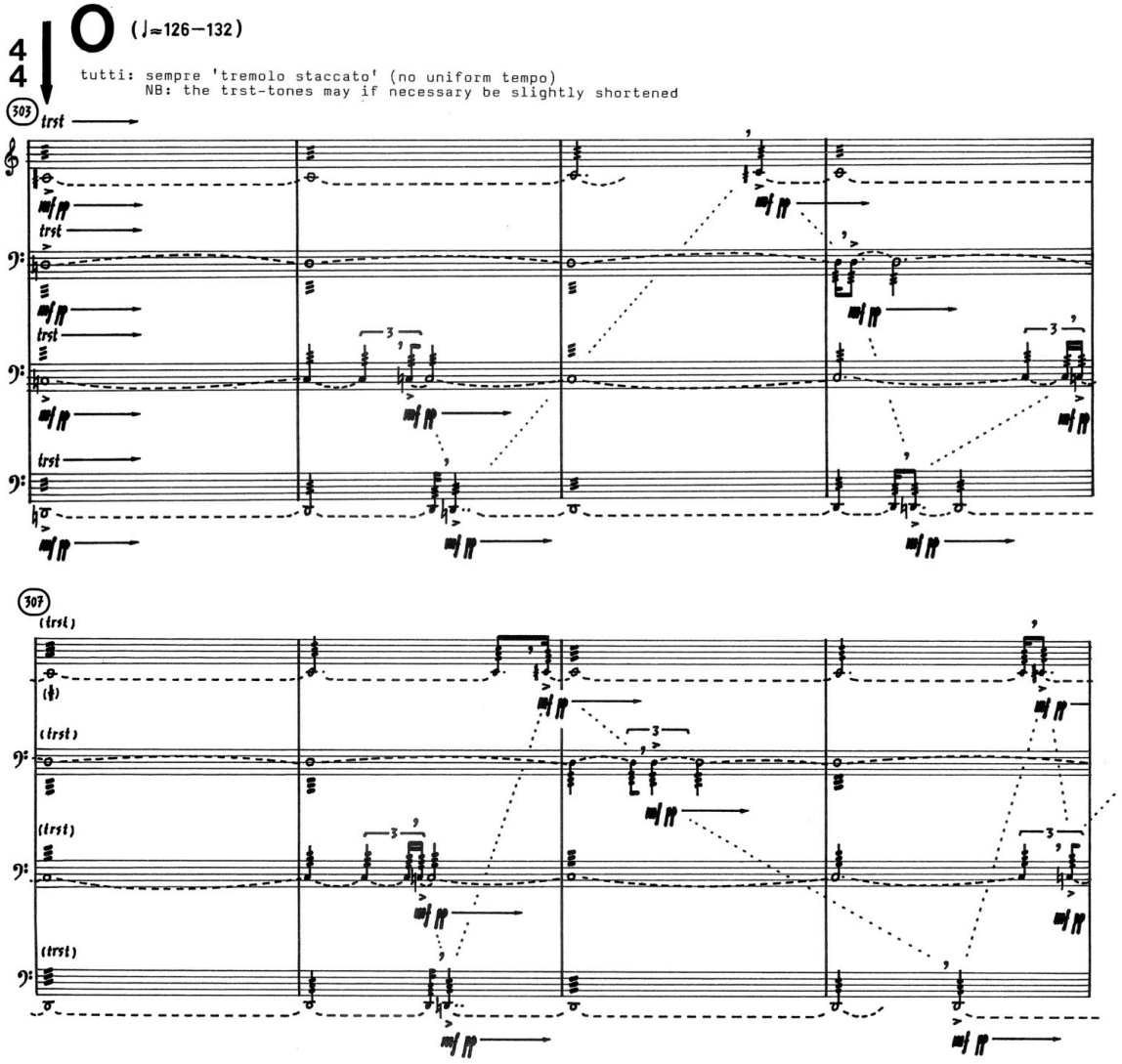
[51] Klas Torstensson, interview, Jan. 23, 2012.

Figure 29: bar 31, Part III, *Solo*



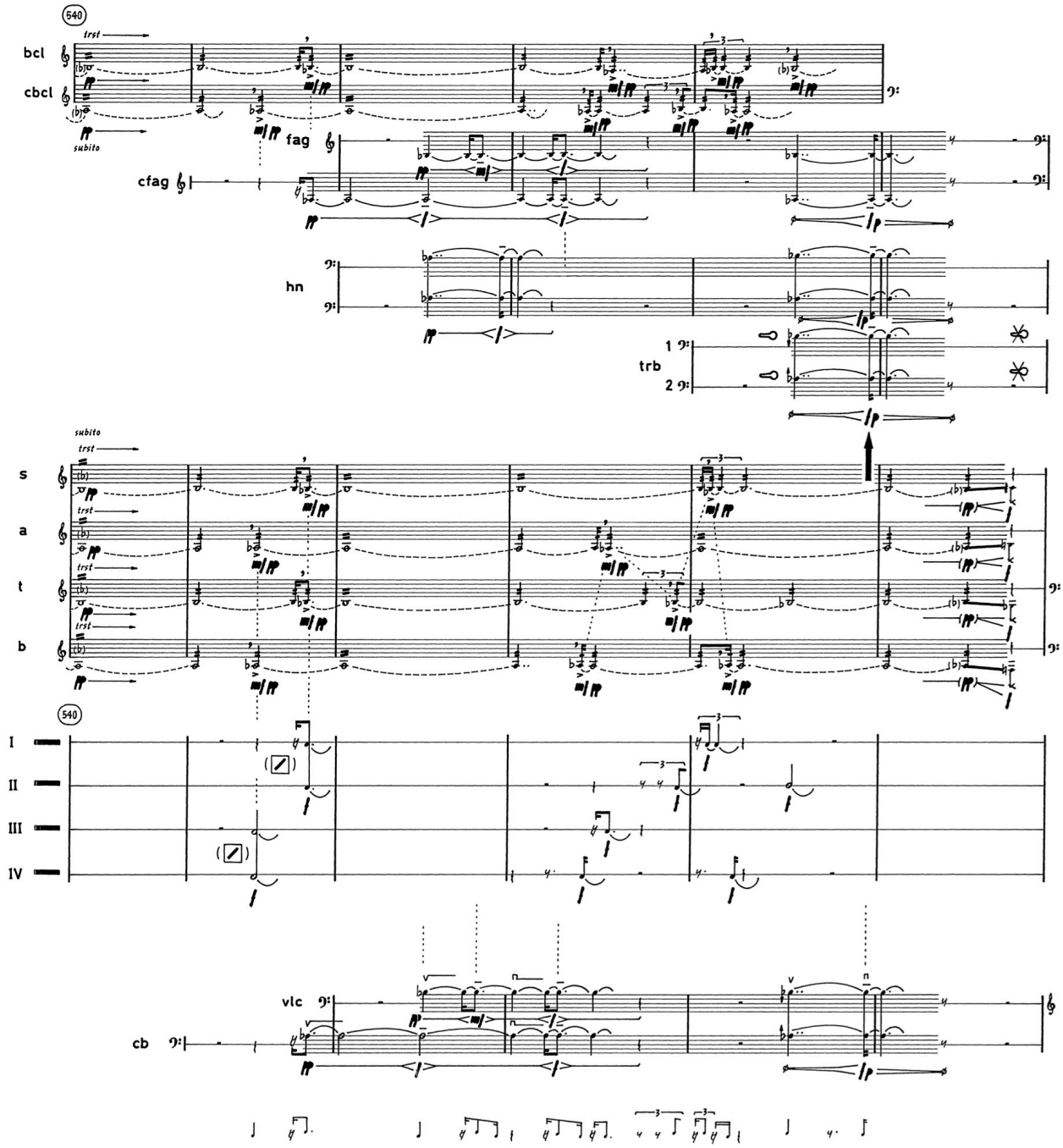
In *Licks and Brains I*, Torstensson uses the tremolo-staccato extensively in an extended passage beginning at rehearsal marker “O”. In Figure 30, the tremolo-staccato is use as a textural device in combination with a syncopated composite rhythm articulated by different voices in the quartet. The manner of passing one voice amongst the four saxophones is similar to the method he uses to pass the main motive’s pitches at the beginning of the piece (see Figure 16 above).

Figure 30: bar 303, *Licks & Brains I*



The syncopated composite rhythm created by the various attacks is similar to the rhythmic profile found in Figure 29. A similar occurrence in *Licks & Brains II* will show Torstensson using low wind instruments and percussion to reinforce the composite rhythm by strengthening the attacks of the saxophone quartet (Figure 31).

Figure 31: Bar 540 after Rehearsal marker "X", *Licks & Brains II*



An exhaustive look at the connections between the three works of the *Licks & Brains* triptych is beyond the scope of this document. What is more useful for

the performer is an understanding of Torstensson's compositional process, ample time for score study, and a keen ear that will allow the player to be conscious of how elements are repeated, varied, combined on a small scale – and how that influences the large scale.

This introduction to the *Licks & Brains* triptych should leave the reader aware of Torstensson's notation for and usage of the saxophone, an idea of the work's musical material, and how he connects the three pieces by using variations of that material. Those variations illuminate a different struggle or conflict within each work, which ultimately affects the listener's perception. In that regard, the triptych is not a chronological trilogy, but could more aptly be conceived as three different ways to discuss the same problem.

While large-scale families of works are a permanent characteristic in Torstensson's oeuvre, one should remember that the "cycle" was an important form during the 1980s, having been very influential in Gérard Grisey's *Les Espaces Acoustiques*, a six-movement work composed from 1974 to 1985 which starts with a movement for solo viola and progresses to large orchestral forces. A similar influence can be seen in Brian Ferneyhough's *Carceri d'Invenzione II*, which was composed between 1984 and 1987 and includes a work for solo flute, a flute concerto, and a work for flute and pre-recorded

flutes[52]. Both of these cycles were finished during the years preceding the *Licks & Brains* triptych.

The innovative sound vocabulary presented in *Solo* would become commonplace in contemporary saxophone writing in later years. This document is not meant to infer Torstensson's influence on later composers and their saxophone music, but instead suggests that his works were among the first to reinvent the instrument from the inside out and use a wider sound palette than found in traditional playing.

The next chapter will present an analysis of *Solo*, which will examine Torstensson's specific compositional procedures.

[52] "Brian Ferneyhough: Works by Genre," *Ressources.Ircam*, http://brahms.ircam.fr/composers/composer/1286/#works_by_genre (accessed April 29, 2012).

CHAPTER THREE

Analysis of *Solo*

This chapter will provide an analysis of *Solo*, the first work of Klas Torstensson's *Licks & Brains* triptych. Through an examination of the composer's procedures on a large-, medium-, and small-scale, this analysis will attempt to pinpoint traits of his compositional aesthetic and shed light upon the structure of the work in question. The findings of this analysis will be related to interpretive decisions and obstacles faced by performers.

Since the piece is defined by a large-scale theatrical arch, this analysis will work through the three main sections in chronological order. This author has added some designations for measure numbers and divisions. The entire score of *Solo* with added measure numbers can be found in Appendix A, and may greatly enhance the reading experience of this chapter.

PART I

Part I of *Solo*, which lasts until bar 18, is performed without the saxophone mouthpiece and functions as a dictionary of the sounds possible in this manner of playing. In this section, Torstensson introduces the sounds in an additive manner to give the impression of "an extremely heavy and complex piece of machinery being revved into motion.[1]"

[1] Klas Torstensson, *Solo*, Donemus (Amsterdam, 1988), i.

By combining mechanical saxophone sounds with those of the player's voice, the composer creates a meta-instrument, stating, "The machine *is* the human, right from the beginning. Without the human behind the machine, the machine wouldn't do anything. It is the effort and energy put into the machine that brings about the sounds. The machine waits for [the player] to force it to make sounds.[2]"

Figure 1 identifies the nine phrases that comprise Part I of *Solo* as well as their location in the score. Each phrase begins with the same sound, a massive tongue-ram on a low B-flat, and ends with a silence of specific duration.

Figure 1: Phrases in Part I of *Solo*

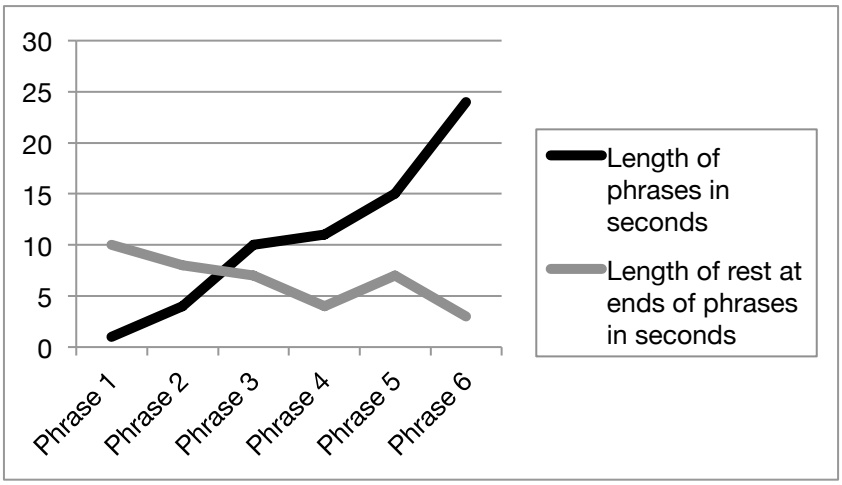
Phrase Number	Location in the score
One	m. 1 to 2
Two	m. 2 to 3
Three	m. 3 to 5
Four	m. 5 to 7
Five	m. 7 to 9
Six	m. 9 to 12
Seven	m. 12 to 14
Eight	m. 14 to 16
Nine	m. 16 to 18

This analysis will show that the first six phrases introduce the sonic vocabulary while increasing in length. Within phrase seven, a transition to Part II begins; at this point phrase lengths have reached a peak and the sound vocabulary is

[2] Klas Torstensson, interview with the author, Amsterdam, January 30, 2012.

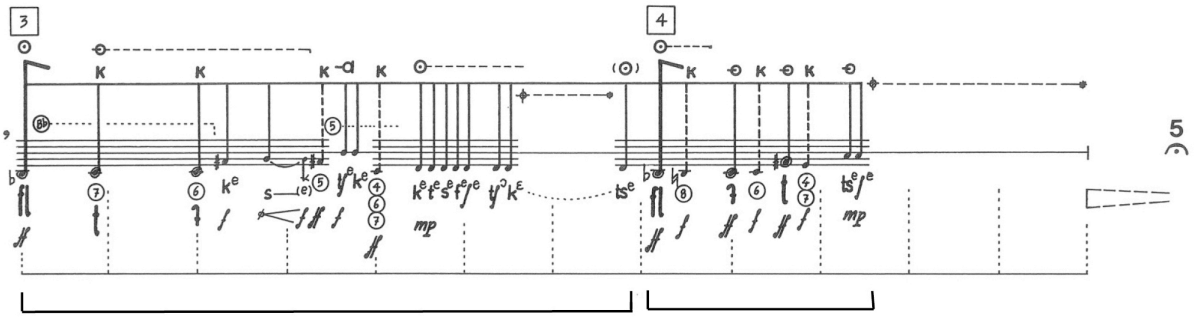
almost fully introduced. Figure 2 charts the lengths and ending rests for the first six phrases of Part I. In general, there is an inverse relationship between the lengths of phrases and the rests found at the phrase endings. Phrase seven will be considered part of the transition and discussed later.

Figure 2: Length of phrases and rests in Phrases 1-6, Part I



As the phrase lengths increase, the composer begins using subphrases. Phrases one and two are simple one-part entities; phrase three contains two subphrases which each begin via tongue ram (see Figure 3 below).

Figure 3: Phrase three, Part I



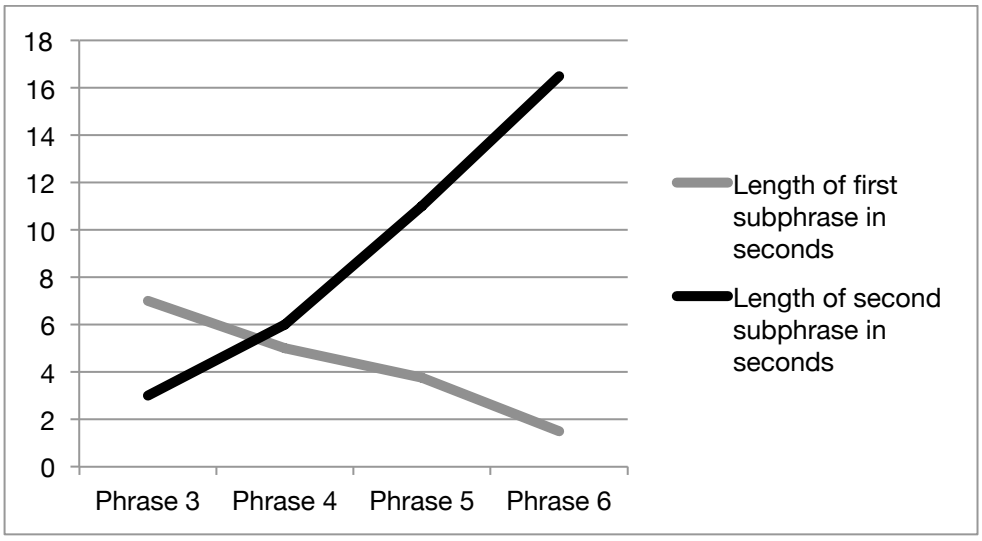
Phrases three, four, and five have two subphrases; phrase six contains three subphrases. Figure 4 identifies these subphrases and their lengths in seconds. Please reference page 121 in Appendix A to see these passages in the full score.

Figure 4: Subphrases lengths in Phrases 3-6, Part I

Phrase	Subphrases	Subphrase lengths
Three	m. 3-4, m. 4-5	7”, 3”
Four	m. 5-6, m. 6-7	5”, 6”
Five	m. 7-8, m. 8-9	3.75”, 11”
Six	m. 9a – m. 9b, second bar of 9-11, m. 11-12	1.5”, 16.5”, 6”

Figure 5 charts the lengths of subphrases. This illustrates another inverse relationship; as first subphrase lengths decrease, the second sub-phrases increase in length. The third subphrase of phrase six is not included in the figure.

Figure 5: Subphrase lengths in Phrases 3-6, Part I, *Solo*



The result of this phrase organization is a sense that the music, instrument, or both are gaining momentum. Like an old automobile or machine being coaxed back to life after years of inactivity, the lengthening phrases suggest that, at some point, the machine will finally reignite and take off. In this way, the phrase structure of Part I foreshadows the large-scale form of the entire work.

With the same objective in mind, Torstensson introduces the various sound elements in an additive manner that results in an ever-expanding sound vocabulary. After their introduction, sounds are retained and used continually until the full vocabulary is realized at the transition to Part II, which begins at 13e. The growing sound palette runs parallel to phrase lengthening in creating dramatic momentum.

Figure 6 shows the introduction of sounds within each phrase. Note that syllabically colored air sounds are still being introduced in phrases seven and eight, which is after the onset of the transition to Part II. All other sounds have been introduced by this point.

Figure 6: introduction of new sounds, Part I, *Solo*

Phrase	New sounds/material	New syllabic content
One	tongue-ram, tongue-flap, "freeze" (breath hold + quiet exhale)	s^{e}
Two	tongue-pop, single key click	k^{e}, f^{e}, $t\int^{Ø}$, s^{i}
Three	combine tongue-flap + key click, combine tongue-pop + key click, multiple key click, crescendos (on syllables)	$t\int^{e}$, t^{e}, $\int^{e}$, $t\int^{€}$, $k^{ɛ}$, ts^{e}
Four	loud syllabically-colored exhale, loud syllabically-colored inhale	$\int^{ø}$
Five	suppressed scream, tongue-click	s^{i}, $s^{€}$, f^{a}, ?m?, ?a?
Six	multiple repeated sounds	k^{u}, f^{o}, $ts^{ɛ}$, t^{i}
Seven		s^{a}, k^{a}, ?o
Eight		ts^{i}, $s^{ɛ}$

The composer suggests that, despite the many layers of sounds, it is not necessary to analyze Part I as a polyphonic texture[3]. The player and instrument are working together to "assemble" all the sounds in a linear, quasi-melodic fashion – similar to the way a large percussion setup is played. For this reason, it is critical that the performer consider the sounds as related and connecting, not as disjoint. To accomplish this, the performer must conceptualize the musical phrases in the same way he or she might interpret a work consisting of more

[3] Klas Torstensson, interview, Jan. 30, 2012.

traditional melodic phrasing. By considering each phrase as a whole while having a strong conceptualization of how each element should sound on its own, the performer can structure the individual sound elements within a broader context. This will help contextualize the minute sound elements within a larger framework.

As mentioned in Chapter Two, the category of plosive tongue sounds takes on a role of structural importance in Part I. Throughout the section, each phrase is triggered by a low tongue ram, which thereby takes on structural importance and becomes the most recognizable element of the sound vocabulary. On an aesthetic level this sound is particularly arresting as, when heavily amplified, it contains an overwhelming percussive effect and resonance in the bass saxophone. The tongue-ram on the low B-flat appears only at the beginning of phrases and subphrases.

The tongue-flaps and -pops, which are part of same category of plosive tongue sounds, are generally spaced evenly through the first several seconds of each phrase, which creates a sense of mechanical continuity. In this way, they exhibit some structural importance albeit less than the tongue-rams.

At times the composer leaves open space between the plosive tongue sounds (Figure 7), although more frequently, other sound elements are placed between them (Figure 8). Figure seven also shows the use of plosive tongue sounds in

combination with key clicks, which creates a more complex sound and helps to vary the sound vocabulary.

Figure 7: bar 3a, *Solo*

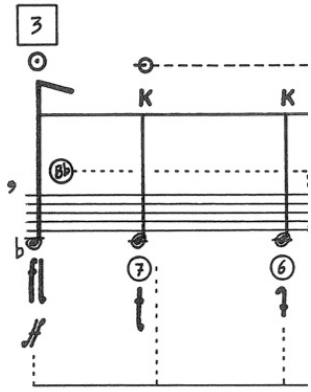
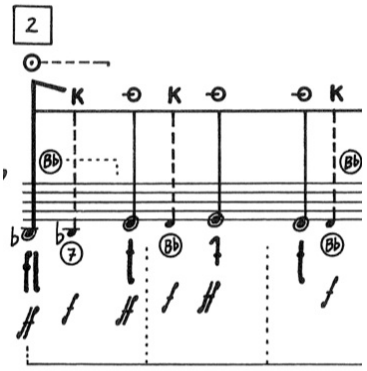


Figure 8: bar 2a, *Solo*

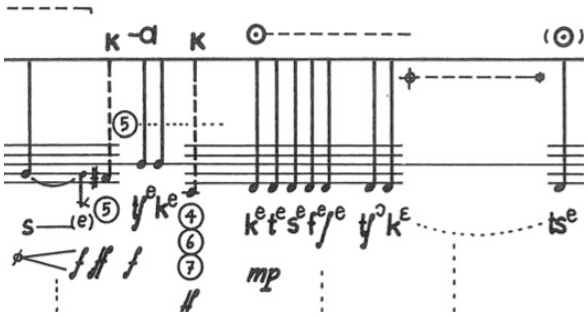


The syllabically colored air sounds, notated with small black noteheads and symbols from the International Phonetic Alphabet, provide a link between the percussive, clanking sounds of the saxophone and the human sounds of

breathing and vocalization. The performer should remember it is critical that the voice is not used in the execution of these short, staccato sounds.

While these sounds sometimes appear alone, they are most often found in rapid succession, which necessitates an unusual sense of vocal virtuosity from the saxophonist. Torstensson does not use the syllabic air sounds in a spaced-out manner like the plosive tongue sounds. Furthermore, there is a high degree of variance as distinct syllables are never repeated within any given "outburst". Figure 9 shows a passage from phrase three that illustrates Torstensson's use of these sounds in fast progression.

Figure 9: from Phrase three, measure 3d, Part I, *Solo*



Once introduced, syllabic air sounds often return in later phrases. Figure 10 displays the occurrences of specific syllabic air syllables in the first nine phrases of *Solo*. Phrases seven, eight, and nine, have non-exact numbers of syllabic air sounds because they contain a transitional gesture (discussed at length below

and shown in Figure 11), which features a transformation from the tongue-flap to the t^{i} syllable.

Figure 10: Occurrences of syllabic air sounds, Part I, *Solo*

Total number of syllabic air sound occurrences	1	4	13	7	14	13	~10	~8	~2	
Number of different syllabic sounds	1	4	9	5	8	11	7	7	2	
s^{ε}								1		1
ts^{i}								1		1
k^{a}							1	1		2
s^{a}							1			1
ts^{a}						1				1
t^{i}						1	~1	~1		~3
ts^{ε}						1				1
f^{o}						1				1
k^{u}						1				1
f^{a}					1	1				2
s^{c}					1					1
$\int^{\emptyset}$				1						1
ts^{e}			2	1		1	2			6
k^{ε}			1							1
$t\int^{c}$			1							1
$\int^{e}$			2			1	2			5
t^{e}			1		3				~1	~5
$t\int^{e}$			1		1			2	1	5
s^{i}		1			1					2
$t\int^{\emptyset}$		1					1			2
f^{e}		1	1	1	1	1		1		6
k^{e}		1	3	3	2	1				10
s^{e}	1		1	1	4	3	2	1		13
Phrase #	**Ph 1**	**Ph 2**	**Ph 3**	**Ph 4**	**Ph 5**	**Ph 6**	**Ph 7**	**Ph 8**	**Ph 9**	**Total**

From this chart, the performer can gauge the nature in which Torstensson expands and shapes the syllabic vocabulary by giving more attention to syllables ending with the "e" sound, as well as those beginning in "s" and "t", and less attention to syllables ending in "a" and "u". Phrases one, two, and three contain more occurrences of syllables ending in "e" while later phrases contain more "a", "u", and "i" syllables. As a result, the listener may first perceive a heavy emphasis on the "e" syllable which gradually becomes less important as Part I progresses.

The "suppressed scream", a sound with significant dramatic impact, is introduced at 13b, which is a point mid-way between the work's beginning and the transition to Part II. While it is not as loud as the recurring tongue-ram that opens each phrase, this element is startling and gives credence to the ongoing struggle between player and instrument[4]. Torstensson waits until bar 13b to introduce the sound because at this moment, the musical text suggests the performer's grueling work might warrant a grunt or scream of exertion[5].

Transition to Part II

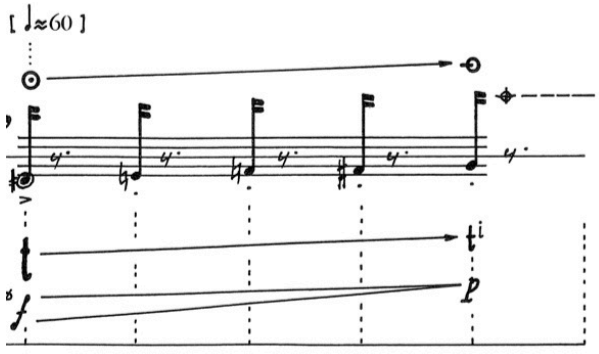
The transition to Part II begins at 13e and lasts until bar 21a. During the transition, the composer introduces a more "normal" sound environment

[4] In an interview with the author on Jan.30, 2012, the composer noted that he has witnessed audience members laugh and/or giggle when this sound is introduced. He does not dislike this reaction.

[5] The composer likens this effect to the screaming which often occurs during tennis matches, which can be disturbing to some spectators but is also a by product of the physical struggle at hand.

through recognizable pitch material and traditional sound production with the mouthpiece and reed. The transition begins with the passage seen in Figure 11, which is significant because it contains the first instance of transformation thus far. On one hand, the tongue-flap transforms gradually into the syllabic air sound "t^{i}", which is similar in timbre yet higher pitched. Additionally, a second layer of transformation occurs; the saxophonist is instructed to gradually move his or her mouth away from the opening of the saxophone neckpiece. As this happens, the degree to which the plosive tongue and syllabic sounds are amplified through the body of the bass saxophone decreases, creating the aural sensation that the performer is creating distance from the audience.

Figure 11: transitional gesture, bar 13e, Part I



Other important features of this gesture include the its rhythmic regularity, which has been yet unseen in *Solo*, as well as the recognizable pitch content. The plosive tongue sounds will articulate a clear, pitched resonance in the body of the instrument highlighting the ascending chromatic motion. As examined later

in this chapter, the upward chromatic passage will become an integral element in subsequent sections and foreshadows the climactic moment of the piece. The composer mentions the paradoxical nature of this passage:

> "So far in the piece, you don't know what to expect because it is so strange. Then, suddenly – it's kind of a paradox – a more traditional musical element is introduced. This excites the ear, but the question is: Is it really that interesting? It is a transition, but the upward chromatic scale is straight forward and not that musically interesting.[6]"

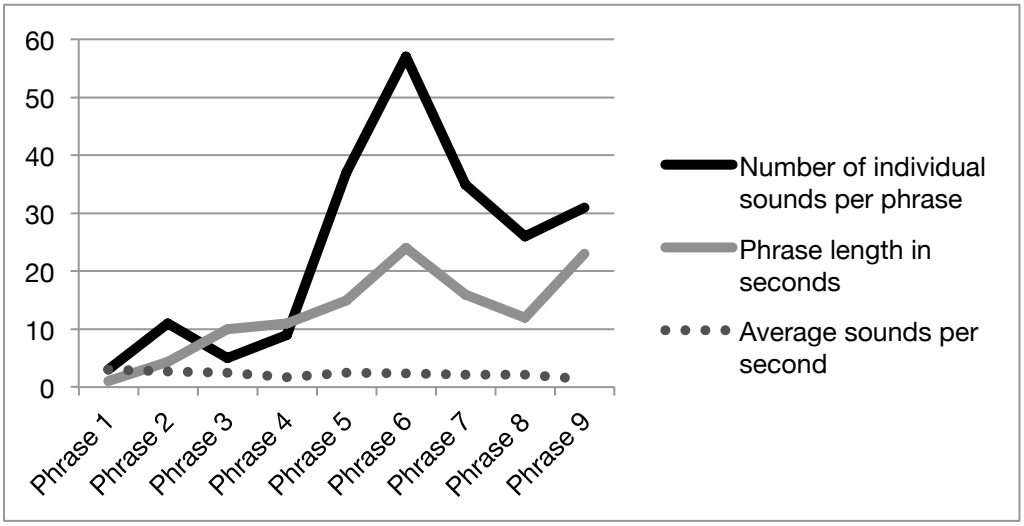
This gesture indicates that the music is transitioning toward recognizable pitch materials and rhythmic regularity. Although the arrival of this gesture is striking, Torstensson primes the listener's ear by introducing the concept of a single repeated sound in bars 10a and 10f, where tongue-flaps and tongue-pops are repeated consecutively. Before the transitional gesture at 13e, these are the only instances where any sound element has consecutive multiple occurrences.

Between measures 14 and 18, there are no new elements added to the sound palette. Instead the transitional gesture appears three times, varied slightly with each occurrence: at measure 15b beginning on a D ascending five pitches, at 16e beginning on an F ascending three pitches, and 17i beginning on a D-sharp ascending seven pitches.

[6] Klas Torstensson, interview, Jan. 30, 2012.

During the transition, silence becomes more prominent as rests between phrases lengthen and even begin to appear mid-phrase, breaking the feeling of increasing phrase length established at the beginning of the piece. This increase in silence also helps to prepare the lengthy rest that will inevitably occur before bar18 when the saxophonist places the mouthpiece onto the instrument. Figure 12 shows how, toward the end of Part I, phrases decrease in density and contain fewer sounds.

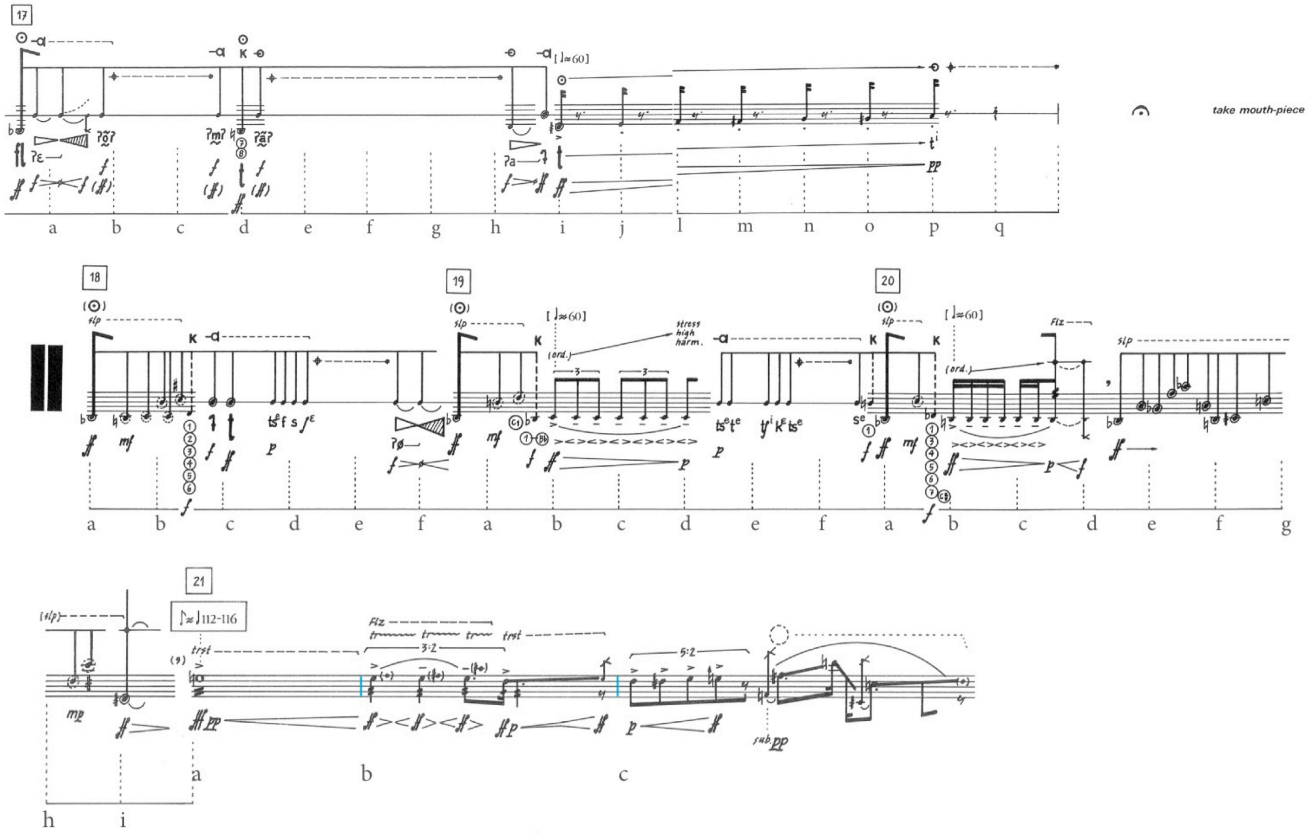
Figure 12: Individual sounds per phrase, sounds per second, and phrase length, phrases 1-9, Part I



At bar 18, a point three-quarters through the transition, the saxophonist is instructed to finally place the mouthpiece onto the instrument, and should remember that the addition of the mouthpiece is an important physical "transition" and therefore must be executed in a deliberate manner. The true

arrival of Part II occurs at 21a with the change of tempo and shift to traditional rhythmic notation, yet Torstensson places the large Roman numeral "II" at bar 18a, just after the saxophonist adds the mouthpiece (see Figure 13). This acts as a psychological marker for the performer and less as a precise indicator of formal structure[7].

Figure 13: bar 17-22, *Solo*



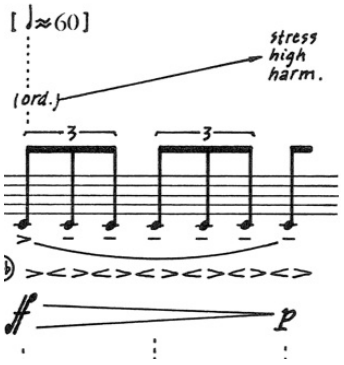
The first sound after the addition of the mouthpiece is a loud slap tongue on a low B-flat at bar 18. Because of the newly added mouthpiece, the tongue-ram is no longer possible to execute; therefore the composer chooses the slap tongue

[7] Klas Torstensson, interview, Jan. 30, 2012.

because of its similar effect. The performer should make the sounds of bars 18 to 21 sound as close to the preceding (non-mouthpiece) section as possible; the listener should hear a connection between the recurring low B-flat tongue ram in Part I and the low B-flat fortissimo slap tongue in 18a, 19a, and 20a. Because of the significant difference in timbre with the addition of the saxophone mouthpiece, the composer suggests the performer make his or her best effort to execute the sounds in similar manner[8].

The material in bars 18 to 21 provides the bridge between non-mouthpiece and traditional sound production. Although the score indicates this material falls in Part II, this analysis will consider these bars as part of the transition. The passage of repeated low C's in 19b (Figure 14) is the first instance of traditional sound production and builds on the transitional gesture first seen in 13e. Similar to the transitional gesture (Figure 11), consistent rhythmic pulsations are present – this time as a smorzato in eighth note triplets – and the saxophonist is instructed to transform the sound by gradually emphasizing higher harmonics.

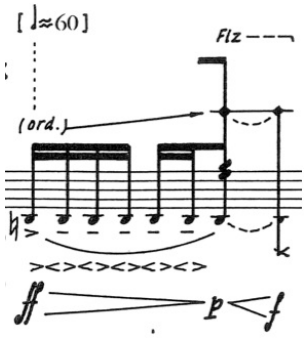
Figure 14: Bar 19b, Part II



[8] Klas Torstensson, interview, Jan. 30, 2012.

The second instance of traditional tone production appears in bar 20b and is a variation of the figure found in 19b, this time one half step lower with a quicker smorzato pulsation (Figure 15). This illustrates Torstensson's use of variation with repetition and begins to reinforce the importance of the smorzato as a sound element.

Figure 15: bar 20b, Part II



Part II

In this analysis, Part II begins at 21 and will be considered in two large sections designated by the author: IIa (m. 21-25) and IIb (m. 25-31). Part IIa constitutes a drastic change of texture and playing technique, and contains a more focused usage of sound elements[9]. The structure of Part IIa is a double period, illustrated in Figure 16. To reference this section, please see pages 125-6 in Appendix A for the full score.

[9] One reason may be that Torstensson's sound palette is more restricted now that the player employs a mouthpiece.

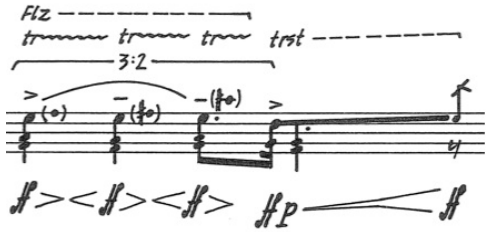
Figure 16: Phrase structure of Part IIa

Period	Phrases	Subphrase	Significant Elements
21-23b	21-22	21a-21c	Introduction of "trst", smorzato variation
		21c-22	variation of ascending chromatic scale, glissandi,
	22-23b	22a-22b	Variation of elements from 21a
		22b-23b	"Barbaric" sound (low B-flat + voice), regular pulsations on low notes with harmonics, Tone-less slap tongue ("Zungenschlag"), return of elements from Part I
23b-25	23b-24b	23b-23c	Variation of elements from 22b-22c
		23c-24b	Variation of elements from 21b and 21c
	24b-25	24b-24d	Variation of elements from 22b-22c
		24d-25	Variation of elements from 22c-23b

At the downbeat of the Part II at measure 21a, one finds the first instance of the tremolo-staccato, which becomes a significant element in Part IIa. As discussed in Chapter Two, this sound is also an important unifying element of the *Licks & Brains* triptych. Since the tremolo-staccato can only be executed in combination with a sustained pitch, one finds a drastic increase in the amount of sustained pitch in Part IIa.

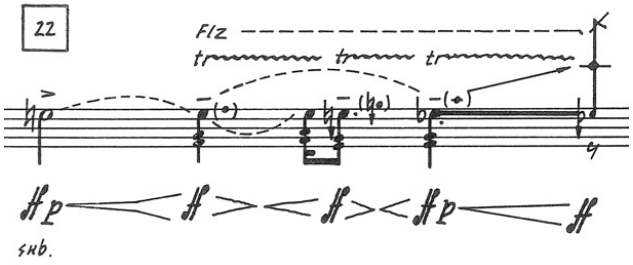
The element of the smorzato, first seen at 19b in the transition, is further developed in Part IIa. In bar 21b (Figure 17), the smorzato effect has been rhythmically slowed and is suggested in the dynamic shaping. Here the smorzato pulse has slowed to the quartet note triplet, whereas it has previously been the eighth-note triplet and sixteenth note (seen in Figures 13 and 14, respectively).

Figure 17: Bar 21b, Part II



In bar 22a (Figure 18), the dynamic shaping influenced by the smorzato is further stretched. By this point, the smorzato effect has undergone several instances of variation through repetition.

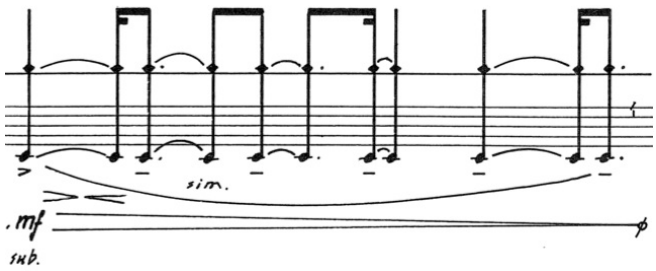
Figure 18: Bar 22a, Part II



A significant gesture arrives on beat three of 22b (Figure 19): a steady pulse with stable use of spectral harmonics. While this figure might look new with regard to notation, it is actually a variation on elements that have already been introduced and developed. The use of spectral harmonics has already been seen in bars 19b (Figure 14) and 20b (Figure 15), and the rhythmic regularity has been

suggested from the transitional gesture (Figure 11) and the smorzato effect described above. This gesture in Figure 18 appears extensively in Parts II and III.

Figure 19: Beat three, bar 22b, Part II

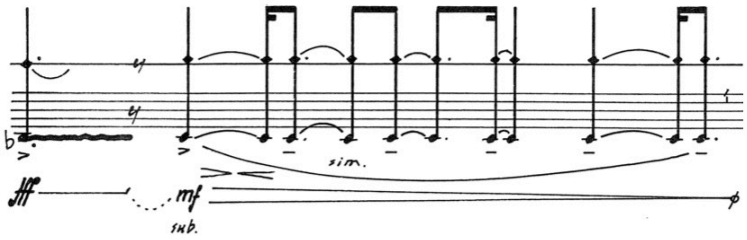


Another significant feature is introduced in Part IIa: rhythmic compression versus a regular pulse. The first phrase of Part IIa (m. 21) contains a general sense of compression, shifting from durations of whole note to quarter note triplets to eighth note quintuplets. The second phrase of Part IIa (m. 22) shows a variation of the same effect.

Torstensson is consistent in his employment of this effect; the acceleration creates a feeling that the music is tumbling out of control, at which point he suddenly interjects a calm, regular pulsation (Figure 18) that creates a sense of stability. The regular pulsations always occur on low pitches emphasizing high harmonics and are generally preceded by the occurrence of a single loud sounds in the extreme low register. These loud sounds usually combine normal playing with the voice to create a complex, noisy, and “barbaric” result. In

drawing connections to Part I of *Solo*, the "barbaric" sound is most similar to the "suppressed scream" in its intensity and startling nature. Bar 22 contains the first instance of this sound (Figure 20).

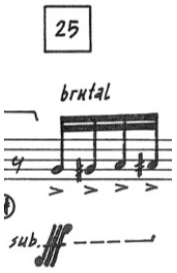
Figure 20: bar 22b, Part IIa



The process of compression followed by regular pulsation occurs on a larger scale in the second period of Part IIa where beginning at 23b the durations compress gradually until 24b, at which point the "barbaric" sound interrupts the acceleration and articulates the regular pulsations.

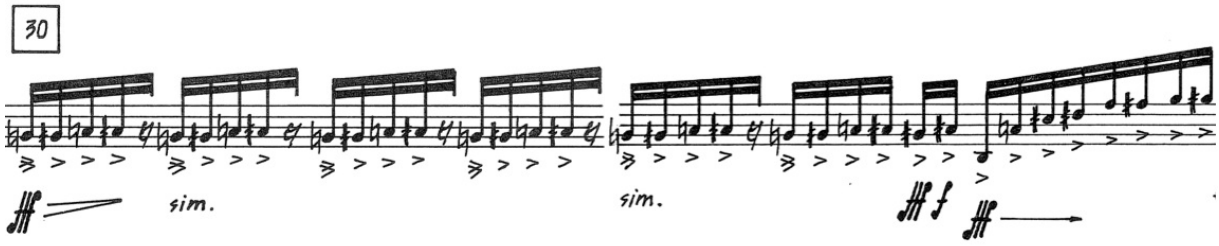
Part IIb, found in bars 25 to 31, centers upon a four-note ascending chromatic scale. Appearing suddenly at bar 25 with the indication "brutal", this gesture (Figure 21) has been foreshadowed as early as the transitional gesture seen in bar 13e. In this instance, the material takes on a new character; it is both brutal and mechanical.

Figure 21: Bar 25a, Part IIb



In Part IIb, Torstensson often creates the sense of compression by shortening subsequent repetitions of the mechanical figure, for example in bar 30a (Figure 22). In Part IIa the compression was always succeeded by a gesture with regular pulse. Here, the "brutal" gesture is always abandoned via a longer ascending sixteenth note passage whose intervals gradually compress (Figure 22).

Figure 22: Compression of "brutal" gesture, bar 30a, Part IIb



The phrase structure of Part IIb recalls that of Part I (see Figure 2). There are five phrases that increase in length, ignited by the same sound – in this case, the four-note "brutal" gesture from Figure 19. Each phrase has two sub-phrases:

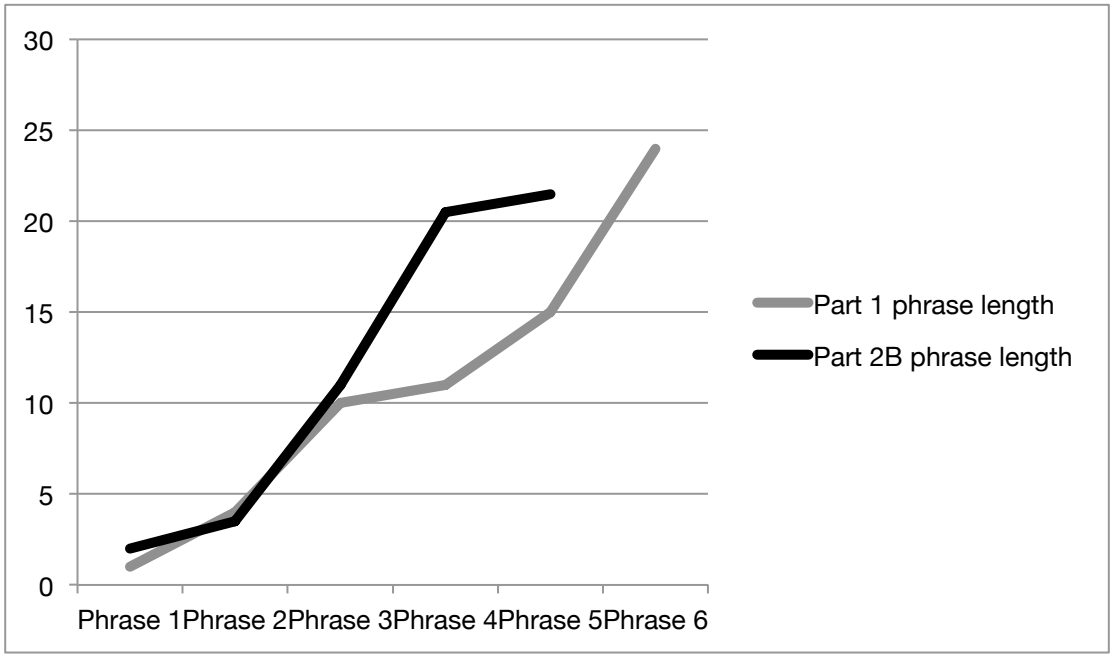
the first sub-phrase invariably begins with the “brutal” gesture and the second suddenly reverts to material from Part I or IIa. Figure 23 identifies the five phrases of this section. Please see pages 126-7 in Appendix A.

Figure 23: Phrase structure in Part IIb

Phrase	Sub-phrase one (“brutal” material)	Sub-phrase two (earlier material)	Significant elements
25a-25b	Beat one, 25a	Beats 2-4, 25a	
25b-25d	Beats 1-2, 25b	Beat 3 of 25b to 26d	
25d-27	25d	26a-27	
27-29	27-28	28-29	Introduction of dual layer triplets with stratified dynamics at 27b
29-31	29-30	30-31	Second sub-phrase is a continuation of “brutal” material

Figure 24 shows the similarity of phrase lengths in Part I and Part IIb.

Figure 24: Phrase lengths in Part I and Part IIb



Torstensson's use of Part II's musical elements (compression vs. regular pulse, repetitive "brutal" figure, smorzato effect) creates a diverse chain of pulses; sometimes the variation is subtle while at other times it creates a sense of urgency. This feature is integral to the musical discourse of Part II and it is therefore critical that the performer adhere strictly to the written durations.

Part III

Part III of *Solo* begins at 31a and lasts until the conclusion of the work. In general, Part III will not introduce new materials; contrarily, this analysis will show that Torstensson reduces the number of musical elements until the work's climax, at this point the only remaining musical element will be an upward

chromatic scale. At the conclusion of the piece, Torstensson will finally introduce the main motive of the *Licks & Brains* triptych.

This analysis will consider Part III in two sections. Part IIIa is comprised of measure 31 through the downbeat of 40; measure 40 to the end will be considered a coda. Part IIIa begins with a phrase structure similar to the double period in Part IIa; however, as the section unfolds, the phrases take on increasingly irregular lengths and become less cohesive. Figure 25 identifies the double period between 31 and 32. See pages 127-8 in Appendix A to reference the score.

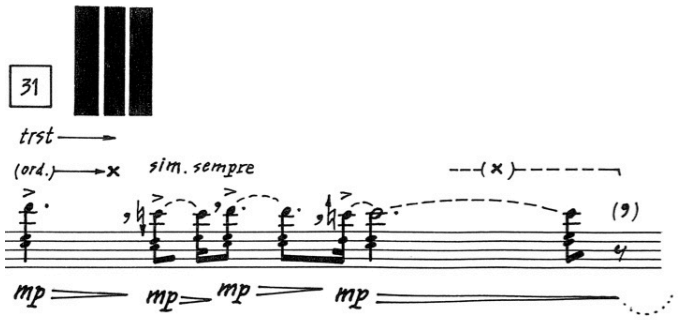
Figure 25: Phrase structure beginning of Part III, bar 31a, *Solo*

Period	Phrase	Sub-phrase	Significant Elements
31-32	31-31c	31a-31b	highly syncopated rhythmic figure, transformation from normal playing to air sounds, variation of smorzato effect
		31b-31c	Glissando, tremolo-staccato
	31c-32	31c-31d	Variation of syncopated figure
		31d-32a	Variation of elements in 31b
32-34	32-33	32a-32b	Variation of syncopated figure, addition of harmonics
		32b-32c	Variation of elements in 31b
		32c-33a	Return of sounds from Part I
	33-34	33a-33b	Variation of glissandi seen in 21c
		33b-34	Variation of glissandi seen in 21c, similar phrase ending to 32b

The gesture found at the outset of Part III is highly syncopated and occupies a compact pitch space (see Figure 26). As discussed in Chapter Two, this figure

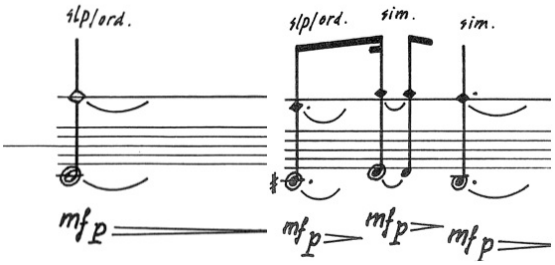
provides a link to the elements in *Licks & Brains I* and the orchestral opening of *Licks & Brains II*.

Figure 26: Opening of Part III, bar 31



This gesture unifies many elements in Part III of *Solo* and, although it may sound new, has been suggested in earlier sections. Syncopated rhythms permeate Part II, which may account for any familiarity sensed the listener upon the arrival of Part III. Figure 27 illustrates a similar rhythm in retrograde starting in bar 28b in Part IIb.

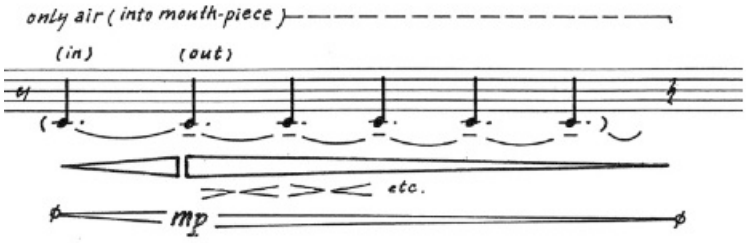
Figure 27: Bar 28b, Part II



From bar 34 until 36c, the musical discourse is dominated by the returning idea of regular pulse on low notes with harmonics. The composer varies this element

in a number of ways. At bar 34, Torstensson combines the high harmonics and syncopation with instances of regular pulse seen in the low D-flats beginning 1.5 beats after 34 and the low C eighth note quintuplet at 34b). In 34e, the composer varies this gesture by using air sounds for the rhythmic pulses (Figure 28).

Figure 28: bar 34e, Part IIIa



This section contains less rhythmic pulse variety compared to Part II. Figure 29 shows a comparison of rhythmic pulse duration in Parts II and III.

Figure 29: Rhythmic pulse duration on sustained low notes in Parts II and III

Pulse Duration	Instances in Part II	Instances in Part III
Dotted eighth note	m. 28b	
Quarter note triplet		m. 34d
Quarter note	m. 23b, m. 24d	
Quarter note tied to sixteenth	m. 22b	
Dotted quarter note	m. 24c	m. 34b, m. 34d, m. 36a

During this section, *Solo* reaches its most quiet, relaxed state. The phrases in this section become shorter and are generally seven to nine beats in length. They might be most easily perceived as instances of previous musical material

in variation. Measures 36b and 36c act as a bridge back to the high energy of Part IIb using the familiar sound element *zungenschlag* (slap-tongue) and a reintroduction of the "machine-like" material.

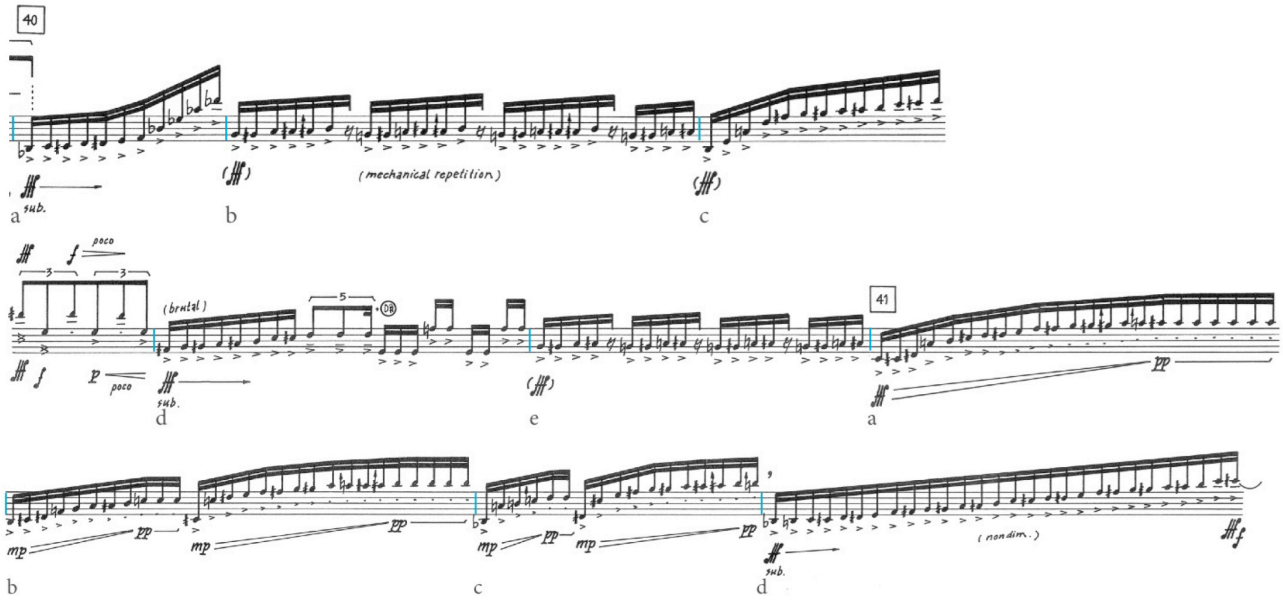
The second half of Part IIIa (bar 37 to the coda) is comprised of one period, identified in Figure 30. During this segment, Torstensson quickly and blatantly reintroduces the main ideas from Part II like a recap before entering the coda. Reference pages 129-30 in Appendix A for this section in the score.

Figure 30: Period beginning at bar 37, Part III

Period	Phrase	Sub-phrase	Significant Elements
37-40	37-39	37-38	brutal gesture from Part IIb
		38-39	Elements from Part I
	39-40	39a-39c	Tremolo-staccato on sustained noted from Part IIa, smorzato element
		39c-40	"barbaric" sound from 22b, variation on regular pulsation

The coda begins with an extended passage (40a through the end of 41d) based on the machine-like "brutal" material (Figure 31). By this point, the musical elements and manner of sound production have been reduced. The short, repetitive ascending chromatic passages beginning on G are juxtaposed with ascending sixteenth note passages of varying lengths.

Figure 31: bar 40a to 41d, coda



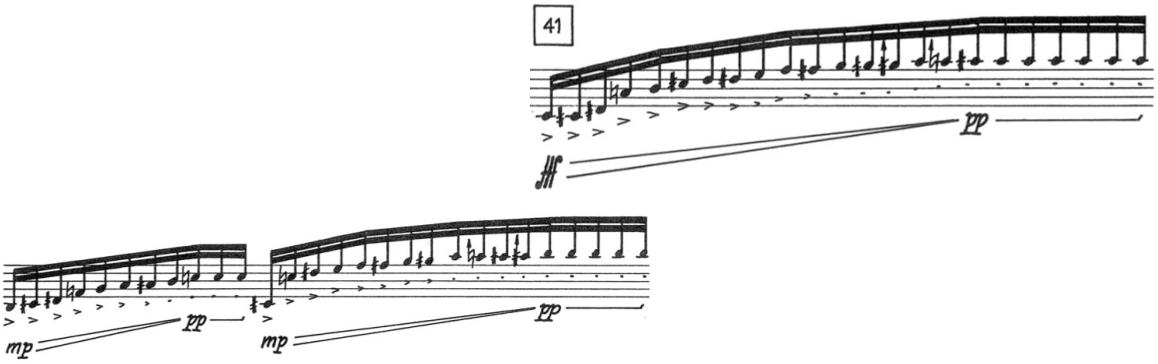
Torstensson uses duration of large pulse and aspects of the Fibonacci series to connect these elements. For example, in bar 40a the long ascending passage has a large scale pulse of 11 sixteenth notes while the following repeated segments in 40b have a pulse duration of 7 and 4 sixteenth notes, respectively. In 40d, the longer passage's pulse is 8 sixteenth notes and is followed, albeit not immediately, by a pulse of 3 and 5 sixteenth notes, respectively. Finally, the second upward passage in 41b is 17 notes in length, while the two subsequent passages in 41c are 6 and 11 sixteenths in length.

Although the approach is not systematic, these additive characteristics are found in the Fibonacci series, which is commonly used among composers because it is a natural way of managing divisions of time. While it is unlikely the

listener will perceive these exact numbers, it is reasonable to suggest that one can sense the larger pulses are proportionally related to the smaller pulses and act as a variation on the composer's compression technique which appears throughout the piece.

Furthermore, this section provides a link between the tremolo-staccato element and the "brutal" machine-like material. At the conclusion of the upward passages in 41a, 41b, and 41c, the intervals gradually compress until a staccato repeated pitch remains (Figure 32). This repeated staccato can be perceived as a variation of the tremolo-staccato element.

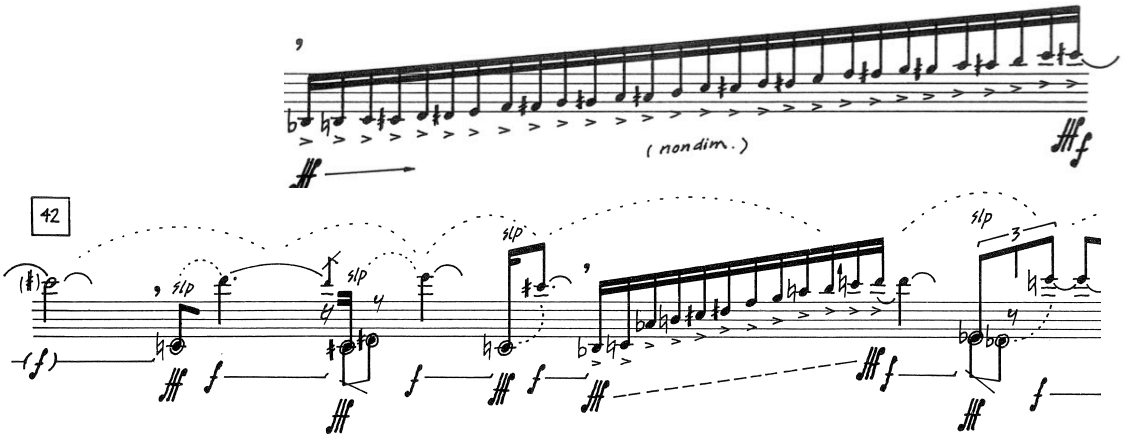
Figure 32: Bar 41a and 41b, variation of tremolo-staccato, Part III (coda)



In 41d, Torstensson finally delivers the moment the entire work has built toward: a full chromatic scale from a low B-flat to a high C-sharp. This figure, simple yet all encompassing, is symbolically important. At this moment, the piece finally takes flight and the saxophonist (and saxophone) has succeeded in revving to a

full-blown ignition. The struggle between instrument and performer fades from the forefront as Torstensson finally delivers at bar 42 the most important melodic content: the three-note motive that unifies the *Licks & Brains* triptych (Figure 33). The pitches of this motive are written C-sharp – D – E and are connected above the staff by a large dashed slur marking.

Figure 33: Full chromatic scale which delivers main motive, Part III, *Solo*

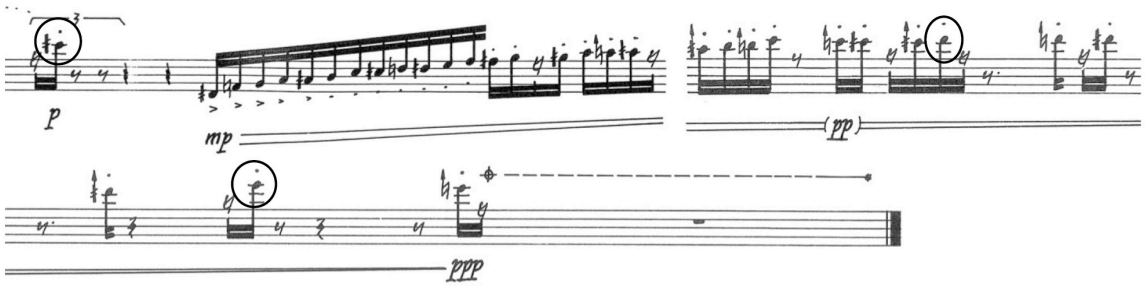


Here we find synthesis, as this passage contains all the musical elements. Between the notes of the main motive, Torstensson interjects low slap tongues and the familiar ascending sixteenth note passages. This recalls the opening of Part I, where key clicks and air sounds were interjected between structurally important plosive tongue sounds (see Figure 8).

The motive is presented five times, four of which are clearly perceived. In the final instance, Torstensson nestles the motive pitches within a rhythmically disintegrating line of ascending sixteenth notes. Figure 34 illustrates the

conclusion of the piece, along with the final occurrence of the motive. The motive pitches have been circled.

Figure 34: Conclusion of work, beat 6, bar 34a, Part III



Instead of concluding the work with the last note of the motive, the high E, Torstensson continues the upward passage with one final E-quarter-sharp. This suggests continuation in the remaining works of the triptych.

Considering *Solo*'s quick, open ending, the listener will likely perceive the main goal as the arrival of the three-note motive. It is the point toward which man and machine publicly struggle, a point of profound achievement whose result will be repeated, expounded, and developed through the remaining 45-minutes of the *Licks & Brains* triptych.

Conclusion

In drawing conclusions from this analysis, there are five major aspects to consider.

1) The accumulation and abandonment of material on a large scale.
2) The conflict of "compression vs. regular pulsation" on a medium scale.
3) The variation of material (smorzato, tremolo-staccato) on a small scale.
4) The de-emphasis of pitch until the work's climactic moment.
5) The physical struggle of the human-saxophone machine.

When examining *Solo* on a large scale, the significant feature is the introduction and abandonment of material. In the first part, sounds are introduced in an additive manner that eventually yields Torstensson's "encyclopedia" of non-mouthpiece saxophone sounds. In Part II, he retains the sound elements from Part I that can be executed with a mouthpiece while adding normal saxophone sound production. In Part III the elements are gradually reduced until the piece's climax, at which point all that remains is an ascending chromatic scale. The large-scale dramatic arch of the piece renders this chromatic scale, which might normally be perceived as "boring[10]," an exciting moment.

On a medium scale that can be perceived from phrase to phrase, Torstensson deals with the competing forces of compression and regular pulsation. This conflict appears in both the loud, mechanical passages and the sustained low

[10] Klas Torstensson, interview, Jan. 30, 2012.

notes with harmonics. Generally, he abandons the passages of compression by a sudden shift in register and longer rhythmic pulse by jumping to low, sustained notes or lengthy, ascending sixteenth note passages.

The variation of small sound elements, including the smorzato, tremolo-staccato, and the duration of pulsation, allows the listener to perceive development of material on a local level throughout the work. Through this variation, as well as the combination of different timbral elements (for instance, harmonics with tremolo-staccato) the disparate elements of Torstensson's sound encyclopedia link organically.

The way *Solo* is articulated parallel on all three formal levels (large-, medium-, and small-scale) allows the listener to shift his or her focus throughout the piece. While he attempts to guide the listening experience, creating the ease and flexibility of perception for each individual listener is at the forefront of his artistic conscious.

> "When composing a piece, I am constantly attempting to swing between the large form and the detail. And I do this because, what interests me the most, is that the piece can in a way be predictable; not in what the listener listens to or think of, but in the way he listens. I want to be able to manipulate this in one way or another. I try to promote an active, flexible attitude on the part of the listener. This sounds pretentious. But actually it's not pretentious – it's ambitious.[11]"

[11] Asbjørn Schattun, "As vague as this goal may be…," *Periodical for ny Musikk*, 3 (1992): 16.

As discussed in Chapter Two, pitch is the final element added by Torstensson to any of his works. In *Solo*, pitch does not play a fundamental role in the work's construction nor is it approached in a systematic manner. At the climactic moment, bar 41d going into bar 42, he uses the work's only critical pitch content: the upward chromatic scale and the three-note *Licks & Brains* motive.

Instead of relying on pitch, Torstensson takes advantage of the distinct sound of the bass saxophone's different registers in several ways. The structurally important tongue ram in Part I occurs on a low B-flat, which is the instrument's most resonant pitch. The tremolo-staccato first appears in the upper-middle register on a written middle-E, which on the bass saxophone is rich and sonorous but not inherently aggressive. The machine-like repetitive chromatic figure starts on a G in the lower-middle register, which can easily take on a character of violence. The low register is used for regularly pulsed sustained pitches due to its rich spectral content. Finally, the main melodic motive utilizes the bass saxophone's uppermost register, a tessitura more close to that of the human voice and the instruments of the standard saxophone quartet.

As each of these significant figures occurs in a different range, it is critical that the performer develop the distinct personality, sound, and resonance of each register so that it relates to the musical discourse.

Finally, one cannot ignore the physical struggle inherent in this work. This conflict is visual, seen in the positioning of the saxophone on a platform so that it is not an extension of the human body, and aural, heard in the grunts and screams of the performer who is struggling to make the instrument work. As discussed in this analysis, the struggle fuels the work's theatrical and musical momentum.

Saxophonists may find irony in this situation since the bass saxophone can be a difficult instrument to control; however, in Torstensson's decision to base a piece on the inherent nature of this instrument, a new sound vocabulary was discovered and employed to great expressive potential, creating a piece inherently *about* the bass saxophone while simultaneously reinventing it from the inside out.

CHAPTER FOUR

Suggestions for the Performer

Performing the saxophone music of Klas Torstensson presents many of the same challenges of much difficult contemporary music. Strictly adhering to rhythm, tempi, and dynamics while executing difficult virtuosic passages will take considerable discipline and detail throughout the performer's preparation. In the case of the *Licks & Brains* triptych, however, certain performance aspects need further consideration as they will push the performer – sometimes intentionally – to the extremes of physicality and expression.

In the case of *Solo*, the work's theatrical element is inherent in the instrument-body relationship. In executing the piece, the performer will physically exert him or herself to an intense degree, perhaps even visibly. It is acceptable and even desirable for the audience to visibly notice the performer's exertion and struggle to control the instrument. In that regard, all physical movements during one's performance – even breathing – become an integral part of the piece. Therefore, careful attention must be given to minimize (or eliminate) page turns. Torstensson suggests that all pages be reduced to fit onto one stand so that there are no page turns. This suggests that, by turning one's pages, the performer will snap the audience back into a "musical performance" environment, whereas ideally the piece will transcend the normal concert experience. To achieve these results, preparation of this piece should include studying video of oneself in practice. In an idea situation, the work will be performed from memory.

In the case of *Licks & Brains I*, the issue of physicality most directly relates to the endurance needed to perform the piece. While Torstensson states the piece should be 19 minutes in length[1], performances by this author have often surpassed 21 minutes. The only available commercial recording of the piece was released in 1995 by the Netherlands Saxophone Quartet and is almost 23 minutes in length[2]. *Licks & Brains I* is non-stop in action; substantial rests are non-existent and intensity level remains high throughout. For the performer, one should prepare for the physical task of playing the piece.

Especially in *Solo*, the saxophonist must give close attention to the shift in rhythmic notation at the onset of Part II. At this point, Torstensson switches from proportional notation to standard rhythmic notation. As he notes in the legend of the score, there is more flexibility in the standard notation. This means performers should aim to be exact in the timing of sound elements within proportional notation. Hash marks representing seconds beneath the score should be used for timing accuracy.

In *Licks & Brains I* and *II*, proportional notation is mostly employed for short rapid passages within the layer Torstensson calls "remainder" and should stay independent of the global pulse created by the network attacks[3]. This takes considerable attention from the performer, who must be able to detach oneself from the global pulse for a second or fraction thereof before jumping back in with exact precision. The saxophonist might consider these gestures like the performance of ornaments in Baroque music.

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[1] Klas Torstensson, *Licks & Brains I*, Donemus (Amsterdam, 1987), ii.
[2] Klas Torstensson, *Licks & Brains I*, Netherlands Saxophone Quartet. Composers' Voice – CV 13, 1995.
[3] Torstensson, *Licks & Brains I*, 2.

In preparing the work, this author and his saxophone quartet[4] have found success in practicing the piece layer-by-layer. First, the layer of network attacks can be isolated and rhythmically internalized. These attacks are of structural significance and there is no room for flexibility or freedom in their interpretation.

The successful execution of the second layer, the passed-around three-note *Licks & Brains* motive, provides challenges. As simple as it may seem, emphasis should be given to this motive considering it is the triptych's recognizable unifying element. As the notes of the motive are continually passed amongst the parts, the performers should strive to hold the notes their full value – or even slightly longer if possible – to ensure they connect to the following note in another part. In addition to holding these notes full value, the performer must be careful to not decrescendo before leaving the note. This author has found it will be a natural reaction to slightly decrescendo; therefore, the performer might consider a barely-perceptible crescendo to counteract this tendency. It is imperative the listener perceives this as a connected melodic gesture. Finally, the third layer of rhythmically independent and dense "remainder" should be added.

Another performance issue the saxophonist faces is the extended sound vocabulary in *Solo*. The rapid syllabic air sounds and plosive tongue sounds require a level of mouth activity unusual for saxophonists. The performer should approach these techniques the same way he or she would approach a difficult passage, striving for consistency and clarity. Ideally, the saxophonist will work with a trained vocalist for diction practice.

[4] This refers to Anubis Quartet, whose members include Allison Balcetis, Sean Patayanikorn, and David Wegehaupt. Anubis Quartet gave the US premiere of *Licks & Brains I* at Ganz Hall in Chicago on May 13, 2011.

Performing on a bass saxophone can be a serious issue for many saxophonists, as very few own one. Usually, these are borrowed from universities or instrument collectors and exist in a state of disrepair. Since the piece requires incredible agility and control, the performer may take several actions to ease the task. First, this author has found success in using the palm keys (C1, C2, etc.) or a combination thereof for middle D, as opposed to the standard fingering. The palm keys respond with much more speed and consistency. Additionally, older instruments lacking the high register keys including C3, C4, and C5, can still be used if the performer is able to overblow the middle octave in order to produce the work's highest pitches. On some bass saxophones this is simple and requires little effort; this author has found more difficulty in overblowing the middle registers of modern instruments with high-register keys.

Finally, the performer should consider the generally volatile nature of the bass saxophone and realize that some small details might need to be changed on account of register stability, key mechanisms, etc. If the performer needs to adjust any details on the micro-level, he or she should always be respectful of the theatrical, physical nature of the piece and keep in mind the overarching artistic goals and features. However, this author firmly believes that gear should not be a prominent factor in deciding to undertake *Solo*.

It is the opinion of this author that Torstensson's music should be studied and performed regularly by all saxophonists interested in contemporary music. Composed in the late 1980s, the triptych is no longer new; however, the innovative way in which Torstensson employs an extended sound vocabulary results in a style of saxophone

writing that is part of a greater movement of pieces that explore the instrument radically.

Klas Torstensson's music is rich and multifaceted, and marks an important development in recent decades of saxophone literature. He presents the audience with music that questions traditional concepts of instrumental performance, formal structure, and sound. Torstensson's reimagining of the saxophone causes the listener to reflect on and transcend ossified preoccupations, all while he shapes the perceptual experience into one that honors a listener's individuality.

APPENDIX A

On the following pages, the reader will find the full score to Klas Torstensson's *Solo* for amplified bass saxophone, which is reproduced here with permission of the Music Center of the Netherlands.

To ease the analysis in Chapter Three, the author has added measure numbers and, when necessary, bar lines. These are not meant to aid in performance or suggest structural delineations.

SOLO FOR BASS SAXOPHONE

KLAS TORSTENSSON

AMPLIFICATION

The bass saxophone and the voice should be amplified and approximately 3 seconds of reverberation should be added to the signal. All amplified signals should be sent to all loudspeakers. Both the tone production (including the voice) and the mechanism should be amplified almost out of all proportion, evoking the sensation of an extremely heavy and complex piece of machinery being revved into motion.
SOLO should be performed standing up, the instrument resting on some (non-resonating) object of the appropriate height.

ABOUT THE SCORE

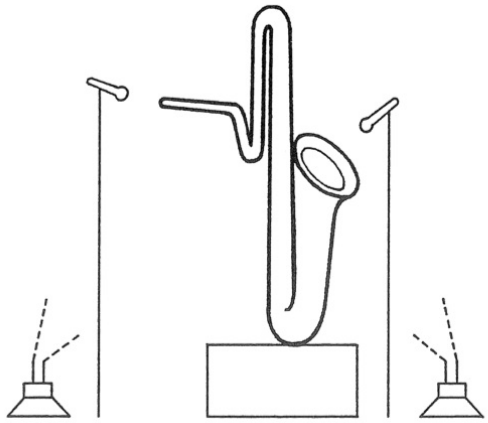
It is advisable to re-assemble the pages in such a way that the entire score will cover no more than 2 or 3 pages. In that way the music will fit onto two music-stands, and no page turns (which may conflict with the 'theatrical' continuity) will be necessary.

ABOUT THE NOTATION

The two different rhythmic notations used in SOLO - proportional notation (I) and traditional notation (II/III) - are more closely related than might be expected. The proportional notation requires an extremely exact interpretation. The traditional rhythmic notation on the other hand may be interpreted with some freedom.

ALL FINGERING ACCORDING TO THE 'LONDEIX SYSTEM'

DURATION: 10 MINUTES



SOLO was written for Leo van Oostrom who first performed the piece in Amsterdam on October 8, 1988.

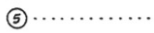
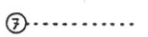
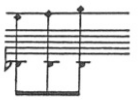
SOLO is part of the triptych LICKS & BRAINS
wich also includes
LICKS & BRAINS I for Saxophone Quartet and
LICKS & BRAINS II for Saxophone Quartet and Ensemble.

Discography: CVCD13, Donemus, Paulus Potterstraat 14-16, 1071 CZ Amsterdam, 31-20-676 44 36.

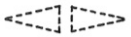
SOLO was written with the financial support of het Fonds voor de Scheppende Toonkunst, Amsterdam.

i

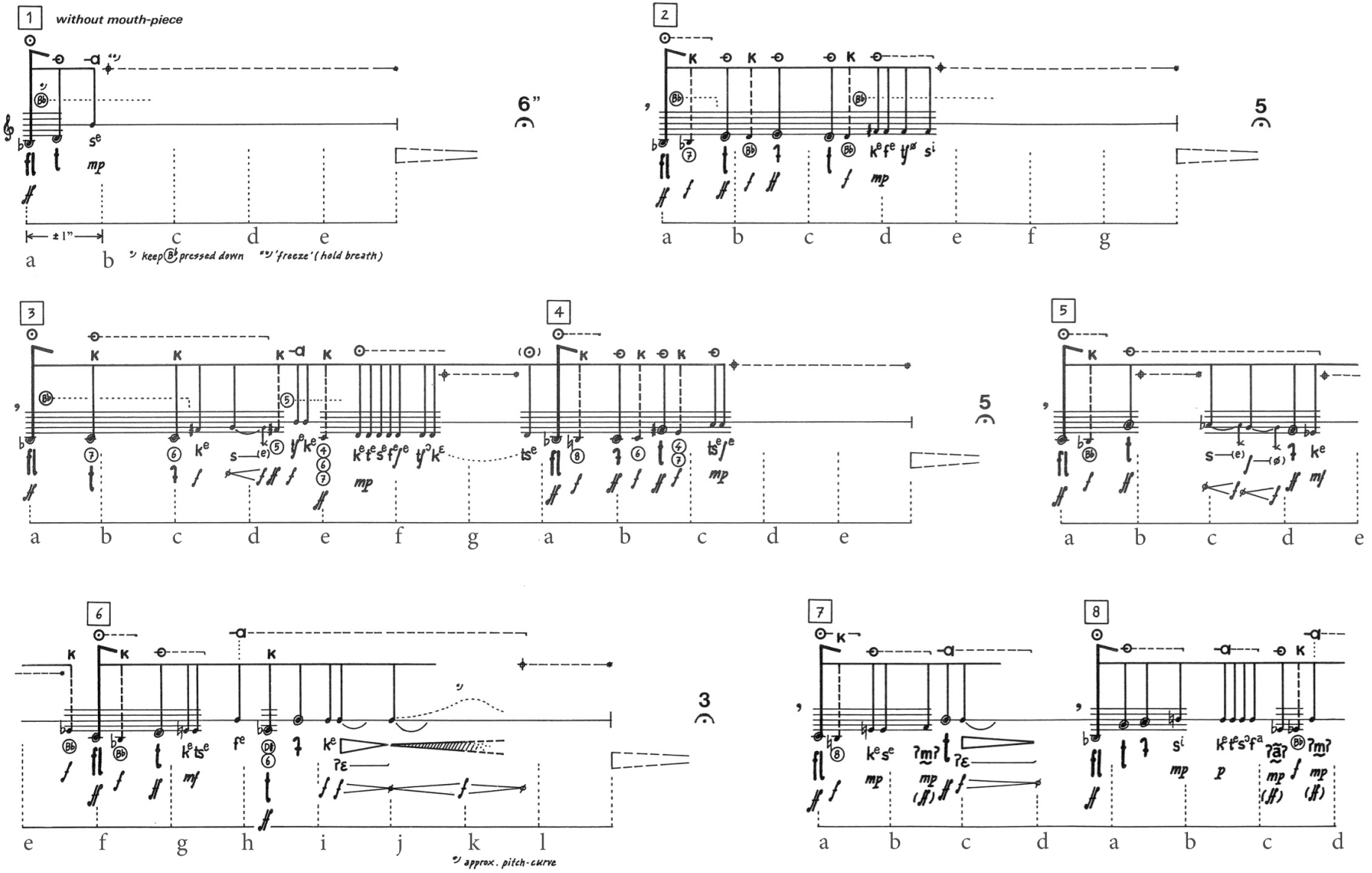
SYMBOLS / ABBREVIATIONS

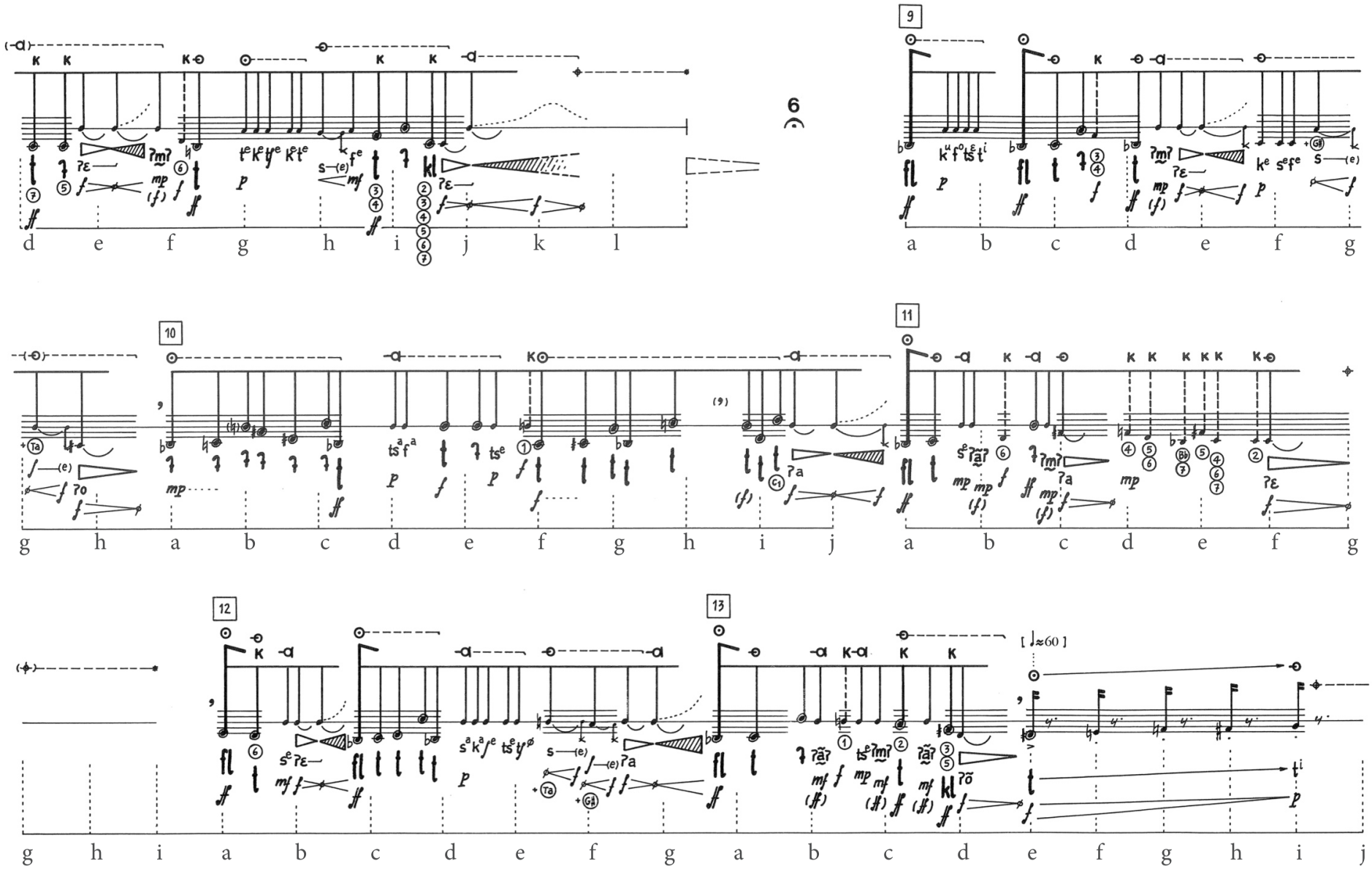
⌖	freeze (hold breath) until *
ø	niente
ord	ordinario (normal)
𝄲	quarter-tone higher/lower
	glissando
Flz	flutter-tongue
trst	tremolo staccato (as fast as possible)
	slap-tongue ('normal')
	slap-tongue ('dry')
	colpo di chiave (key-slap), together with tone
	'beating key' (plus usual fingering)
	colpo di chiave (key-slap), without tone
	'beating key' (plus usual fingering)
	keep key pressed down
	spectra realized with the embouchure only, i.e. by adding 'natural' harmonics to the notated 'fundamental' ('fundamental' always present)
	'breathy' tone-quality
	Zungenschlag (slap-tongue almost without any tone)
	add voice ad libitum, resulting in an unstable tone with an extremely distorted sound-quality
mf [*ff*]	the dynamic sign within brackets gives an indication of the required action
⊙	in tube (without mouth-piece)
⊙	close to opening of tube (id.)
⊙	into microphone

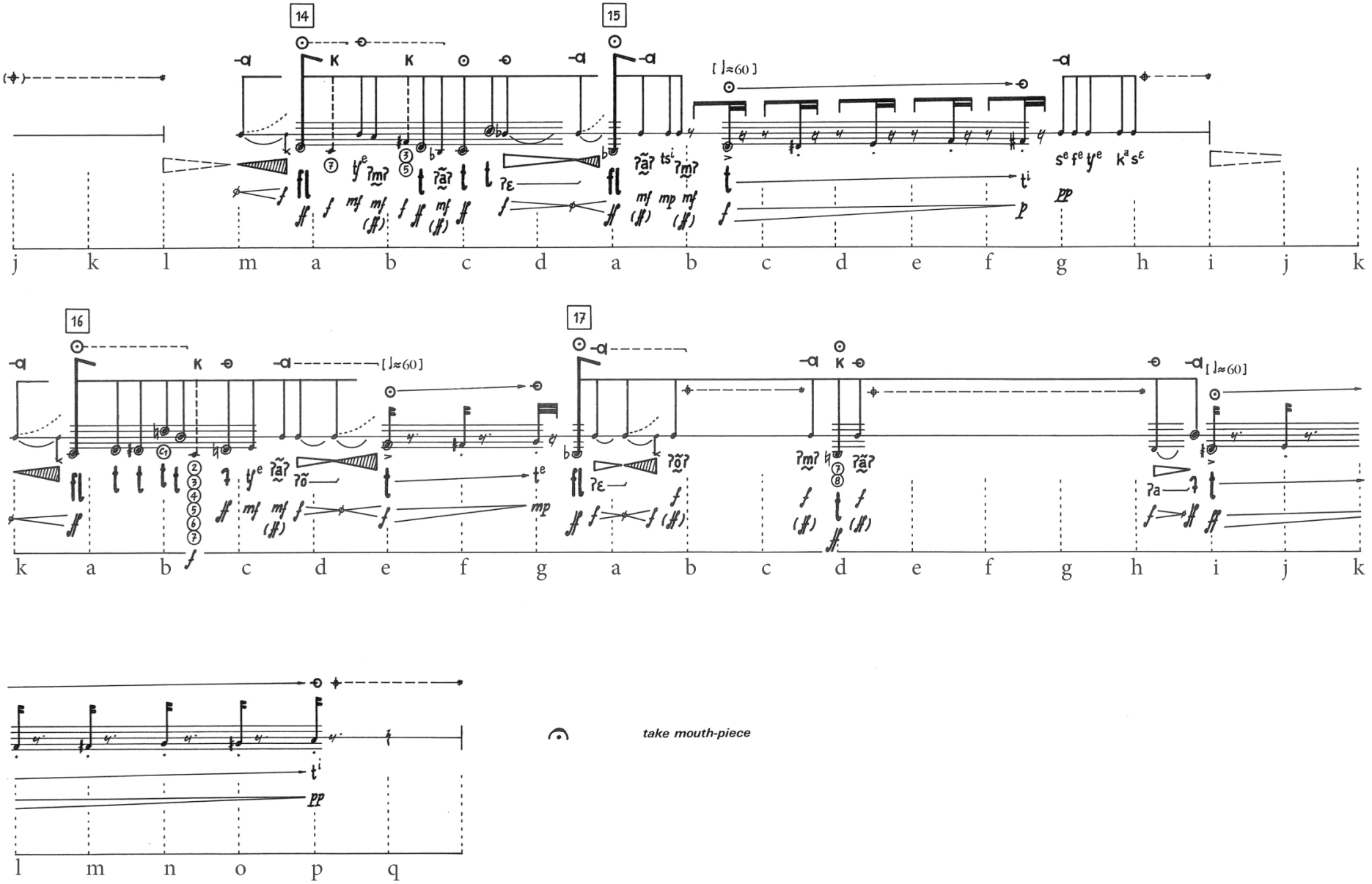
VOICE / PHONETIC SYMBOLS

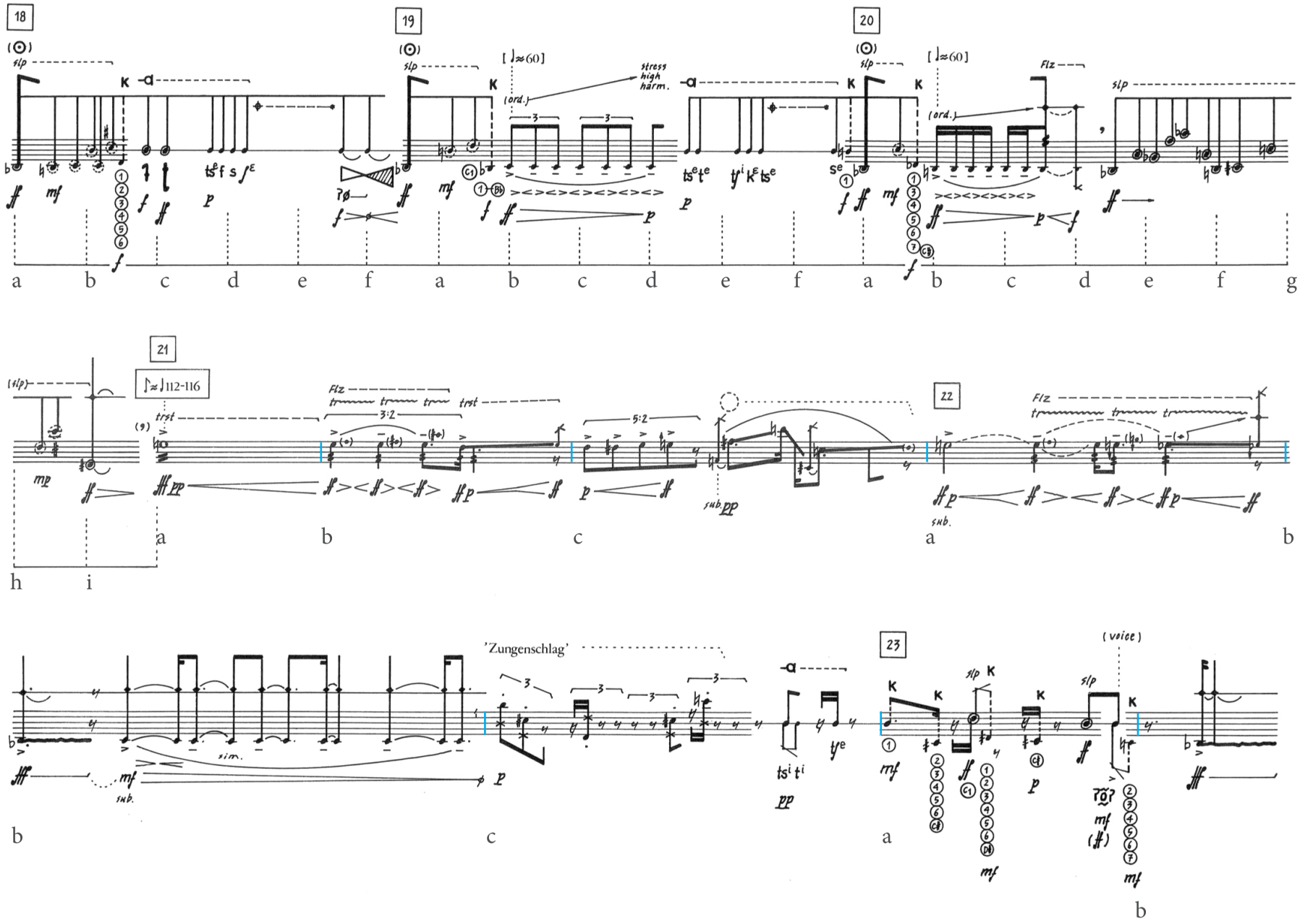
	inhale/exhale (almost voiceless)
	inhale/exhale (on the prescribed vowel)
	inhalation, simultaneously through mouth and nose, holding the lips almost completely together, letting the air get through only with some audible 'difficulty'
ɬ	'tongue-ram' (in tube)
ɭ	('rd'/'rt') tongue-flap ('retroflex flap') Production: start with the tongue-tip well curled back, then let it shoot forwards and downwards, lightly striking the pre-palatal arch, just behind the alveolar bridge, on the way down.
ʈ	('t') tongue against hard palate (vacuum), followed by a sudden withdrawal
kl	('kl') tongue-click ('velare click')
ts^{e}	always voiceless. The small, raised vowel symbol indicates a colouring of the air-stream following the voiceless consonant
ʔm̰ʔ / ʔã̰ʔ	'suppressed scream'
~	nazalisation (superscript tilde)
~	'creaky' voice (subscript tilde)
ʔ	glottal stop / glottal initialization

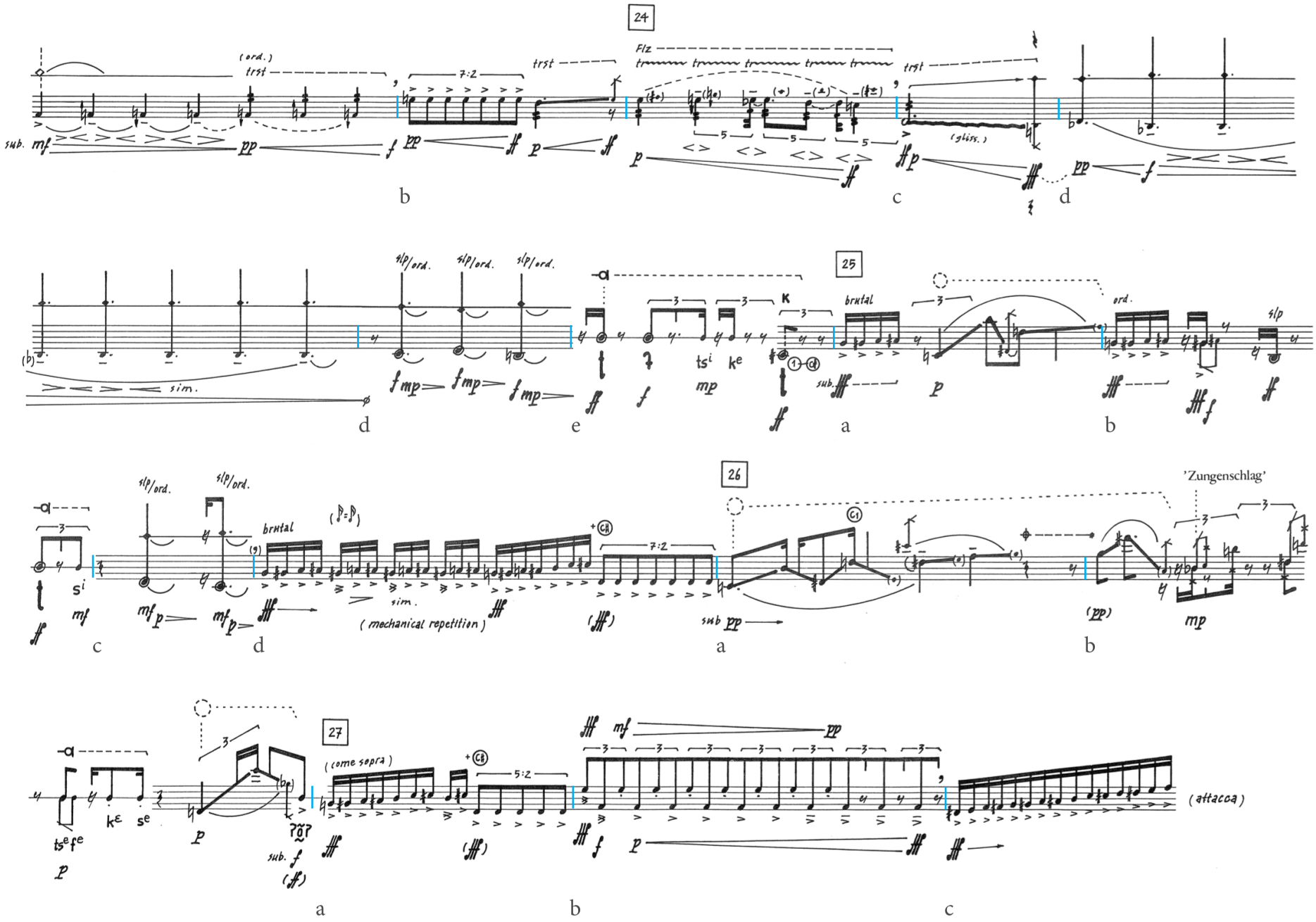
u	tout (Fr), subito (It)	f	fine
o	beau (Fr), wohl (German)	k	coal
ɔ	hot (Eng)	m	sum
a	fahren (German)	s	see (unvoiced)
ɛ	maître (Fr)	ʃ	she (unvoiced)
e	mehr (German)	t	tie
i	see (Eng)		
ø	peu (Fr), schön (German)		

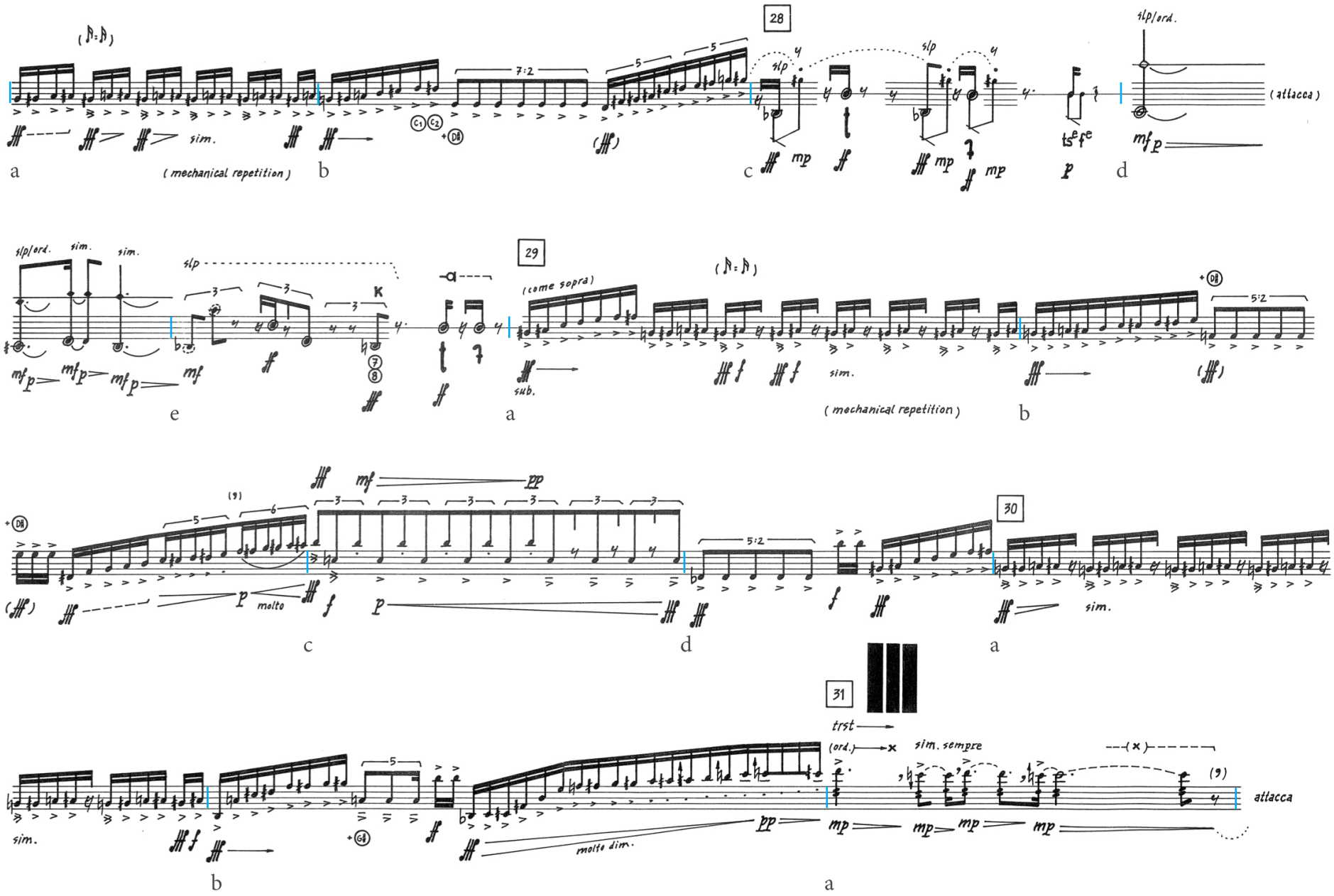


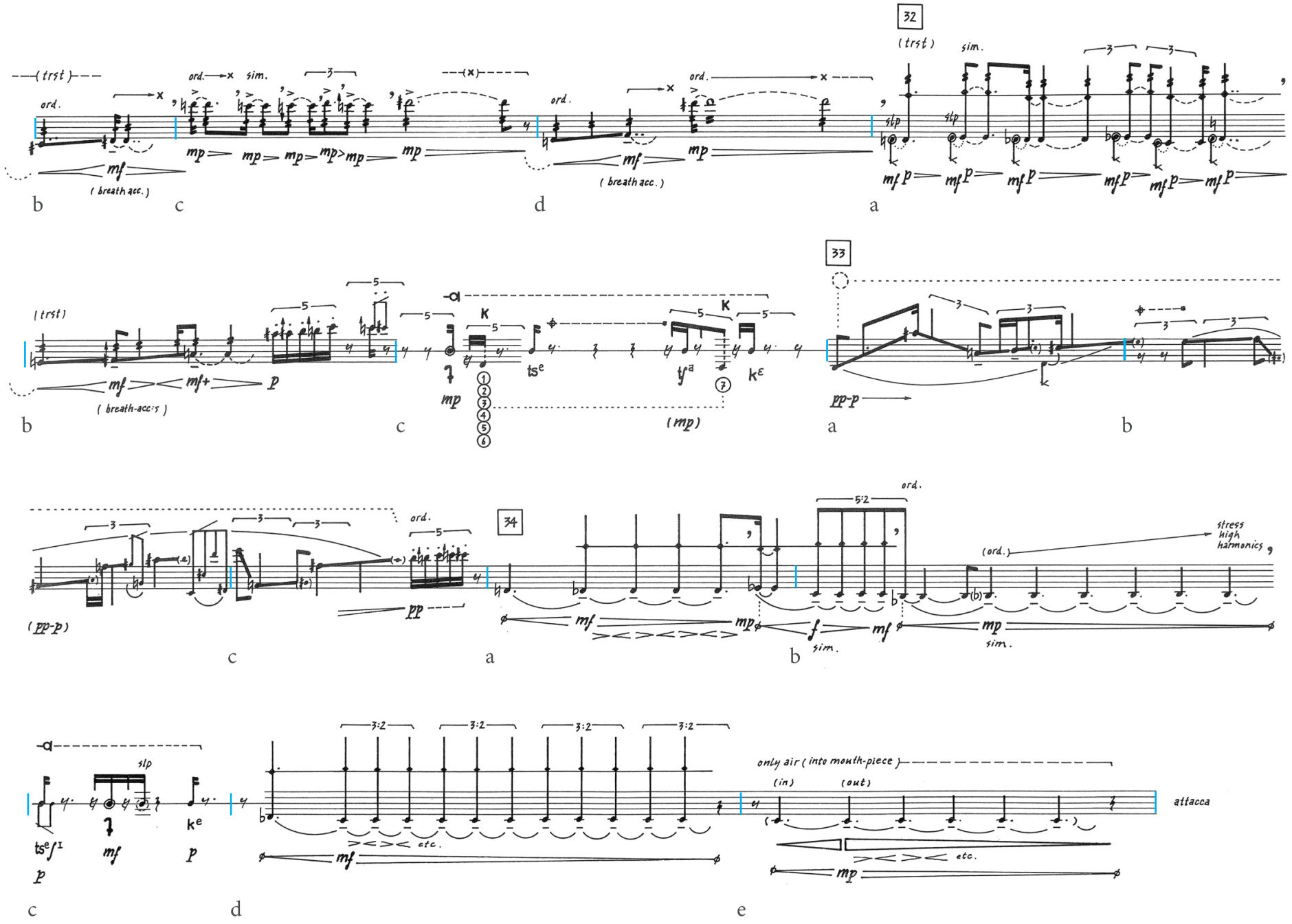

9
10
11
12
13
[♩≈60]

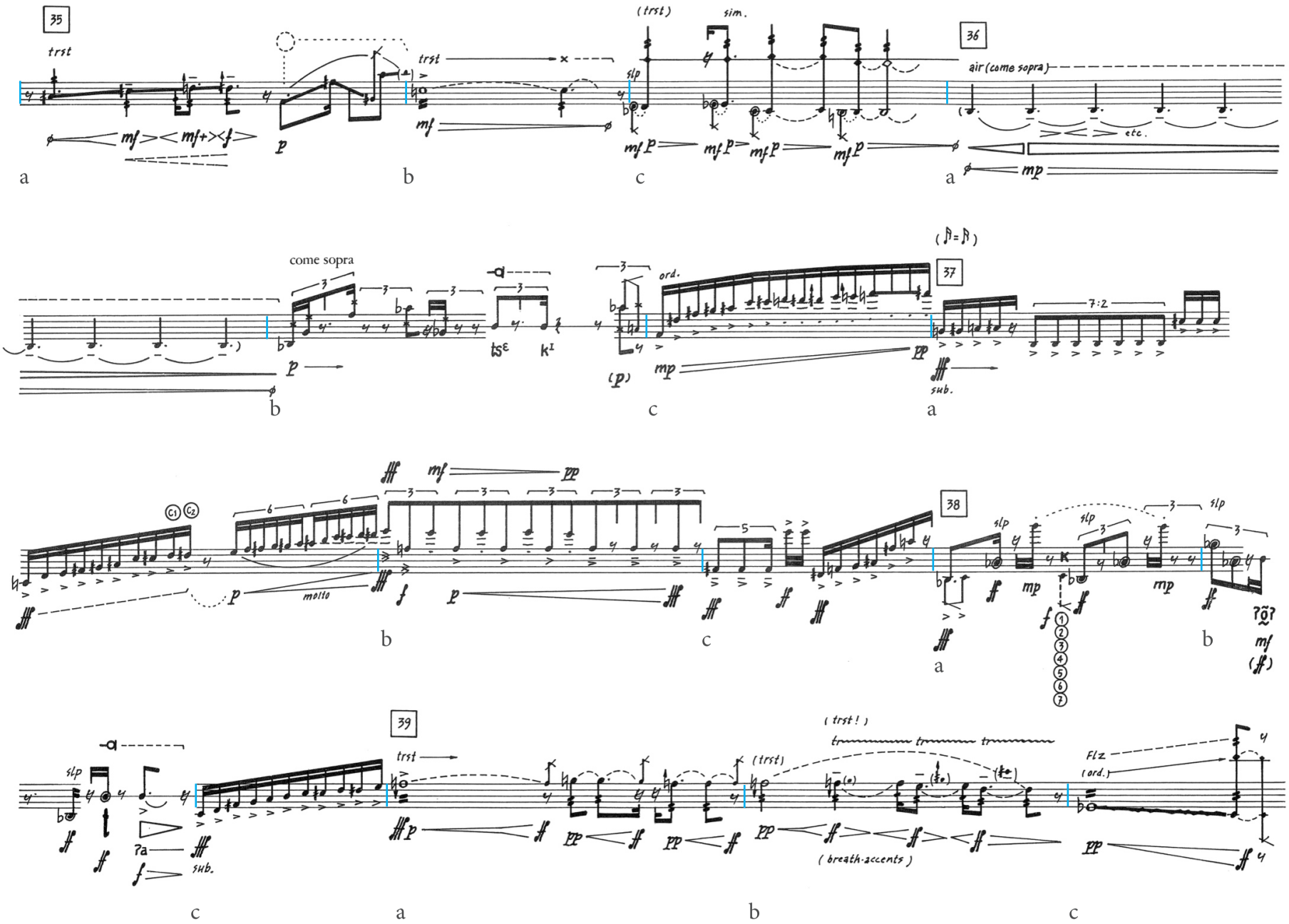

14
15
16
17
[♩≈60]
take mouth-piece

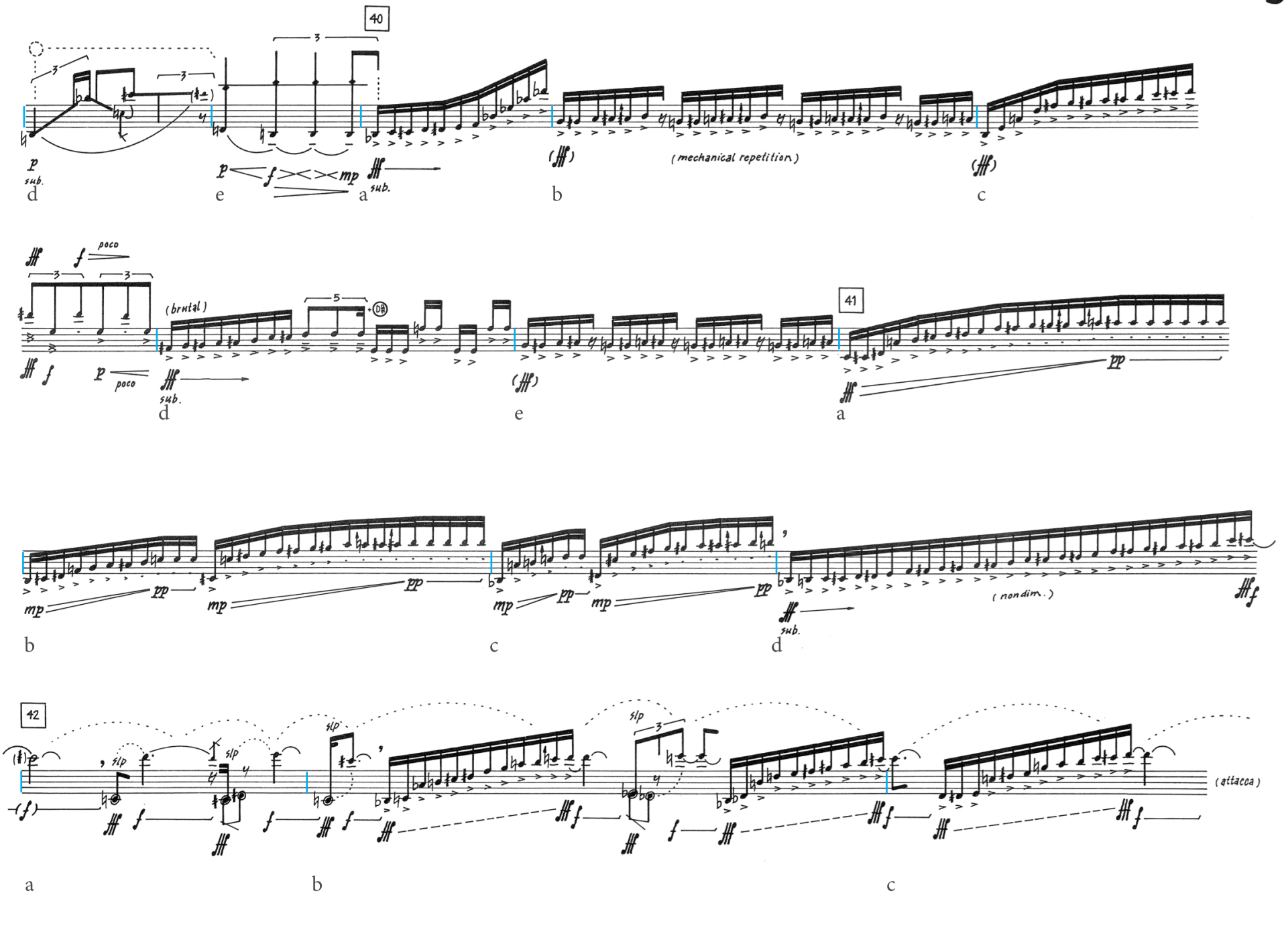

18
19
20
21
22
23
slp
(ord.)
stress high harm.
Flz
trst
3:2
5:2
sub.
'Zungenschlag'
(voice)
sim.
a b c d e f a b c d e f a b c d e f g
h i
a b c a b
b c a b

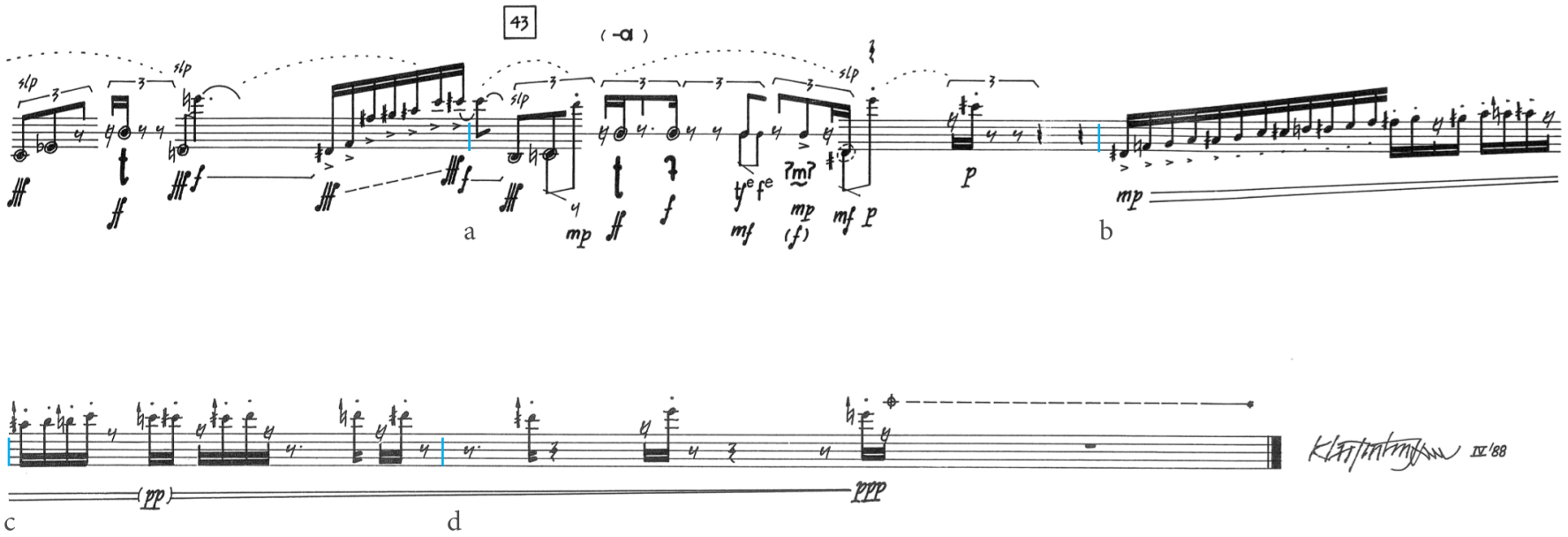

24
25
26
27
'Zungenschlag'
(ord.)
trst
sub.
(gliss.)
sim.
brutal
ord.
sl/p
(mechanical repetition)
(come sopra)
(attacca)
a
b
c
d
e


28
sim.
(mechanical repetition)
slp
mp
slp/ord.
(attacca)
a
b
c
d
29
sub.
(come sopra)
e
30
molto
sim.
31
trst
(ord.)
sim. sempre
molto dim.
attacca


32
(trst)
sim.
ord.
x
(x)
slp
mf p
mp
mf
(breath acc.)
b
c
d
a
33
(trst)
K
ts
k
(mp)
pp-p
b
c
a
b
34
(pp-p)
pp
5:2
3:2
stress high harmonics
(ord.)
only air (into mouth-piece)
(in)
(out)
etc.
attacca
c
d
e


35
trst
mf
mf+
f
p
trst
mf
(trst)
sim.
slp
mf p
36
air (come sopra)
etc.
mp
a
b
c
a
come sopra
p
ts
k
ord.
(p)
mp
37
(♪=♪)
7:2
pp
sub.
b
c
a
c1
c2
6
molto
ff
mf
pp
f
3
5
38
slp
mp
b
?
mf
(ff)
39
trst
(trst)
(trst!)
tr
(breath-accents)
Flz
(ord.)
?a
sub.
c
a
b
c


40
p sub.
d
e
a
sub.
(fff)
(mechanical repetition)
b
(fff)
c
poco
(brutal)
5
DB
sub.
d
(fff)
e
41
pp
a
mp
pp
b
c
sub.
d
(nondim.)
42
slp
(f)
a
b
3
c
(attacca)


43
(-a)
slp
a
b
c
d
(pp)
ppp

APPENDIX B

CHRONOLOGICAL LIST OF WORKS

1976
Redskap for six percussionists (16')

1979
Pedaal for amplified violin (9')

1980
Intros for bass clarinet, bassoon, two trombones, piano, percussion, amplified viola, and amplified bass (13')

1981
Spans for bass clarinet (8')
Spans/spännvidder for bass clarinet, contrabass clarinet, and two percussion (8')

1982
Järn for flute, three saxophones, horn, two trumpets, piano, double bass (9')

1983
Fläka for large ensemble (14')

1984
Spåra for three saxophones, three bass guitars, four percussion, and two amplified electric pianos (13')

1986
Cracking Ice for 24 singers, six percussionists, lasers, video, and electronics (60')

1985
Ingloss for 24 solo voices (18')

1987
Licks & Brains I for saxophone quartet (19')

1988
Licks & Brains II for saxophone quartet and large ensemble (26')
Solo for amplified bass saxophone (10')

1990
Koorde for two pianos (20'-25')
Stick on Stick for orchestra (21')

1991
Hamra for soprano saxophone (18')
Urban Solo for solo soprano (20')

1992
Urban Songs for soprano, large ensemble, and computers (30')

1994
Kargt (from *The Last Diary*) for large ensemble (21')
The Last Diary for reciting male voice and large ensemble (21')
Urban Extra for music box (1'25")

1998
Intermezzo (from the opera *The Expedition*) for orchestra (12')
Intermezzo and Epilogue (diptych from the opera *The Expedition*) for soprano and orchestra (22')

1999
The Expedition, an opera (140')

2000
Lantern Lectures, Volume I for large ensemble (23')

2001
Lantern Lectures, Volume III for large ensemble (17')

2002
Lantern Lectures, Volume II for large ensemble (17')
Lantern Lectures, Volume IV for large ensemble (18')

2003
Four Brass Links for trumpet, horn, and trombone (15')

2004
In grosser Sehnsucht for soprano, violin, cello, and piano (45')

2006
Self-portrait with percussion (*Lantern Lectures*, Volume V) for solo percussion and large ensemble (40')

2007
Fastlandet (from A Cycle of the North) for orchestra (21')
Urban Intro for strings (5')

2008
Polarhavet (from A Cycle of the North) for orchestra (21')
Two Showpieces for Percussion (8')

2010
Violin Concerto for solo violin and large ensemble (30')
Pocket Size Violin Concerto for quartet (14')

2012
Himmelen for orchestra (20')
Prelude & Encores for oboe/oboe d'Amore, clarinet, soprano/alto saxophone, bassoon, and bass clarinet/contrabass clarinet (13')

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