

Influences of Industrial Rock in Orchestral Music:  
Traces of 1980s West Berlin in Magnus Lindberg's *Kraft*

オーケストラ音楽にみるインダストリアル・ロックの影響  
— マグヌス・リンドベルイの《クラフト》における  
80年代西ベルリンの痕跡 —

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## Abstract

The orchestral piece *Kraft* (1985) is one of the representative works of the Finnish composer Magnus Lindberg (1958-). Since the introduction of *atonality* at the beginning of the twentieth century, technological evolution enabled a variety of experiments with non-tonal (e.g., natural) sounds. The emancipation of noise in music was an arising matter, and *Kraft* aptly exemplifies this trend. In this context, the work is particularly unique in that it was influenced by industrial rock music. The adoption of industrial waste objects as percussion instruments manifests this feature, demonstrating the traces of a subcultural rock genre in the work – one which is disparate from the orchestral concert style.

The main objective of this thesis is to understand the influence of the German industrial postpunk rock band Einstürzende Neubauten (1980-, hereinafter Neubauten) on Lindberg's work *Kraft*. It explores the two subjects' early works, conferring the main emphasis on the work in question. The analysis of *Kraft*'s score – an analysis that focuses on the role of the found metal objects – serves as the centerpiece of the study. Meanwhile, it explores the background and significance of Lindberg's choice to use those objects in the way that he did. Ultimately, the purpose is to examine the relevant sociopolitical and artistic factors that brought Neubauten's influence into play.

Both *contextualist* and *isolationist* approaches underlie this examination. The former is a framework through which the discussion describes how sociohistorical factors affected the two subjects. The latter helps in the analysis to elaborate Lindberg's compositional thinking: how he went about embodying his preoccupations in his composition. However, because extramusical associations assume a prominent role in the overall interpretation, both approaches pervade the discussion. In addition, the Aristotelean idea of *sensus communis* is utilized in describing the *corporeality* of the found instruments in the performance space, Charles Peirce's "Theory of Signs" in explicating how meaning is generated and communicated, and the ideas of Pierre Schaeffer and Helmut Lanchenmann in articulating Lindberg's sound world.

The findings of this study point to the social dynamism of West Berlin in the 1980s as the principal cause of Lindberg's adoption of urban metal objects in *Kraft*. The unique social situations in the city during the post-war period gave rise to its subculture, as well as its associated art scene. It was in this milieu that Neubauten had emerged, and also where Lindberg encountered their sound. This encounter proved to be impactful in that it prompted Lindberg to compose a work different from the piano concerto he had originally intended to

write. The exotic social dynamism, dovetailing with Lindberg's newly developed compositional language at the time, was the key factor that led to the birth of *Kraft*.

Underground industrial rock music influencing a concert orchestral work is a rare occurrence. Given the implicit differences between these genres, the realization of this idea seems unlikely. Nevertheless, a close look reveals several factors acting behind and enabling Neubauten's influence on Lindberg. Their shared commonalities as musicians of the twentieth century and decisive situational causalities all provide valuable insights into the matter. In particular, the unique urban phenomena of 1980s West Berlin brought about a powerful social dynamic, which was ultimately what compelled Lindberg to incorporate urban junk into *Kraft*, bringing Neubauten's influence into play.

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# Contents

<b>1 Introduction .....</b>	<b>2</b>
<b>2 Post-World War II West Berlin and Its Subculture .....</b>	<b>6</b>
2.1 Youth Activism in West Germany during the 1960-70s .....	6
2.2 The Squatter Movement and the Subculture of West Berlin .....	8
2.2.1 The Micropolitics in the Form of Squatting .....	9
2.2.2 The Subculture: The Art Scene .....	11
<b>3 The Art and Aesthetics.....</b>	<b>15</b>
3.1 Einstürzende Neubauten’s Aesthetic Parameters.....	15
3.1.1 The Pursuit of Authenticity .....	16
3.1.2 The Traces of Walter Benjamin .....	18
3.1.3 Antonin Artaud and “The Theatre of Cruelty” .....	23
3.2 The Biographical Background and Compositional Preoccupations of Magnus Lindberg.....	25
3.2.1 The Biographical Background of Magnus Lindberg.....	26
3.2.2 Compositional Preoccupations: From the Beginning towards <i>Kraft</i> .....	30
(1) Rhythm.....	31
(2) Texture.....	32
(3) Induction from Preset Material .....	33
(4) Temporality and Continuity .....	35
(5) Binary Opposition.....	36
(6) Timbre.....	38
<b>4 The Impact: The Details of the Influence.....</b>	<b>41</b>
4.1 The Emancipation of Noise .....	41
4.2 Corporeality in the Performance Space .....	46
4.3 Semiotics and Meanings.....	49
4.3.1 The Semiotic Triad: Einstürzende Neubauten.....	51
4.3.2 The Semiotic Triad: Magnus Lindberg and <i>Kraft</i> .....	54
<b>5 Analysis of <i>Kraft</i>.....</b>	<b>60</b>
5.1 Background of <i>Kraft</i> .....	60

5.2 Theoretical Frameworks.....	64
5.2.1 The Framework of Texture .....	64
5.2.2 The Framework of Structure .....	66
5.2.3 The Framework of Sound .....	68
(1) Pierre Schaeffer: Typology-Morphology .....	69
(2) Helmut Lachenmann: <i>Klangtypen der Neuen Musik</i> .....	72
5.2.4 The Framework of Spatialization.....	74
5.3 Analysis of <i>Kraft</i> .....	77
5.3.1 Movement I.....	77
5.3.2 Movement II .....	113
<b>6 Conclusion .....</b>	<b>132</b>
<b>Bibliography.....</b>	<b>139</b>

**Chapter 1**  
Introduction



# 1 Introduction

The subcultural milieu of West Berlin in the 1980s was a dynamic urban setting. The countercultural art scene explicitly denied the already-established artistic conventions in favor of vigorous promotion of amateurism and autodidacticism. The young artists sought their own *authenticity*, which was not unrelated to the then-zeitgeist and status quo. The German industrial post-punk rock band Einstürzende Neubauten (1980-) (hereinafter Neubauten) emerged out of this social setting. It made a name for itself as an iconic figure, representing a singular milieu that no longer exists today. With a career spanning over forty years, the band has produced some of the most innovative works of its genre. In particular, its trademark noise is known for its inclusion of urban debris – e.g., as scrap metals, road shields, gas tanks, automobile parts, and more.

When the band was leading an active career during 1984-85, there in the city was a visitor from Finland. It was the renowned Finnish composer Magnus Lindberg (1958-). Admittedly, it is not often that a composer of contemporary concert music is present at such a freewheeling nightlife scene. However, that was exactly what happened in this case. Lindberg was doing his residency in the city, and his visit to the idiosyncratic milieu turned out to be something special. His encounter with Neubauten's music was instrumental in the birth of his key work, *Kraft* (1985). Specifically, Lindberg adopts the metallic *objets trouvés* (the likes of the aforementioned) in the composition, blending them together with a symphonic orchestra. The result is a highly powerful work combining the orchestral sonority and the timbres of the industrial debris.

At the writing of this essay, only a limited amount of research has been conducted on Lindberg's music. Within the limits, there are virtually no scholarly sources available that draw attention to this topic. Based on this observation, this study explores the music of Einstürzende Neubauten and Magnus Lindberg's early works. It confers the main emphasis on *Kraft*, investigating the adoption of metallic objects into the work. It also delves into the sociohistorical background of West Berlin to examine the factors that gave rise to Neubauten. The centerpiece of the investigation will be the analysis of the score of *Kraft*, an analysis that focuses especially on the role of the found metal objects. On top of that, it will explore the background and significance of Lindberg's choice to use those objects in the way he did. With these, the prime objective of this study is to understand the influence of Neubauten's sound on *Kraft*. It seeks to investigate the relevant factors (i.e., sociopolitical, and artistic) that brought the influence into play.

*Kraft* was commissioned by the Helsinki Festival and its premiere was held on September 4, 1985. It was performed by the Finnish Radio Orchestra conducted by Esa Pekkar-Salonen (1958-), with the Toimii Ensemble as soloists. The ca. half-hour-long work consists of two movements, and is scored for a soloist ensemble, live electronics, and symphony orchestra. Lindberg composed the piece over the span of three years (1983-85), both in Paris and Berlin, initially, meaning to compose a piano concerto. However, upon witnessing Neubauten's music, he decided to adopt metallic junk into the composition, completely changing the style of the work. This shift influenced by the German band is where this research places its focus.

Initially, the investigation focuses on the sociohistorical background of West Berlin – i.e., those eras that were most relevant to the birth of its subculture. First, attention is drawn to the decades of 1960-70s. It was during the 1960s that progressive youths<sup>1</sup> took to the streets, retaliating against the authoritarian regime. One salient factor behind their animosity – uniquely German – was the legacy of the National Socialism. The fascist past of the nation was at the core of the political unrest. The emerging youths likened the new governmental system to the power structure of the Nazi party. Such was the spirit of the times, which led further to a more radicalized counter-violence political movement during the 1970s.

With time, alternative activism emerged from the ashes of the fall of preceding extremist movements. The squatter movement exemplifies this form. Vasudevan argues that “the action repertoire adopted by the student movement and the extra-parliamentary opposition in the late 1960s extended beyond appellative and symbolic expressions of contention and dissent. These new protest techniques were *anticipatory*. They actively prefigured the alternative society they imagined.”<sup>2</sup> In other words, the activism was no longer about taking annihilative measures, demanding for a governmental change. Rather, it was about developing a new utopian setting that distanced itself from the mainstream.

The subculture in question grew out of this environment. From the late 1970s, the milieu proliferated with nightclubs and bars, where the alternative art scene took its shape. This was the surroundings that gave birth to Neubauten. The band armed itself with sociopolitical themes, drawing inspiration from the progressive philosophic/artistic ideas that emerged at the turn of the twentieth century. This resulted in its eccentric sonic experimentations.

Lindberg spent the years 1984-85 in Berlin, receiving funding from the Goethe Institute. By the time he arrived in Berlin, he already had graduated from the Sibelius

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<sup>1</sup> For example, *Außerparlamentarische Opposition* (hereinafter APO, Extra-parliamentary Opposition)

<sup>2</sup> Alexander Vasudevan, *Metropolitan Preoccupations: The Spatial Politics of Squatting in Berlin* (Chichester, West Sussex: Wiley Blackwell, 2015), 54.

Academy and had gone to Paris to further his studies. Meanwhile, his compositional exploration in the early years led to his renunciation of 'serialism' and to his experimentation with concrete timbres. As we will see, these two aspects are crucial in discussing the main topic, because they reveal the composer's compositional preoccupations at the time.

Five theoretical frameworks will be employed. In elaborating on how meaning is constructed and conveyed – i.e., the interrelationship between the metallic found instruments and the artists – the argument will draw on the Semiotic theory of Charles Sanders Peirce (1839-1914). For the analysis of the score of *Kraft*, the sound structures will be explored based on the sound classifications put forth by the French composer, acoustician, and electronic engineer Pierre Schaeffer (1910-1995) and the German composer Helmut Lachenmann (1935-). Both were selected in accordance with the collective claims by Lindberg's researcher Risto Nieminen, the British composer Julian Anderson (1967-), and Lindberg himself about the composer's sound world. Also, the analysis will examine the overall framework of the composition based on the Aristotelian dramatic structure, to which its formal structure bears a resemblance. Finally, the idea of *spatialization* will help to articulate the theatricality in the work.

Following this introductory first chapter, chapter 2 will introduce the historical background of post-World War II West Berlin and its subculture. The chapter does not seek to examine the entire topic, nor does it intend to form a judgement about the legacy of the political movements. It addresses the key events that led to the birth of the subculture. Chapter 3 will address the aesthetic and artistic parameters of *Einstürzende Neubauten*, placing the emphasis on their self-reflection and the philosophic ideas. Furthermore, it will discuss the biographical background and compositional preoccupations of Magnus Lindberg, primarily focusing on his early years. In chapter 4, the discussion will delve into how the influence came into play. It will be based on the Semiotic theory of Peirce. Chapter 5 will analyze the score of *Kraft*, inspecting into the locational specificity of the found objects and their functions within the musical discourse. Finally, chapter 6 will lay out the observations and reflections of the study.

**Chapter 2**  
Post-World War II West Berlin and Its Subculture

## 2 Post-World War II West Berlin and Its Subculture

Since the end of the Second World War, Berlin suffered from its ever-continuing political unrest. Following the fall of the Third Reich in May 1945, the Allies partitioned the city into four segments. Also, the aftermath of the war and continual intensification of the Cold War conflicts were prevalent in the city. As a result, the Berlin Wall was erected in 1961. From this point to the year of 1989, when the wall finally came down, the city was on the frontline in the Cold War tensions.

In this geopolitical context, a subculture emerged during the 1980s among West Berlin's cultural minority groups. This subculture was the milieu from which the German industrial music pioneers Einstürzende Neubauten evolved, and the setting where the Finnish composer Magnus Lindberg first witnessed their music. This chapter will address the key historical factors that gave birth to this cultural milieu. Section 2.1 will give an overview of youth activism in the Federal Republic of Germany during the 1960-70s.<sup>3</sup> Section 2.2 will address the squatter movement in West Berlin and its subculture.

### 2.1 Youth Activism in West Germany during the 1960-70s

The widespread authoritarian wave during the 1960s in Federal Democratic Republic (FDR) fueled dissatisfaction of the young generations. As Michael A. Schmidtke clarifies in his article, *Cultural Revolution or Cultural Shock? Student Radicalism and 1968 in Germany*, a change in the form of the government, namely the Grand Coalition, acted as a catalyst for the student movement in 1960s.<sup>4</sup> The economic challenges that had emerged at the time caused the formation, but despite such background, the move proved controversial. It implied centralizing the state power, signaling anti-democratic power structure. This was especially contentious at

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<sup>3</sup> The political unrest was not limited to West Berlin; the student movement was spread throughout the *Bundesrepublik*. However, due to the nature of the topic, much of the emphasis will be conferred on the events related to the city.

<sup>4</sup> Michael A. Schmidtke, "Cultural Revolution or Cultural Shock? Student Radicalism and 1968 in Germany," *South Central Review*, Vol. 16/17, Vol. 16, no. 4 - Vol. 17, no. 1, Rethinking 1968: The United States & Western Europe (Winter, 1999 - Spring, 2000): 78. JSTOR (3190078).

the time, for the centralization of power echoed the then-recent past, namely the Nazi regime.<sup>5</sup> The tragic historical events were at the heart of the political tension, stirring animosity among the students.

There was a central factor that gave rise to such a viewpoint. Upon their matriculation, many students first learned about the war crimes that had been committed by the Nazi party. This turned out to be a “political shock.”<sup>6</sup> The youths were rather ignorant of their recent past because their parents’ generation had stayed silent on the matter. The shock gave rise to the youths’ antipathy towards the parental silence, which consequently led to their politicization.

Given this, the recasting of postwar Germany is another noteworthy matter. The upbringing of the young generation (a generation born at the end of the war) centered around democratic ideals. With the legacy of National Socialism left behind, such ideological recasting was deemed a top-priority task. A newly developed German identity was a necessity to ensure separation from their fascist past. Furthermore, the intensification of the ideological conflict of the Cold War necessitated such educational measures even more. Accordingly, the ideological commotion was an ever-present social issue among the young generation. And, with that, the formation of coalition was a provoking matter; it was strong enough to spark their motivation to challenge the establishments.

The shame felt upon learning of the Nazi era exerted further impact on the students. It extended to their activism against the Vietnam War. Although the Vietnam war protest was a global phenomenon, the then-zeitgeist in *Bundesrepublik* could be referred to as being uniquely German. Morton says, “Most events of their day [the youths] viewed as either stemming from the Nazi era or as throwbacks to Nazi policy. Any authoritarian action was labeled fascist and therefore Nazi.”<sup>7</sup> Hence, a direct correlation was made with National Socialism once again. Considering this, the student protesters were ardent to act, bearing in mind the nation’s painful past.

In the beginning, the demonstrations were generally non-violent, although it began to shift as the atmosphere intensified over time.<sup>8</sup> The events like the death of Benno Ohnesorg

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<sup>5</sup> The newly elected chancellor of the coalition was Kurt Georg Kiesinger, who had been a former member of the Nazi Party (among others in power as well).

<sup>6</sup> Nan Katharine Harrington, “Student Activism and University Reform in England, France, and Germany, 1960’s-1970’s,” (PhD diss., The University of Texas at Austin, 2003), 150.

<sup>7</sup> Gracie M. Morton, “The Long March of the German 68ers: Their Protest, Their Exhibition, and Their Administration,” (Master’s thesis, East Tennessee University, 2007), 38.

<sup>8</sup> Joshua Kramer, “Grass Roots Urbanism: An Overview of the Squatters movement in West Berlin during the 1970s and 1980s,” (Master’s thesis, Bowling Green State University, 2018), 19.

(1967), the Easter Riots (1968), and the revolts against the Emergency Acts (1968)<sup>9</sup> sparked fierce counter-violence demonstrations. These ultimately led to the grand climax of the German student movement in 1968. However, with the passing of the Emergency statutes, it was evident that student activism had failed to bring change to the political systems. Also, the movement began to disintegrate from this point.

Following the fall of the 1960s student movement, more radicalized violence-driven activist groups began to emerge during the 1970s. The radical far-left extremist group, Red Army Faction (hereinafter RAF) imposed ultra-violent terrorism on West Germany. Its radicalization stemmed from the same ideological motifs as its forerunners, although it explicitly advocated violent counterattacks. The gang undertook aggressive guerrilla actions with the aim of putting the authorities in harm's way.<sup>10</sup> With that, a series of tumultuous events during the latter part of 1977 marked the climax of its extremist counter-violence activisms. Therefore, the year is named 'German Autumn in 1977' today.<sup>11</sup>

## 2.2 The Squatter Movement and the Subculture of West Berlin

The squatter movement in West Berlin arose parallel with the revolts during the 1970s (especially during the latter part of the decade). Over the span of the two decades (1970-80s), this milieu became yet another subject of the city's political instability. Concurrently, it served as a setting where the alternative lifestyles and subcultures blossomed.<sup>12</sup> In light of this, this section will address how the squatter movement came about and how the subcultures were able to flourish in it.

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<sup>9</sup> These newly introduced statutes by the Grand Coalition allowed government regulation in times of emergency – i.e., uprising, war, or natural disaster. The laws were counted as threats to civil liberties as they allowed the authorities to enforce limitation on confidentiality of communication (both postal- and telecommunication) and mobility rights depending upon circumstances.

<sup>10</sup> Their terroristic activities involved a chain of bombing incidents, bank robberies, hunger strikes, hijackings, and murders.

<sup>11</sup> The year marked the RAF's final defeat as well. They completely disbanded in 1998.

<sup>12</sup> The members of *Einstürzende Neubauten* were part of the inhabitants of the squats.

### 2.2.1 The Micropolitics in the Form of Squatting

During the late 1960s, a new tendency grew out among the activists. It was the longing for utopia, one which is present now without needing to wait for a political change.<sup>13</sup> Also, the more non-dogmatic groups such as the *Spontis* were seeking to reform the left-wing politics. They “believed in spontaneous, immediate, sensuous, and authentic articulations of dissent rather than theoretical discourse and organized protest.”<sup>14</sup> The TUNIX Congress held in 1978 served as the turning point that reinvigorated the countercultural left. It ultimately gave birth to the alternative modes of activism that no longer pleaded changes to the political system. It rather focused on “a renewed commitment to the cultivation of alternative spaces of subversion, solidarity and self-determination.”<sup>15</sup>

The squatter movement emerged under these circumstances. In the city, the traces of the war were remaining during the 1970s (physically as well). The old tenements were scheduled for demolition under the city’s urban renewal policy. However, delayed implementation of the policy heightened the rates of vacancy, while, proportionally, housing shortage became rampant. Therefore, the continual demonstrations against the ‘clear-cut’ renovation policy began to spread out. This led to the protesters appropriating empty spaces, ultimately giving way to the squatter movement.

A double-sided political resistance was prevalent when the movement was in its full swing (the early part of the 1980s). As Mitchell argues, on the one hand, the inhabitants took the issues out to the streets as outdoor actions, and, on the other, they pursued an alternative lifestyle in indoor setting.<sup>16</sup> Though the ideals that guided their forerunners were still present, a change in urban renewal policies was of their utmost interest. In other words, the local matters were now at the center of attention.

Though the ‘German Autumn in 1977’ weakened protest activities, in no way did it stem the militancy in the city. Appropriations and evictions were regular occurrences during the former half of the 1980s. Mitchell quotes Aust and Rosenbladt to describe the usual scenes:

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<sup>13</sup> Azozomox and Armin Kuhn, “The Cycles of Squatting in Berlin (1969–2016),” in *The Urban Politics of Squatters’ Movements (The Contemporary City)*, ed. Miguel A. Martinez Lopez (New York: Palgrave Macmillan US, 2018), 147.

<sup>14</sup> Sabine von Dirke, *“All Power to the Imagination!”: The West German Counterculture from the Student Movement to the Greens* (Lincoln and London: University of Nebraska, 1997), 85.

<sup>15</sup> Vasudevan, *Metropolitan Preoccupations*, 90

<sup>16</sup> Peter Angus Mitchell, “Contested Space: The History of Squatting in Divided Berlin c.1970-c.1990,” (PhD diss., University of Edinburgh, 2015), 173.



...the two sides marched towards each other like ‘adversarial armies’, with the officers beating their truncheons against their shields and the squatters clapping together the cobblestones they held in their hands to the same rhythm as the punk music blaring out of a squatted building in the background.<sup>17</sup>

Complementing this, the bassist of Neubauten, Alexander Hacke (1965-) recounts that the ever-occurring squatter riots made him feel like the world was nearing its end. He adds, “I seriously didn’t believe I would live to see eighteen.”<sup>18</sup>

On the other hand, a more instructive side of the movement was coexisting. At the time, numerous vacancies were in a serious state of disrepair. Therefore, many among the squatters attempted to renovate the buildings themselves, without the help of the government. This group of squatters were called ‘rehab-squatters,’ who took DIY approach in refurbishing the tenement buildings.<sup>19</sup> The construction activities were their implicit political challenges, gaining control over their own properties.<sup>20</sup> This rehab-squatting even helped to foster a sense of community among the tenants.<sup>21</sup> The residents consisted of the marginalized minorities: the non-conformist youth, who were deemed social outcasts at the capitalistic *Bundesrepublik*,<sup>22</sup> the elders and Turkish immigrants with working-class backgrounds, punks, vagrants, artists, etc. Centered around these, a close-knit community arose, practicing alternative/communal lifestyles. In other words, a utopian microcosm – isolated from the mainstream society – was at hand, one which went on to give birth to its vibrant art scene.

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<sup>17</sup> Stefan Aust and Sabine Rosenblatt, *Hausbesetzer: wofür sie kämpfen, wie sie leben und wie sie leben wollen*, (Hamburg: Hoffmann und Campe, 1981), 186-87, quoted in Peter Angus Mitchell, “Contested Space: The History of Squatting in Divided Berlin c.1970-c.1990.” (PhD diss., University of Edinburgh, 2015), 182

<sup>18</sup> Max Dax and Robert Defcon, *Einstürzende Neubauten: No Beauty without Danger*, (Bremen: Druckhaus Humburg, 2005), quoted in Michael Andrzej Ryszka, “The Experimental Music of Einstürzende Neubauten and Youth Culture in 1980s West Berlin,” (Master’s thesis, University of Calgary, 2012), 2.

<sup>19</sup> Such autodidactic approach was prevalent in the artistic milieu as well.

<sup>20</sup> Emily Pugh, “You Are Now Entering Occupied Berlin: Architecture and Rehab-Squatting in West Berlin,” *Centropa* 14, no. 2 (May 2015): 193

<sup>21</sup> Kramer, “Grass Roots Urbanism,” 47

<sup>22</sup> They were able to escape from military duties as well, for West Berlin residents were granted conscription exemption.

## 2.2.2 The Subculture: The Art Scene

The alternative tendencies were not confined to the lifestyle the inhabitants pursued. It was also widespread among the art scenes. By the late-1970s, the milieu proliferated with clubs and bars; the economic systems consisted of employees who were living from social welfare.<sup>23</sup> This provided an apt environment for the excessive nightlife to ferment. The scene mainly revolved around the SO36 area in Kreuzberg, whose residents were primarily comprised of squatters. Also, the Federal Republic was providing continuous economic incentives to attract younger generation; it was a strategic effort to keep the city alive. Most of the creative youths were living from social welfare, which enabled them to pursue whatever artistic aspirations they wished.

The artistic youths refused to align themselves with the annihilating revolutionaries of the previous decades. They instead strove for authenticity that was distinct from the mainstream. Such tendency can be viewed as a by-product of the anti-establishment demonstrations of their predecessors. Their “accumulated subcultural knowledge [...] emerges through delineation from the mainstream, and allows social ascendancy across the established classes.”<sup>24</sup> Bader and Scharenberg comment that the importance of local music correlates with the alternative lifestyles and that the authenticity is the incarnation of the milieu’s local subculture.<sup>25</sup> In addition, the willingness to rebuild a new German culture was strongly felt. This was accompanied by uneasiness about facing prewar German traditions – most were born around or after the end of the Second World War.

In this sociopolitical context, the artistic youths pursued deliberate autodidactic approaches (echoing the ‘rehab squatters’). Their artistic practices defied all musical conventions or virtuosity, promoting amateurism and DIY aesthetics. Accordingly, there was no need for formal training; the genuine expressive statement of the artist alone was what really mattered. For good measure, as there was no demand for commercial success, most of

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<sup>23</sup> M. Mayer, “Soziale Bewegungen in der Stadt: eine vergleichende Untersuchung von Veränderungsprozessen im Verhältnis zwischen städtischen Bewegungen und Staat in den Vereinigten Staaten von Amerika und der Bundesrepublik Deutschland,” (Habilitation dissertation, Department of Political Science, Johann Wolfgang Goethe-Universität, Frankfurt am Main. 1986), quoted in Andrej Holm and Armin Kuhn, “Squatting and Urban Renewal: The Interaction of Squatter Movements and Strategies of Urban Restructuring in Berlin,” trans. Andrew Winnard, *International Journal of Urban and Regional Research* 35, Issue 3 (May 2011): 2.

<sup>24</sup> Ingo Bader and Albert Scharenberg, “The Sound of Berlin: Subculture and the Global Music Industry,” *International Journal of Urban and Regional Research* 34, Issue 1 (March 2010): 79.

<sup>25</sup> Ibid.

the record labels were run by the young entrepreneurs themselves. In other words, there was absolutely no conformity pressure to anything.

These young artists coined themselves *Geniale Dilletanten* (also the name of a festival that was held in Berlin's Tempodrom in 1981); it translates to 'Brilliant Dilettantes' in English. Notice the misspelling of the word *Dilletanten*, which is spelled with an additional 'l' instead of 't'. This was deliberately done to showcase their anti-mainstream spirit. One of the definitive embodiments of this was the *Neue Deutsche Welle*. This was a genre that demonstrated the youths' artistic spirit (inspired by American/British punk), while it prioritized singing in the German language. This aspect was an important trait of this genre, for it was undertaken as a confrontational act. Ironically, it was a reaction to the mainstream Anglophone punk and new wave, which had been their initial inspiration. In hindsight, such an act could be viewed as an implication of their desire to establish their own authenticity.

Such freewheeling artistic ethos characterized West Berlin's subculture. It was rather short-lived, blossoming from the late 1970s to its fall from the later part of the Eighties. Scholars such as Hermand regard the alternative scene as an embodiment of low culture, which conclusively lacks in artistic achievements.<sup>26</sup> On the other hand, there are institutions like the Goethe Institute, which chose the band Einstürzende Neubauten to represent Germany in the Expo 86, a World's Fair held in 1986 in Vancouver.<sup>27</sup> All said, the legacy of the West Berlin subculture seems to be open to interpretation. However, it is clear that chaotic social phenomena engendered the milieu, and that the artistic practices were reflections of the restless zeitgeist.

To summarize this chapter, starting from the 1960s to its peak during the following decade, youth activism was prevalent in West Germany. Although student movement was a global matter, the German counterpart was distinctive in that the fascist past of the nation was at its heart. The years 1967-1968 saw eruptions of massive protests that collectively further radicalized the student demonstrators. Their activism culminated in 1968; this was also the year when the Emergency Laws were passed. This event saw the disintegration of the student movement, after which a more ultra-violent body such as Red Army Faction emerged. Notwithstanding their violent campaigns, their terrorisms ended in defeat; hence, the youth activism was met with its dissolution at last.

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<sup>26</sup> Jost Hermand, *Die Kultur der Bundesrepublik Deutschland, 1945-1965* (Munich: Nymphenburger, 1986), 518, quoted in Sabine von Dirke, *"All Power to the Imagination!": The West German Counterculture from the Student Movement to the Greens* (Lincoln and London: University of Nebraska, 1997), 143.

<sup>27</sup> Paul Hockenos, *Berlin Calling: A Story of Anarchy, Music, The Wall, and the Birth of the New Berlin* (New York: The New Press, 2017), 93.

With the revitalization of left-wing politics at the TUNIX Congress in 1978, the more micropolitical activisms emerged. The squatter movement arose in parallel with these alternative movements. Although tumultuous confrontations between the squatters and state police were regular occurrences, the ‘rehab-squatters’ practiced implicit activisms by renovating the vacancies themselves. This helped to fertilize a close-knit community among the tenants – a utopian microcosm.

Among these residents were the artistic youths – the *Geniale Dilletanten* – that celebrated excessive nightlife, defying traditionalism in favor of amateurish authenticity. Additionally, by writing their lyrics in German, they also distinguished themselves from the Anglophone mainstream dominance. In consolidation, their sole aim was to live out their genuine artistic passions, segregating themselves from the established conventions. As Hall states, such a creative milieu is a by-product of urban phenomena distinctly rising in the cities that are “actively transitioning forward, invoking feeling of needing to react in the heat of myriad social transitions.”<sup>28</sup> With its claustrophobic, riotous, and visceral nature, West Berlin in the 1980s certainly exemplifies such a transitional setting. It gave birth to a unique cultural aggregate as a result.

At the center of the artistic environment described in this chapter were the industrial music pioneers Einstürzende Neubauten, indulging their passions for new sounds that signified their own definition of *authenticity*. This band’s history, music, and philosophy are considered in the next chapter. The West Berlin artistic environment is also where Magnus Lindberg encountered Neubauten’s music. This encounter and its impact on Lindberg and his music, especially on *Kraft*, will be considered in later chapters.

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<sup>28</sup> Sir Peter Hall, “Creative Cities and Economic Development,” *Urban Studies* 37, No. 4 (April 2000): 646.

**Chapter 3**  
**The Art and Aesthetics**

### 3 The Art and Aesthetics

Chapter 2 delved into the historical/political matters related to West Berlin during the 1960-80s. This was to contextualize the setting where Neubauten and Lindberg crossed paths. Here in chapter 3, the focus will be on the two subjects' respective aesthetic backgrounds and compositional practices. First, to make the transition smooth, the chapter will begin with the discussions concerning Neubauten. Section 3.1.1 will address Neubauten's aesthetic outlooks and musical experimentations. Section 3.1.2 will discuss the band's ideological associations with the ideas of German-Jewish philosopher and literary critic Walter Benjamin (1892-1940), and the French playwright, dramatist, and theorist Antonin Artaud's (1896-1948) *Theater of Cruelty*. Section 3.2 will deliberate about the biographical background of Magnus Lindberg and his compositional preoccupations, placing the emphasis on the earlier years - those that collectively contributed to the birth of *Kraft*.

#### 3.1 Einstürzende Neubauten's Aesthetic Parameters<sup>29</sup>

Einstürzende Neubauten was formed on April 1, 1980. Its initial lineup consisted of the leader Blixa Bargeld (1959-), the percussionist NU Unruh (1957-), and another percussionist FM Einheit (1958-).<sup>30</sup> Before long, the band was joined by the guitarist Alexander Hacke and bassist Mark Chung (1957-). Later, in the mid-90s, Hacke replaced Chung on the bass, when Chung and Einheit left the group. Following this, Jochen Arbeit (1961-) joined as the guitarist and the drummer Rudi Moser<sup>31</sup> replaced Einheit on the percussion. This lineup remains to this day.

As introduced before, throughout their career, the musicians have been widely regarded as industrial post-punk music pioneers. They blend the sounds of scrap-metals, gas tanks, metal barricades, concrete, jackhammers, chainsaws, and more with electronic and rock 'n' roll instruments. The band's sonic experiments have had far-reaching influence on

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<sup>29</sup> The textual and performance features are also important aspects of the band's artistic practice, however, due to the nature of this essay, the discussion will primarily focus on the matters related to its sound.

<sup>30</sup> The two female members, Gudrun Gut (1957-) and Beate Bartel (1957-), soon left the group to form other bands. They both were also active members in the milieu at the time.

<sup>31</sup> Information concerning his birthdate was nowhere to be found.

other artists: e.g., their own native rock act Rammstein (1994-), the British electronic band Depeche Mode (1980-), the American industrial rock band Nine Inch Nails (1988-), and more.

Its body of work includes music for television, film, dance, and theatre. And at the time of writing this essay, it has released official 13 studio albums among the vast number of other releases. When the band was first formed, nobody would have expected that it would be so long-lived with its rich oeuvre.<sup>32</sup> Against the odds, the band made a name for itself with a career spanning 40 years. It became a symbolic figure of West Berlin's subculture.

### 3.1.1 The Pursuit of Authenticity

The band's leader, Blixa Bargeld recalls the formational phase of the band in the movie, *B-Movie: Lust & Sound in West Berlin 1979-1989*. He talks about the ideas that underlay their musical motives: "I asked myself: what is my authentic situation in life? What is my personal environment? [...] Then we went off on expeditions. We set off into the industrial landscapes and began to make music with nothing."<sup>33</sup> While he is speaking, the movie shows a scene of the band working in the hollow spaces, performing on the *objets trouvés*. The succeeding scene is more violent, showing the band vandalizing an abandoned automobile (see Figure 1). The scenes and Bargeld's remarks imply that the idiosyncratic enactments were born out of the members' self-reflections, stemming from their geographical identity. Their surroundings had both physical and ontological significations, and, accordingly, the band's appropriation of it characterizes its self-defined *authenticity*.

Furthermore, a more directly musical question underlies the band's compositional practice. Bargeld claims that the band undertook the sonic experiments with the intention to measure the extent to which its music relates to its personal environments.<sup>34</sup> Such an idea foregrounds the direct connection between the band's vicinity and its music. Admittedly, discussing about programmatic elements in music is already a *cliché*. However, Bargeld's reference touches on the important factor that put things into perspective: the band's direct adoption of its proximity is an inherent part of its sonic experimentations. Therefore, it is not a mere depiction of everyday life, but an application of the *immediate*. This gives rise to the

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<sup>32</sup> Bargeld was randomly asked to play at a gig in the Moon discothèque in West Berlin on April 1, 1980.

<sup>33</sup> *B-Movie: Lust & Sound in West-Berlin 1979-1989*, DVD, directed by Jörg A. Hoppe, Klaus Maeck and Heiko Lange (Hamburg: Edel Germany GmbH, 2015).

<sup>34</sup> Jürgen Teipel, *Verschwende Deine Jugend* (Berlin: Suhrkamp Verlag, 2012), 288.

semantic contexts pertinent to its time and space. As LaBelle points out, it “opens up a vocabulary of sound based on direct contact.”<sup>35</sup>

The corporeal properties the musicians perform in and on are noteworthy. They are not originally intended for musical purposes. Therefore, as soon as their vibration reaches the eardrum, one’s perceptual awareness is pointed to the source’s identity and its spatiotemporal dimensions. Such evocative capacity of the concrete sound is well articulated by LaBelle:

Hearing a certain metallic sound brings to mind the dangling of keys, or a particular scratch conjures the scrawl of a pen in the midst of writing... such acoustical moments trigger images completed in the mind, pictures filled in by complementing the sonic signifier with its physical source. They, in turn, raise sound as kind of “vocal” index of the life of objects, leading us to recognize the animate as not only corporal display but as sonorous release.<sup>36</sup>

Thus, urban residues can serve as musical instruments. They can communicate about themselves and the space they are in – i.e., the symbolic mediator. It goes on to engender the pertinent images in the listener’s consciousness. And once the musician turns the materials into music, the evocative capacity weds to the meanings, intentions, and narratives imparted by the musician.

Such dialectical synthesis offers a palpable lens through which Neubauten’s methodology can be inspected. Through the methodology, the band incarnates its self-reflection in its sonic landscape. Comprehensively, these elements characterize the band’s trademark cacophony. This subject will be discussed in more detail in chapter 4, in conjunction with the discourse regarding Lindberg’s *Kraft*.

Meanwhile, the pursuit of authenticity demonstrates the group’s affiliation with West Berlin’s artistic youth – i.e., the *Geniale Dilletanten*. It gives rise to a distinct way of sound production, which enables the band to challenge conventional musical thinking. In other words, the destructive sound productions can also be viewed as a direct attack conducted against pre-existing musical conventions, or more specifically, against the prewar German tradition and Anglophone<sup>37</sup> rock ‘n’ roll. This way the group’s connection to the brilliant dilettantes is justified. Take for example their first LP released in 1981, *Kollaps*; it manifests

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<sup>35</sup> Brandon LaBelle, *Background Noise: Perspectives on Sound Art* (New York: The Continuum International Publishing Group, 2006), 40.

<sup>36</sup> *Ibid.*

<sup>37</sup> Additionally, the band’s lyrics are written primarily in German.



the group's artistic intentions. They sought to come up with a record that was so sonically destructive that it was unlistenable. To elaborate the experience in more detail, Hall quotes Johannes Ullmaier, writing in the *New Journal of Music* in 1997: "Whoever listens to the first three pieces of the debut LP... at the appropriate – that is extreme – volume and with open ears would be hard pressed to find anything comparable in music history."<sup>38</sup>



(Figure 1. Excerpt from the video: *Einstürzende Neubauten - Autobahn*)

### 3.1.2 The Traces of Walter Benjamin

Some additional philosophical ideas drive the band's pursuit of authenticity. For one, its artistic expressions draw on the ideals put forth by the German-Jewish philosopher, Walter Benjamin. Bargeld clarifies the influence of the philosopher: "My idea of destructivity corresponds with Walter Benjamin's."<sup>39</sup> The matter is certainly not unrelated to antipathy towards National Socialism (in the same vein as the '68ers):

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<sup>38</sup> Johannes Ullmaier, "EINSTURZ AUF RATEN: DIE EINSTÜRZENDE NEUBAUTEN AUF DEM WEG VON E NACH U," *Neue Zeitschrift Für Musik* (1991-)158, no. 2 (1997): 20-25, quoted in Mirko M. Hall, "Blixa Bargeld and Noise," in *Musical Revolutions in German Culture: Musicking Against the Grain, 1800-1980* (New York: Palgrave Macmillan US, 2014), 123.

<sup>39</sup> Nevaree, "Einstürzende Neubauten - Nürnberg 1986 - ZDF Report (with subtitles)," *YouTube* video, 10:07, January 23, 2014, <https://www.youtube.com/watch?v=mGA1eAlbZXc>.

The Neubau/Altbau dichotomy points to historical dimension in our work. It's not architectural destruction that haunts us. It's the rift torn in the culture of Europe and especially Germany. The prewar avant-garde tradition was completely severed. There was no German tradition one could refer to without feeling guilty. That culture which existed before the war is rightly forbidden to us, because of what it led to – or at best, did not prevent.<sup>40</sup>

Hall complements this by claiming that Neubauten's cacophony was meant to *destruct* the musical traditions in Germany tainted under the manipulation of the Fascist regime.<sup>41</sup>

Taking that into account, Neubauten's noise acts as a double-sided contravention: on one hand, its defiance against mainstream musical conventions, and, on the other, its sociopolitical rebellion. Notice the concept of 'destruction' as the common denominator between the two. Given these considerations, there is a necessity to focus on the philosophical parameters of Benjamin, together with his historical views. These conceptual models further contextualize the band's musical destructions, enabling a deeper understanding on a semantic level.

The band's idea of destruction incorporates a particular philosophical concept of Benjamin. A metaphoric character named 'destructive character' aptly represents the idea. Bargeld links this character to his band's music: "Connect the 'destructive character' with this historical perspective and you have a key to our method and madness."<sup>42</sup> Benjamin's article, "The Destructive Character," written in 1931, describes the nature of this character: "The destructive character knows only one watchword: make room. And only one activity: clearing away."<sup>43</sup> But then, what is being cleared exactly? Benjamin writes that it is 'cheerful' in destructing "the traces of our own age,"<sup>44</sup> and that such an act "means to the destroyer a

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<sup>40</sup> Kenneth Laddish and Mark Dippé, "Blixa Einstuerzende: Bargeld Harassed," *Seele Brennt Archive*, accessed December 27, 2021, <https://seelebrenntarchive.wordpress.com/2013/04/17/bargeld-harassed-interview-1993>. The term *Altbau* refers to the buildings in Berlin that were built in the prewar period; *Neubau* refers to the newly built ones after the WWII.

<sup>41</sup> Mirko M. Hall, "Blixa Bargeld and Noise," in *Musical Revolutions in German Culture: Musicking Against the Grain, 1800-1980* (New York: Palgrave Macmillan US, 2014), 118.

<sup>42</sup> Laddish and Dippé, "Bargeld Harassed."

<sup>43</sup> Walter Benjamin, "THE DESTRUCTIVE CHARACTER / WALTER BENJAMIN," *PUNKTO*, accessed May 17, 2019, <https://www.revistapunkto.com/2011/12/destructive-character-walter-benjamin.html>.

<sup>44</sup> *Ibid.*

complete reduction, indeed a rooting out.”<sup>45</sup> It is this act of ‘clearing out’ – be it tradition or history – that generates room that functions as the path that leads to the ‘new.’

Having said that, the character expresses no interest in what would replace the emptied space. It instead acknowledges ‘destruction’ as a way to completely emancipate things from what is/was already. The Korean sociologist, Hong-Jung Kim defines such ‘destructivity’ as ‘pa-sang-ryeok (破像力)’ – i.e., the faculty to destroy imagination.<sup>46</sup> He argues that it operates in a destructive mode. Unlike its opposite form, the imaginative faculty (想像力), whose highest form, he claims, is ‘dream,’ pa-sang-ryeok demonstrates itself through ‘awakening’ – an ‘awakening’ to a new world.<sup>47</sup> Therefore, the iconoclastic faculty of the ‘destructive character’ can be regarded as being constructive (also positive). It demolishes for the sake of ‘empty space’ – i.e., the path to a new world.

Neubauten’s destructions evoke the scenes of the visceral retaliations of the squatters against the urban renewal policies. They represent the willingness to “exorcise and build a different present.”<sup>48</sup> They also seek to tear down pre-existing musical boundaries, as well as to *destruct* the tarnished German musical tradition. All these are carried out to ‘make room’ that emancipates, leading to the ‘new.’ Upon listening to the noisy drumming on scrap metals in the track “*Tanz Debil*,” or to the sounds generated by the street drills in “*Steh auf Berlin*,” one is helpless but to feel threatened by the brutality the sounds exude. The sonic spectacle suggests the band as a potential incarnation of Benjamin’s ‘destructive character’ in the auditory domain.<sup>49</sup>

Another allegory written by Benjamin can enhance the understanding of positive destructivity. The ‘angel of history’ that appears in Benjamin’s final text, *Theses on the Philosophy of History* (1942) is the allegory in question. The discourse goes all the way back to 1921, when Benjamin had acquired a painting by the name of *Angelus Novellus* (1920). It is a work by German-Swiss painter Paul Klee (1879-1940). At first glance, it is difficult to ascertain

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<sup>45</sup> Ibid.

<sup>46</sup> “Shiganül ch'owörhan penyaminüi chihye 시간을 초월한 벤야민의 지혜 [The Timeless Wisdom of Benjamin],” Daehak-Shinmun, last modified October 7, 2020, <http://www.snunews.com/news/articleView.html?idxno=12487>.

<sup>47</sup> Kim Hong-Jung, *Sahoehakchök Pasangnyök* 사회학적 파상력 [Sociological Capacity of Destructivity] (Paju: Munhakdongne, 2016), 10.

<sup>48</sup> Sandra Bettencourt, “Materialities of the new: processes of destruction and construction in the work of Einstürzende Neubauten,” in *Keep it Simple, Make it Fast! An approach to Underground Music Scenes (Vol. 1)*, ed. Paula Guerra and Tânia Moreira (Porto: University of Porto. Faculty of Arts and Humanities, 2015), 350.

<sup>49</sup> Hall, *Musical Revolutions in German Culture*, 118.

whether the angel in the painting is puzzled or horrified. With its strange facial impression, it appears to be feeling at odds with the way things are unfolding before it (see Figure 2).



(Figure 2. *Angelus Novus* by Paul Klee)

Benjamin is known to have cherished this painting since its purchase. Moreover, he conceived the corresponding allegory based on the painting. Here is its account:

A Klee painting named “Angelus Novus” shows an angel looking as though he is about to move away from something he is fixedly contemplating. His eyes are staring, his mouth is open, his wings are spread. This is how one pictures the angel of history. His face is turned toward the past. Where we perceive a chain of events, he sees one single catastrophe which keeps piling wreckage upon wreckage and hurls it in front of his feet. The angel would like to stay, awaken the dead, and make whole what has been smashed. But a storm is blowing from Paradise; it has got caught in his wings with such violence that the angel can no longer close them. This storm irresistibly propels him into the future to which his back is turned, while the pile of debris before him grows skyward. This storm is what we call progress.<sup>50</sup>

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<sup>50</sup> Walter Benjamin, *Illuminations*, ed. Hannah Arendt, trans. Harry Zohn (New York: Schocken Books, 1969), 257-58.

The allegory can be interpreted from four different angles. The angel itself represents the history of humankind. It faces the past – a past seen as catastrophe – that is piling up in front, while its back faces the future. Meanwhile, the storm – blowing from Paradise – is propelling everything forward with an enormous force. This is referred to as ‘progress.’ The ‘storm’ contains a destructive force, active in the ‘now,’ piling up the wreckages of history. The demolition of the storm echoes the ‘destructive character,’ clearing the path for the sake of ‘empty space.’

The destructive force also incorporates Benjamin’s theological views, ‘Jewish Messianism.’ Referring to the ‘storm’ in the allegory of ‘angel of history,’ Handelman says:

This storm [...] seems to represent the destructive aspects of a revolution, whose purgation alone can bring any progress to the ruins of history, [...] the forces of destruction and catastrophe somehow both contain within themselves and propel movement toward the future redemption.<sup>51</sup>

She complements this, quoting Scholem, “...in Jewish messianic thinking, catastrophe and redemption are intertwined.”<sup>52</sup> With these in mind, one could refer to Neubauten’s blare as an incarnation of the ‘messianic’ destruction. It manifests the eschatological ‘clearing up,’ while as Robinson points out, “hope appears, not in what history brings, but in what arises in its ruins.”<sup>53</sup>

This redemptive aspect of ‘destruction’ paves the way for subsequent discourse. Jennifer Shryane likens the Berlin seen through Benjamin’s book, *A Berlin Childhood around 1900* (1938) to West Berlin in Neubauten’s times. Benjamin portrays the ‘heroic rag-pickers’<sup>54</sup> as the marginals to capitalism. They collected rubbish in deserted urban areas and re-assembled it, resurrecting the materials into completely new/reusable objects.<sup>55</sup> Neubauten’s

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<sup>51</sup> Susan Handelman, “Walter Benjamin and the Angel of History.” *Cross Currents* 41, no. 3 (1991): 346.

<sup>52</sup> Gershom Shelom, *On Jews and Judaism in Crisis Selected Essays*, trans. Werner J. Dannhauser, (New York: Schocken Books, 1976), quoted in Susan Handelman, “Walter Benjamin and the Angel of History.” *CrossCurrents* 41, no. 3 (1991): 348.

<sup>53</sup> Andy McLaverty-Robinson, “Walter Benjamin: Messianism and Revolution – Theses on History,” *Ceasefire Magazine*, accessed July 5, 2020, <https://ceasefiremagazine.co.uk/walter-benjamin-messianism-revolution-theses-history>.

<sup>54</sup> Jennifer Shryane, *Blixa Bargeld and Einstürzende Neubauten: German Experimental Music: ‘Evading do-re-mi’* (London: New York: Routledge, 2016), 77.

<sup>55</sup> *Ibid.*

re-appropriation is in a similar vein. The band imparts new life to the found materials, turning them into raw sounding percussion instruments. Accordingly, both enactments carry similar transformative power. The materials abandon their original purpose in favor of the new – i.e., a connotation of rebirth. They both *destruct* the presupposition of ruins, discovering new life from it. Such an idea stems from Benjamin’s ‘messianic’ destruction.

Furthermore, the transformative destruction extends to implicit acts of rebellion. In paraphrasing Benjamin’s contents, Shryane mentions the term ‘critical gaze,’ defining it as the lens through which the ‘abandoned’ saw their Fordist society.<sup>56</sup> The ‘gaze’ represents the critical perspective of the group, operating at the heart of its rebellion. Thus, the ‘critical gaze’ underlies the transformative destruction. Through it, the residues take on a new identity, becoming symbols of the group’s social identity. Hence, the transformative aspect of re-assembling demonstrates the group’s autonomy, ultimately extending to its defiance.

Neubauten’s musical strategies can be equated with such interactions. The found metals become the source of its noise, becoming symbolic attacks against the governance and conventions. In this vein, Hegarty makes a point referring to industrial music. He claims that the industrial materials make “intimations of alienation [and] the use of metals/debris/non-musicality could be read as a wallowing in alienation.”<sup>57</sup> Neubauten’s compositional strategies can be referred to as such, representing its way of ‘destructivity.’

### 3.1.3 Antonin Artaud and “The Theatre of Cruelty”

A theatrical paradigm that emerged during the twentieth century underlies Neubauten’s artistic strategy. The band drew inspiration from the theatrical ideas of the French playwright, dramatist, and theorist, Antonin Artaud (1896-1948). His “The Theatre of Cruelty” articulated in his book, *The Theatre and Its Double* (1930) is the matter in question. This avant-garde form of theater seeks to break away from the conventional Western theater forms. It seeks to get rid of the emphasis on textual concerns (or the ‘literal’ meanings<sup>58</sup>).

With the lack of texts, physicality determines its expressive means: dances, hideous screams, grotesque images, pulsating lightings, shocking gestures, and more. Artaud articulates the objective of its ferociousness: “I propose then a theater in which physical images crush and hypnotize the sensibility of the spectator seized by the theater as by a whirlwind of

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<sup>56</sup> Ibid.

<sup>57</sup> Paul Hegarty, *Noise/Music: A History* (New York and London, 2007), 113.

<sup>58</sup> Although textual feature is an integral component of Neubauten’s music, here, the discussion leans towards its sonic experimentations.

higher forces.”<sup>59</sup> By embracing vibrant physicality, it tries to engender the transpersonal experience of the spectators. The sense of outrage dismantles the linguistic aspects, as the subconscious becomes entwined with tempest.

Artaud came across the Balinese theatre in 1931 at the Colonial Exposition in Paris. This instilled in his mind the forming of this new theatrical form. Though he had been influenced by surrealism and symbolism, the theatre of Southeast Asia paved the way for his redefining of the art form. Over time, his ideas proved influential in the world of music as well. The likes of David Tudor (1926-1996), Pierre Boulez (1925-2016), John Cage (1912-1992), and Morton Feldman (1926-1987) were all impacted by his theatrical ideas.

But, perhaps, Neubauten’s oeuvre could be held up as better examples that draw on Artaud’s ideas.<sup>60</sup> This is especially plausible regarding integrating *physicality* into the performance space. The band’s performances incorporate shamanic improvisations, Bargeld’s earsplitting screams, physical body, *objets trouvés*; they all exemplify Artaudian ideals. They are reminiscent of Artaud’s final work titled, *To Have Done with Judgment of God* (1947). As for musical instruments, Artaud elaborates on the matter in *The Theatre and Its Double*:

MUSICAL INSTRUMENTS: They will be treated as objects and as part of the set. Also, the need to act directly and profoundly upon the sensibility through the organs invites research, from the point of view of sound, into qualities and vibrations of absolutely new sounds, qualities which present-day musical instruments do not possess, and which require the revival of ancient and forgotten instruments or the invention of new ones. Research is also required, apart from music, into instruments and appliances which, based upon special combinations or new alloys of metal, can attain a new range and compass, producing sounds or noises that are unbearably piercing.<sup>61</sup>

Neubauten’s performance embodies these ideas. Its first recorded performance called *Stahlmusik* (1980), which was recorded live-on-tape underneath an autobahn bridge, can be

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<sup>59</sup> Antonin Artaud, *The Theater and Its Double*, trans. Mary Caroline Richards (New York: Grove Press, 1958), 82-3.

<sup>60</sup> In an interview with Shryane, conducted in November of 2004, Bargeld confirmed that Artaud was a great influence on Neubauten, especially regarding his use of scream. Complementing this, he also claimed that he had heard the recordings of Artaud’s vocalizations and had read *The Theatre and Its Double* in the late 1970s. See Shryane, *Blixa Bargeld and Einstürzende Neubauten*, 84.

<sup>61</sup> Antonin Artaud, *The Theater and Its Double*, 95.

held up as an apt example. The metallic residues are present ‘as part of the set,’ reverberating in the hollow space, while the sound of electric guitar and Blixa’s deliriums powerfully reinforce their presence. Furthermore, the *corporeality* of the found instruments and space amplify the effects of the performance, establishing the worldview on a broader level. The noise and reverberation of the space collectively exude an industrial atmosphere. They also go on to capture the zeitgeist of West Berlin, representing the band’s powerful destruction, in both a philosophical and a musical spectrum.

To summarize, the fact that both Artaud and Neubauten incorporate vibrant physicality as an integral performance mechanism is noteworthy. This aspect aims to engender palpable spectator experience. This is especially important for this research, for it is the *physicality* that plays a central role in elaborating the subject matter. Taking these into account, the musical methods of the German group can be seen from two angles: the musicians’ destructivity based on Benjamin’s concepts, and turning of those ideas into music, guided by Artaud’s principles.

Up to this point, the discourse has focused on Neubauten’s aesthetic parameters parallel with its musical explorations. It started from the group’s pursuit of *authenticity*, extending to the influence of Walter Benjamin and Antonin Artaud. Within this framework, the discussion centered around the band’s employment of the found materials. Bearing in mind West Berlin’s status quo, the sociopolitical realities must have impelled the musicians to self-reflect in the way they did. Accordingly, the sound became the embodiment of their reflections; hence, the cacophony given birth by the society. This powerful dynamic of the sound could be referred to as what so intrigued Magnus Lindberg. It compelled him so far as to employ it to his own opus.

### 3.2 The Biographical Background and Compositional Preoccupations of Magnus Lindberg

In the beginning, Lindberg’s personal statements about *Kraft* served as the clue to this investigation. In introducing the work, he often mentions his encounter with Neubauten’s music. He claims that the noises were completely new to him, coming to him as a massive “shock.”<sup>62</sup> He even likens the experience to the French composer Claude Debussy (1862-1918) coming across Javanese gamelan music in 1889.

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<sup>62</sup> New York Philharmonic, “Magnus Lindberg on “Kraft,”” *YouTube* video, 3:14, September 10, 2010, <https://www.youtube.com/watch?v=SswOOiNoStU>.



In an interview with the *Neue Zeitschrift für Musik*, he recalls that though punk music was not the type of music he had been acquainted with, the social situation of 1980s West Berlin sparked his interests.<sup>63</sup> Complementing this, at another interview held in Amsterdam Gasholder in 2012, he recounts that he wanted to bring in the ‘industrial sounds of the society’ to his composition.<sup>64</sup> Creative influence as such is worthy of notice. A composer of contemporary ‘concert music’ drawing inspiration from an underground industrial rock genre was not common at the time – if not even now. Furthermore, it is noteworthy that *Kraft* was initially meant to become a piano concerto. However, upon witnessing Neubauten’s music, Lindberg rang the changes and chose instead to combine symphony orchestra with metallic junk.<sup>65</sup> Ultimately, this work went on to become his signature work.

The focus now shifts to discussion about the composer. The following sections will place emphasis on his early years until the creation of *Kraft*. Section 3.2.1 will address Lindberg’s biographical information, and section 3.2.2. will discuss the composer’s aesthetic parameters.

### 3.2.1 The Biographical Background of Magnus Lindberg

Magnus Gustaf Adolf Lindberg was born on June 27, 1958, in Helsinki, Finland. His father gifted him an accordion when he was six years old. He started to take his first piano lessons at the age of eleven, while also growing up with the genre of progressive rock. The composer had great fondness for bands like Pink Floyd (1965-2014). In an interview with *The Guardian*, he says that Béla Bartók’s (1881-1945) *Concerto for Orchestra* (1943) and the album, *Tarkus* (1971) of the English progressive rock band, Emerson, Lake & Palmer (1970-) were the first recordings he had purchased.<sup>66</sup> Evidently, it is noticeable that his musical interests were not limited to classical music.

At the age of fifteen, he decided to become a pianist. He entered the Junior Academy of the Sibelius Academy, majoring in the instrument. In parallel, it was also around this time when he seriously attempted to compose his own pieces. He recalls that he was trying to compose a wind-quintet, for which “it took [him] one month to calculate the first measure of

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<sup>63</sup> Friedrich Spangemacher, “Punk und Muttermilch: Ein Gespräch mit dem finnischen Komponisten Magnus Lindberg,” *Neue Zeitschrift für Musik*, 152, no.1, (January 1991), 28.

<sup>64</sup> Thea Derks, “Thea Derks speaks with Magnus Lindberg on Kraft 23 June 2012,” *SoundCloud* audio, 10:26, 2012. <https://soundcloud.com/thea-derks/thea-derks-speaks-with-magnus> (accessed February 09, 2020).

<sup>65</sup> “Alan Gilbert and Magnus Lindberg in conversation with Sarah Willis,” *Berliner Philharmoniker Digital Concert Hall* video, 18:46. February 01, 2014. <https://www.digitalconcerthall.com/en/interview/16884-4>.

<sup>66</sup> “Facing the Music: Magnus Lindberg,” *The Guardian*, accessed July 14, 2020, <https://www.theguardian.com/music/2015/dec/07/facing-the-music-composer-magnus-lindberg>.

the flute part.”<sup>67</sup> Notwithstanding, in 1974, he composed his first composition titled *Donor* (1975).

From the following year 1976, with his close friend Esa Pekka-Salonen, a worldwide renowned Finnish conductor and composer, with whom Lindberg maintains a lifelong working partnership, he started to sight-read a large body of classical repertoires on the piano every Saturday. This was carried out under the instruction of their teacher, Risto Väisänen (1947-2018). The lessons helped them to cultivate counterpoint and harmony skills. Though Lindberg continually composed at the time, his main goal was still to become a pianist.

Before long, this started to shift. Lindberg started to study composition with Einojuhani Rautavaara (1928-2016) in 1977. In 1978, the composer gave up the studies with Rautavaara in favor of studying with Paavo Heininen (1938-).<sup>68</sup> He recalls about the latter:

He was very open-minded and possessed a comprehensive knowledge of the contemporary repertoire, which he disseminated in his teaching. He is one of the first Finnish composers to have adopted a coherent dodecaphonic style. He introduced us to the composers who were important for him: Roberto Gerhard, Karl Amadeus Hartman, Michael Tippett, Elliott Carter... He was and is an important figure for the musicians of my generation.<sup>69</sup>

Such a modernist approach influenced the pupils greatly. Many of them went on to become key figures of the Finnish contemporary music scene and beyond. The likes of Jukka Tiensuu (1948-), Kaija Saariaho (1952-), Jouni Kaipainen (1956-2015), and Veli-Matti Puumala (1965-) are the representative figures.

Heininen’s influence became more outwardly apparent when his pupils came together to form an informal association in 1977, namely *Korvat Auki!* (Ears Open!). It consisted of composers, performers, and musicologists. The young students (including Lindberg) came together under the slogan of “New Music for people!” Meanwhile, Heininen also suggested his students look beyond the conservative Finnish music scene, to see the global modernist music trend. Influenced by this, the society took a critical stance against the nationalistic views of its

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<sup>67</sup> Steve Smith, “Embracing the Orchestra as Alive,” *The New York Times*, accessed July 14, 2020, <https://www.nytimes.com/2009/09/27/arts/music/27smith.html>.

<sup>68</sup> It was also around this time when Lindberg took classes of Osmo Lindeman (1929-1987) in electro-acoustic music. Occasionally, he made visits to EMS Electronic Music Studio in Stockholm.

<sup>69</sup> Peter Szendy, “Interview with Magnus Lindberg,” in *Magnus Lindberg*, ed. Risto Nieminen, trans. by Nick Le Quesne (Helsinki: Editions Ircam – Centre Georges – Pompidou and Finnish Music Information Centre, 1993), 9.

home country. It demanded a globalization of their music scene, modelling themselves on the continental European avant-garde. In so doing, the members started to organize lectures, seminars, and concerts focused on contemporary works.

Esa Pekka-Salonen describes their views at the time: “Music may not be tonal, music may not be modal, music may not be easily understandable – the form of music must be complex.”<sup>70</sup> He comments that they “thought that the people needed post-serial music and they had been neglected for a long time in Finland where post-serial music had been enjoyed only by privileged; our idea was to bring it to all people.”<sup>71</sup> Such was the progressive attitude prevalent among the members; Lindberg himself was also in the front line. Although, perhaps not inherently the same (their issue was solely related to musical matters) as the youths in postwar West Berlin, these folks, too, took a highly critical stance against the society they were affiliated with. Lindberg recalls that the members were considered arrogant due to their critical attitudes, but those meetings revolving around modern music helped to foster creative discussions among them.<sup>72</sup> Evidently, the youthful sense of invulnerability drove them to live out their genuine musical passions.

The progressive atmosphere was extended further, leading to the formation of an experimental ensemble called, the Toimii Ensemble. This ensemble was founded in 1980 by Lindberg himself with some other fellow musicians, including the members of *Korvat Auki!* (see Figure 3). It was founded upon the idea of discovering new ways of creating music. The ensemble was more like a laboratory for the members, which enabled them to freely conduct new artistic experiments. Lindberg benefitted from this greatly; he also played the piano in it. The unit proved to be a great vehicle for Lindberg’s musical experiments. They went on to premier his breakthrough pieces such as *Action-Situation-Signification* (1982) and, none other than, *Kraft*.

Lindberg did not settle in his home country for his exploration of new musical trends. Besides his visits to the EMS studio in Stockholm, he went to Siena in 1979 and 1981 to attend Franco Donatoni’s (1927-2000) summer courses. Additionally, in 1980 and 1982, he also attended the *Ferienkurse* in summer at Darmstadt, given by the British composer Brian Ferneyhough (1943-). During these visits, he also made acquaintance with the German composers York Höller (1944-) and Helmut Lachenmann. In particular, the latter’s thought system made a lasting impact on him.<sup>73</sup>

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<sup>70</sup> Pirkko Moisala, *Kajja Saariaho* (Urbana and Chicago: University of Illinois Press, 2009), 7.

<sup>71</sup> Ibid.

<sup>72</sup> Szendy, *Interview*, 10.

<sup>73</sup> *Kraft* bears Lachenmann’s influence, which will be discussed more later in chapter 5.

All the while, following his graduation from the Sibelius Academy in 1981, Lindberg took off for Paris to privately study with Vinko Globokar (1934-) and Gerard Grisey (1946-1998). He recalls that the two teachers were so stylistically disparate that, at one time, the completely opposing advice made him feel as “if he were living two lives simultaneously.”<sup>74</sup> In addition to these encounters, he also met with Boulez and the Greek-French composer Iannis Xenakis (1922-2001). All said, it is only imaginable how much the composer took away from these diverse influences.



(Figure 3. *Korvat auki!* in the 1980s)

For this essay, the years 1984-85 hold special significance, because Lindberg resided in Berlin during the period. During the stay, he composed the piece *Metal Work* (1984) and *Kraft*. In hindsight, the timing of this residency was perfectly congruent with the conceiving of the latter. This owes to the fact that timbral experimentation (particularly regarding using concrete sounds) was already an important point of Lindberg’s reflection by then. Therefore, it could be claimed that the encounter with Neubauten’s music lent a further impetus to expand its scope.

To summarize, Lindberg’s active pursuit of new music caused him to proactively promote contemporary music to his own nation’s public. Also, it caused him to leave his homeland for the continental-European modern music scene. This journey as a young composer ultimately led him to West Berlin in 1984 – a move that was instrumental to the creation of *Kraft*.

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<sup>74</sup> Julian Anderson, “The Spectral Sounds of Magnus Lindberg. Julian Anderson Introduces One of Scandinavia’s Leading Composers,” *The Musical Times* 133, No. 1797 (November 1992): 565. JSTOR (1002573).

Lindberg's works gained world-wide acclaim over the years, winning multiple prizes. Initially, he won the young composers' section of the UNESCO Rostrum of Composers in 1982 for *...de Tartuffe, je crois* (1981). Following this, he won the UNESCO Rostrum of Composers in 1986 for *Kraft*. In the same year, he was awarded the first prize of Prix Italia for *Faust* (1986). He also won both the Nordic Council Music Prize and Koussevitzky International Recording Award for *Kraft* in 1988. In 1993, he was awarded with Royal Philharmonic Award (London) in large-scale composition category. Seven years later, he won the Musik Sommer Berlin European Composer Prize (2000), and, in 2003, he received Wihuri Sibelius Prize. He was also among the recipients of the Pro Finlandia Order of the Lion of Finland award in 2012. He served as composer-in-residence of two internationally renowned orchestras as well: New York Philharmonic Orchestra (2009-2012) and London Philharmonic Orchestra (2014-2015). These are some of the recognitions Lindberg has received over the years, making him (together with his *Korvat Auki!* peer Kaija Saariaho) one of the most successful Finnish composers of his time.

Following the success of *Kraft*, Lindberg's compositional style took a slightly different turn. He started to place greater emphasis on the developments of his harmonic language, namely the 'extended-chaconne principle.' Edward Paul Martin argues (quoting Lindberg's opinion) that such adoption of classical form was enacted for the sake of achieving balance in the music.<sup>75</sup> This tendency was continually fertilized over the years. For example, the composer further developed the 'extended-chaconne principle,' insofar as combining it with the elements of functional tonality. Stemming from these aspects, his career as a composer primarily revolves around orchestral compositions today.

### **3.2.2 Compositional Preoccupations: From the Beginning towards *Kraft***

Lindberg's early works well resonate with the aesthetic outlooks of *Korvat Auki!*. The key figures of post-serialism such as Pierre Boulez and Karlheinz Stockhausen (1928-2007) were key influences, and, as a pianist, he performed the works of the latter. But his interest in post-serialism goes even further back. During his upper secondary level school times, he visited libraries of the American Center and the British Council. He recalls about the experience: "They had (damn) good selections of records. I went home with all kinds of weird music those

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<sup>75</sup> Edward Paul Martin, "Harmonic Progression in the Music of Magnus Lindberg," (PhD diss., University of Illinois at Urbana-Champaign, 2005), 75.

days, things like Milton Babbitt and other stuff. I was really into proper new music.”<sup>76</sup> Evidently, a noted serialist figure like Milton Babbitt had already caught the young Lindberg’s interests. This later translated into his active application of the serial principle. Take for example pieces like *Musik för två pianon* (1976), *Tre stycken* (1976), and the song *Jag vill breda vingar ut* (1978): they all fall into this category, capitalizing on the matrix-driven technique.<sup>77</sup>

Lindberg’s compositional conceptions took a new turn from the year 1978 onwards. This period proved pivotal in his career since his musical thinking started to change radically. As a result, he cultivated a style that became characteristic of his compositions. In this vein, *Kraft* holds a great importance, as it embodies most of his compositional preoccupations at the time. This section will introduce six of these preoccupations, and the influences that inspired them.

### (1) Rhythm

According to the composer, Heininen’s instructions had helped him to point his thoughts to the most fundamental aspects of music, namely the dimensions of rhythm.<sup>78</sup> His remarks, in an article he wrote in 1986, “*Magnus Lindberg: A voice from the 1980s*,” offers insights into the matter. He not only points out the importance of rhythm, but also how that relates to his perception of time:

Ever since I became familiar with Stockhausen’s tempered tempo scales and the organization of time in his 1950s pieces, the rhythmic element has been assuming an increasingly prominent role in my music. Stockhausen perceives time as an interval divided into impulses, rather like the *Talea* in Indian music; for me, however, time’s function in a piece is more like that of an energy generator and framework. In many of my compositions, I have accorded so much priority to rhythmic organization that I have devised the whole “back-bone” of the work like a long papyrus roll with nothing but rhythms. I prefer the word “rhythm” to “duration” – in my view, duration is associated

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<sup>76</sup> Jari Kallio, “While composing, you have to get yourself excited” – interview with Magnus Lindberg,” *AIM-ADVENTURES IN MUSIC* (blog), 10.31.2019, <https://jarijuhanikallio.wordpress.com/2019/10/31/while-composing-you-have-to-get-yourself-excited-interview-with-magnus-lindberg>.

<sup>77</sup> Risto Nieminen, “Works,” in *Magnus Lindberg*; ed. Risto Nieminen, trans. by Nick Le Quesne (Helsinki: Editions Ircam – Centre Georges – Pompidou and Finnish Music Information Centre, 1993), 73-77.

<sup>78</sup> Spangemacher, “Punk und Muttermilch,” 26.

with articulation of tones and is thus controlled, in conjunction with instrumentatim, by the rhythm material.<sup>79</sup>

The extent to which this directly relates to Heininen's instructions is not exactly clear. However, it is evident that the composer was drawing extra attention on the matter. This is noteworthy, for the temporal aspect decisively manifests the change of his musical thinking.

Concretely speaking, Lindberg confers a sense of temporal continuity on the musical materials. This is contrary to the serialist method, whose predetermined matrix fixes the materials, giving rise to static situation. Lindberg achieves the continuity via morphing the materials over the musical discourse – i.e., a metamorphosis from one figure to another. The transformations are attained through a number of intermediate stages, which Lindberg calls by the term, 'interpolations.' He applies this process to the parameters such as rhythm, harmony, texture, and timbre, gaining comprehensive control over the music. He likens the process to animation films, claiming: "imagine a hat and a rabbit and the possibilities of creating any number of different intermediate versions between these two objects!"<sup>80</sup> Therefore, the music now comprises components processed in a continuous flow. The more in-depth accounts of the matter will be addressed in due course. However, as a preliminary address, the deliberation highlighted the importance of Lindberg's perception of musical time – i.e., the viewing of the form as a linear continuum. This aspect originates from the radical changes of his compositional style.

## (2) Texture

Initially, analyses of the compositions of the Italian composer Luciano Berio (1925-2003) triggered the change of Lindberg's musical thinking. He made the analyses for the lessons with Heininen, and their influences were first embodied in his composition *Arabesque* (1978).<sup>81</sup> Takemi Sosa claims that Berio's structural ideas provided Lindberg with a fertile ground for research, namely "a way of grouping and developing sound textures."<sup>82</sup> Complementing this, Lindberg's account explains the matter in greater depth:

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<sup>79</sup> Magnus Lindberg, "Magnus Lindberg: A voice from the 1980s," *Finnish Music Quarterly*, September 15, 1987, <https://fmq.fi/articles/magnus-lindberg-a-voice-from-the-1980s> (accessed August 17, 2019), 1.

<sup>80</sup> Tomi Mäkelä, "Magnus Lindberg – Changing style," *Finnish Music Quarterly*, August 16, 1992, <https://fmq.fi/articles/magnus-lindberg-changing-style> (accessed August 20, 2019), 1.

<sup>81</sup> Nieminen, "Works," 78.

<sup>82</sup> Takemi Sosa, *Magnus Lindberg – Musical Gesture and Dramaturgy: in Aura and the Symphonic Triptych* (Helsinki: Academy of Cultural Heritages; Semiotic Society of Finland, 2018), 95.

The prime mover behind this change in my style was getting to know the music of Luciano Berio from a new angle. [...] The experience I got on discovering the incredible granular variations which are an important element of Berio's music, the ability of the musical texture to take shape according to the graininess of the surface, the extraordinary expressive richness and sense of drama which is associated with the music irrespective of its structural properties, it all changed my approach to musical thinking in general.<sup>83</sup>

The complex layers of sound (graininess of the surface) characterize the musical texturing. Starting with *Arabesque*, Lindberg began to compose using this method; he set aside the method of using predetermined theoretical framework. Evidently, the interest now was on the “sonority, in the surface of a musical work.”<sup>84</sup> This aspect is also prominent in *Kraft*, especially, in the several conflicting micro-materials stacking up in multi-layers. The aspect goes on to assume a prominent role in developing the form.

But this aspect extends to a greater dimension. As the composer points out, the musical texturing brings about ‘expressive richness and sense of drama.’ Osmond-Smith provides additional insights into the matter: “The experiences counterpointing complex layers of sound, and the gestural style of writing that provided rhetorical continuity in the absence of more traditional harmonic frames of reference.”<sup>85</sup> In other words, this musical texturing displaces the tonal tension-relaxation mechanism, emerging as the new agent that gives rise to dramatic intensity. Therefore, it plays an important role in instilling expressivity into the music. In *Kraft*, the multi-layers of micro-materials alternate between dispersion and convergence, resembling *tension and relaxation* in tonal context.

### (3) Induction from Preset Material

Lindberg woke up to another compositional approach when he participated in Franco Donatoni’s summer courses in Siena in 1979. He tells Szendy that Donatoni’s “radically different approach was a stimulating shock for [him].”<sup>86</sup> Ilkka Oramo briefly describes Donatoni’s approach:

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<sup>83</sup> Risto Nieminen, “The calculation of processes is a source of inspiration,” *Finnish Music Quarterly*, August 16, 1986, <https://fmq.fi/articles/the-calculation-of-processes-is-a-source-of-inspiration> (accessed August 17, 2019), 2.

<sup>84</sup> Nieminen, “Works,” 78.

<sup>85</sup> David Osmond-Smith, *Berio* (Oxford and New York: Oxford University Press, 1991), 15-16.

<sup>86</sup> Szendy, *Interview*, 10.



The first thing in the morning [Donatoni] went to the blackboard and started exploring permutations. He took a fragment from somewhere, for instance from Schoenberg, and developed out of it a system of transformations in order to show how to deal with elementary musical material.<sup>87</sup>

The remark refers to a way of working with materials that are readily available at hand. The given shapes and characters of the presets steer the process of the development. As the ‘deductive’<sup>88</sup> approach (serialism) had governed Lindberg’s compositional thinking up to this point, such an ‘inductive’<sup>89</sup> way must have provided a fresh impulse to him.

Admittedly, it did not take long for him to adopt the newly learned method to his own composition. Immediately, during his stay in Siena, he composed the work *Quintetto dell'estate* (1979) scored for flute, clarinet, violin, cello, and piano.<sup>90</sup> He began working with preconceived musical ‘models’,<sup>91</sup> of which the respective traits were pre-defined. Just like Donatoni, Lindberg went about the primary materials by coming up with their respective transformations/variants. At its premiere in Helsinki in 1980, at the Young Nordic Composers Festival, he wrote that the “basic models are used in two different ways: by putting them together unaltered, and by gradually changing their characteristics. The simultaneous combination of these two models brings about intense dramatic situations.”<sup>92</sup> Notice the latter part of the comment implying the aforementioned musical texturing. It stresses the importance of the feature in injecting elements of drama into the music. Therefore, this could serve as an indication that Lindberg aptly combined the newly gained knowledge, namely the grainy-texturing methods and the inductive compositional style.

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<sup>87</sup> Ilkka Oramo, “Magnus Lindberg: EXPO, Piano Concerto No. 2, Al largo,” Studies in music and other writings (blog), WordPress.com, May 2, 2013, <https://relatedrocks.com/2013/05/02/magnus-lindberg-expo-piano-concerto-no-2-al-largo>.

<sup>88</sup> Ibid.

<sup>89</sup> Ibid.

<sup>90</sup> The composer counts this work as being his opus one

<sup>91</sup> The musical ‘models’ can also be viewed as musical ‘gestures.’ Based on assessments of several scholars, including the British composer Brian Ferneyhough (also one of the teachers of Lindberg), Sosa defined musical gestures being: “a functional unit that is part of the dramaturgical structure.” – see Sosa, *Magnus Lindberg – Musical Gesture and Dramaturgy: in Aura and the Symphonic Triptych*, 66.

<sup>92</sup> Nieminen, “Works,” 80.

#### (4) Temporality and Continuity

The deliberation on inductive method extends to the topic of temporality. Oramo argues that a pre-designed primary material is flexible, in the sense that it can maintain tolerance to its variants, but, simultaneously, it is discontinuous because they are already stationary units.<sup>93</sup> Such static characteristics of the material are not unrelated to the issues of temporality raised in the music of the twentieth century. It primarily owes to the fall of functional/hierarchical aspect of tonal harmonic system. The serial method equalized the pitch classes and other parameters, bringing about isolation of the thematic materials.

So then, how did Lindberg go about conferring a sense of continuity on the interlocked musical entities? Interestingly, according to Oramo, Lindberg found the answers from the works of his countryman, Jean Sibelius (1865-1957), especially, from the *Seventh Symphony* (1924).<sup>94</sup> Lindberg's own comment elaborates on this in detail:

In his last symphonic works the development and thematic works are particularly interesting. Each theme gives rise to another, according to genuine cycles of metamorphosis. The work – the whole work – is in perpetual evolution. At the same time, this method of proceeding via successive associations is bound up with a narrative conception. [...] the *Seventh Symphony*, in particular, was truly a cult work [...] For me, the crucial aspect of his work remains his conception of continuity. In *Tapiola*, above all, the way genuine processes are created using very limited materials is pretty exceptional.<sup>95</sup>

The notion of each theme giving rise to another provides a problem-solving conceptual framework. It is an agent that emancipates the musical models from their static nature, which extends to continuous flow.

On the other hand, there is a clear difference in language between Sibelius's work and Lindberg's. Though living in the early twentieth century, Sibelius continued to compose in tonal fashion, albeit much in an expanded form. On the contrary, Lindberg's music is

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<sup>93</sup> Oramo, "Magnus Lindberg: EXPO."

<sup>94</sup> Szendy. Sosa, Oramo, Otonkoski and Nieminen all make mention of the Russian writer Mikhail Bulgakov's (1891-1940) influence on Lindberg's formal thinking, namely the narrative technique that has several stories being developed at the same time. This lends credence because Lindberg also composed incidental music for Bulgakov's play *Molière, or the Cabal of the Devout* in 1980. It also alludes to the fact that Lindberg drew inspiration from literary sources.

<sup>95</sup> Szendy, *Interview*, 11.

inherently dodecaphonic. Owing to this, Lindberg's way of imparting continuity is in sharp contrast to that of Sibelius. It is not the harmonic progression that propels the discourse; it is rather the use of intermediate 'interpolations' that characterizes Lindberg's method. This tendency calls attention to the *plasticity* of the materials, whose potential can be maximized by producing new entities out of them (much like a potter making jars out of clay). In this way, the horizontal unfolding of the music, seen through the lens of linear continuity, now becomes a notably significant feature. The focus is no longer on each individual moment itself (like that of Stockhausen's 'moment-form'), but each event is part of an organic narrativity.

### (5) Binary Opposition

But if transitory states produce continuity, and if they were the aisles through which the presets are turned into new entities, then one may raise a subsequent question: what framework determines the beginning and the ending of the whole process? The idea that a preset is bound for a new identity already alludes to the existence of a starting point and a destination. In fact, the *new identity* is the *destination*. Therefore, the point implies 'binary opposition' as a conceptual agent capable of forming the framework. The given two extremes (start and end) accompany a process between themselves.

For Lindberg, dichotomy is the vehicle with which he steers the process of developing drama in the music:

Music is an art of dramatic expression. I have nothing against narrative music, which is today seen as a sort of taboo. The way in which Witold Lutoslawski manages to personify thematic work into true *characters*, almost like in a play, is extraordinary. I like a work to have a *direction*, a development, an evolution between the beginning and the end. My concepts are comparable – but not identical – to those of tonal thought: I think of music in terms of tensions, of relationships of suspension – or even of suspense – and I think it is a shame that we have forgotten everything which gave tonal music its richness, in favour of static structures which are more concerned with isolated moments, isolated instants. [...] If you work with oppositions, with contrasted ideas, you are accused of classicism, because of their proximity to the bithematic thinking of the sonata. As for me, I willingly own up to this sort of classicism, if that means accepting tensions and a narrative character as components of writing.<sup>96</sup>

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<sup>96</sup> Ibid., 12.

Lindberg's claim makes it explicit that binary opposition is an integral element in his compositions.

The matter can be taken one step further: what opposing pair stands as the principal duality in Lindberg's music? One of Lindberg's methods can offer insight into the matter. This method was already a feature (though presumably in its infancy) apparent in *Quintetto dell'estate*. According to Nieminen, climax is not achieved by further complexifying the texture, but, instead, it is attained by simplifying it; climax is reached at a point of utmost simplicity (or primitivity).<sup>97</sup> Hence, this is the pivotal binary opposition in Lindberg's music – i.e., complexity vs simplicity. It consumes the global framework, strengthening dramatic effects on the macroscopic level. Here, Berio's influence draws the attention again. This is because the polyphonic texture is the very factor that initially injects friction (or drama) into the musical space. The several disparate components initially trigger the *friction* at the outset, which reaches the ultimate climactic state over time: the utmost 'simplicity.'

*Kraft* well exemplifies this idea as its overall form revolves around this way of using two opposite extremes. Lindberg attributes such a compositional method to his teacher, Vinko Globokar:

My contact with Vinko Globokar in the beginning of the 1980s also made me aware of the necessity of extreme polarities as the basis for thinking on form. Only the extreme is interesting – striving for a balanced totality is nowadays an impossibility. An original mode of expression can only be achieved through the marginal (a romantic perception?) – the hypercomplex combined with the primitive.<sup>98</sup>

This extreme polarity is exactly what characterizes the musical narrative of *Kraft* – i.e., hyper-complex vs primitive. At the climactic point, all the materials converge on one single note, after which the music is culminated in their complete dispersion. Meanwhile, the sound of blowing into a water bucket is heard in the background. The performance seems to depict 'sublimation' of the materials. This is in sharp contrast to the introduction of the piece, where multiple conflicting materials were splashed at once with an enormous energy.

Through all these reflections, Lindberg eventually renounced serialism in favor of his new compositional thinking. At this point, the discussion briefly returns to the beginning of this section, where it was addressed about Lindberg's perception of time. Several composers

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<sup>97</sup> Nieminen, "The calculation of processes," 6. Regarding the extramusical elements, Nieminen specifically holds up *Action·Situation·Signification* as a work that bears Globokar's influence. See Nieminen, "Works," 86.

<sup>98</sup> Lindberg, "A voice from the 1980s," 2.

and theorists of the twentieth century have proposed potential solutions to the temporal issues that evolved in parallel with the rise of the integral serialism, in particular, the isolated stationary nature of musical form engendered by the static nature of inner contents.<sup>99</sup> By exploring an eclectic mix of influences (the aforementioned), Lindberg was able to ground his own approach to the matter. In sum, the composer's response consisted of inviting successive evolutions of the components, and injecting drama via the use of contrasting textures. In conjunction with these, the conception of binary opposition brings a teleological framework into the music.

### (6) Timbre

Another distinct quality of Lindberg's compositional practice came to the fore in the early 1980s, namely his exploration of timbre. The piece *Action-Situation-Signification* well represents the composer's reflection on this matter. The work predates *Kraft* by three years, and is scored for bass clarinet, piano, percussion, cello, and tape. In it, Lindberg experiments with diverse tone colors, capitalizing on various extended techniques – e.g., blowing into the instrument, rubbing the tam-tam with Styrofoam, etc.). It pushes the boundaries of each instrument's potentials. Consequently, the palette of sounds is vastly expanded, generating great numbers of unorthodox sonorities.

The piece was composed in Paris in 1982. It was the very first piece in which Lindberg explored *musique concrète* – an invention of Schaeffer – although with a slightly altered approach from the original one.<sup>100</sup> The sounds of the tape (i.e., environmental field recordings) succeed the instrumental music, each time a movement comes to an end (i.e., *The Sea, Rain, Fire* and *Wind*). The tapes operate as the central elements of the music, while they also serve as the model for their instrumental counterparts. In relation to this, Anderson writes as follows: “every aspect of playing technique is covered in music of raw, frenetic energy, which periodically coalesces into the recorded sounds of sea, rain, fire and wind, the acoustical properties of which govern the work's four movements.”<sup>101</sup>

The inner contents and hidden forms of the recordings are to be turned into instrumental music. Thus, instead of bringing the collected materials together as a collage (as would be done under the original principle of *musique concrète*), Lindberg juxtaposes his instrumentals with the samples. Therefore, continuity is built around the two subject matters,

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<sup>99</sup> For more on the temporality of twentieth-century music, please see Hasty, “On the Problem of Succession and Continuity in Twentieth-Century Music,” and Kramer, “Moment Form in Twentieth Century Music.”

<sup>100</sup> Schaeffer's principle of *musique concrète* emphasizes assemblage and modification of the recorded sounds.

<sup>101</sup> Anderson, “The Spectral Sounds,” 565.

giving rise to a relationship between natural phenomena (sound recording) and human reaction (the performance) as a musical metaphor. In doing so, Nieminen claims, Lindberg achieves continua between the two different sound worlds, while using the instrumental sounds to counter “the laws governing the concrete sounds.”<sup>102</sup>

Parallel to this, the instrumentals bear the traces of Lachenmann’s *musique concrète instrumentale*, in which the main objective is to generate different types of tone colors via the application of extended techniques. Hence, this work can be viewed as a by-product of a sonic experimentation that selectively makes use of both ideas. It combines them together with the aim to expand the sphere of timbre.

At any rate, all these point out that the composer’s scope of timbre was expanded. It was no longer confined to the conventional orchestral sounds; it broadened to the scope of concrete sounds. The adoption of recorded noises, extended techniques, and *objets trouvés*, all embody such reflections. This particularly holds a great significance in this study, for the use of *concrete* sounds is pertinent to the influence of *Einstürzende Neubauten*.

Altogether, the assessment reveals that Lindberg’s journey as a composer had begun from his exploration of serialism. This gradually started to take a new turn from the late 1970s. After all, he started to renounce serialism in favor of his new compositional style. The multi-layer texturing coupled with the inductively driven development methods, in accordance with a sense of organic narrativity and drama, all in conjunction became his characteristic language. Furthermore, his active exploration of timbre allowed him to adopt *concrete* sounds into his compositions, enabling him to vastly expand his palette of tone colors.

The composer’s preoccupations of this period are imperative for this essay. They ultimately contributed to the creation of *Kraft*. The discussions thus far have covered the historical background of 1980s West Berlin and the aesthetic/compositional preoccupations of the two main subjects. All said, it is now sensible to turn over to the discourse regarding the actual *influence* of *Neubauten*’s sounds on *Kraft*.

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<sup>102</sup> Nieminen, “The calculation of processes,” 7.

**Chapter 4**  
The Impact: The Details of the Influence

## 4 The Impact: The Details of the Influence

This chapter will discuss the influence of Neubauten on *Kraft* in detail. As aforesaid, Lindberg spent the years 1984-85 in Berlin, receiving funding from the Goethe Institute.<sup>103</sup> It was also addressed that *Kraft* was originally meant to become a piano concerto. And it was the encounter with Neubauten's music that caused the composer to ring the changes to the style of his work.<sup>104</sup> On the whole, this observation served as the cornerstone of this investigation, for a composer of contemporary concert music drawing inspiration from an underground industrial rock band was/is a rare case.

### 4.1 The Emancipation of Noise

The sonic experimentations of the two subjects can be considered as products of twentieth century musical practices. With the introduction of Arnold Schönberg's (1874-1951) twelve-tone technique and *The Art of Noises* by Italian Futurist Luigi Russolo (1885-1947), the era saw the decline of functional tonality. Also, technological evolution enabled experimentation with electronic instruments, wielding influence on all styles. Over and above all this, the *emancipation of noise* in music was an arising matter. Table 1 shows some examples of the emerged convention, which also appears to form a shared background behind Neubauten and Lindberg.

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<sup>103</sup> Lindberg was not the only one who visited Berlin during the Cold War times. David Bowie (1947-2016) and Iggy Pop (1947-) were also among the visitors during the 1970s, recording their works in Hansa Studio – the studio is in the Kreuzberg district. Likewise, the British synthpop band Depeche Mode recorded in the same studio as well.

<sup>104</sup> "Alan Gilbert and Magnus Lindberg in conversation with Sarah Willis."



**Table 1. Examples of the emancipation of noise in music**

Artists	Work (Year)
Luigi Russolo	<i>Gran Concerto Futuristico</i> (1917)
John Cage	<i>Living Room Music</i> (1940)
Pierre Schaeffer	<i>Étude aux chemins de fer</i> (1948)
Karlheinz Stockhausen	<i>Mikrophonie I</i> (1964)
Helmut Lachenmann	<i>Pression for Solo Cello</i> (1969)
Iannis Xenakis	<i>Pléiades</i> (1978)
Jimi Hendrix (1942-1970)	<i>The Star-Spangled Banner</i> performance at the Woodstock Festival (1969)
Jimi Hendrix	Guitar-burning performance at the Monterey Pop Festival (1967)
Pete Townshend (1945-)	Guitar smashing during live performance with his band The Who (1964)

Russolo's promotion of noise in music arose from the concern of Italian futurism with artistic responses to the spread of new technology and the modern urban environment. He asserted that, since the industrial revolution, mankind had become familiar with new environmental sounds (or industrial noise), and that this aspect should be assimilated into music. Bearing that in mind, he created noise-generating instruments named *Intonarumori*, with which he gave a performance of the *Gran Concerto Futuristico* in 1917. The performance was met with strong disapproval at the time, and the devices were all destroyed during World War II. However, Russolo's progressive ideas of noise went on to impact future generations. With the continuous advancement of technology, different styles that involve concrete/electronic sounds began to flourish.

In this vein, Neubauten's active use of *industrial* noise is in alignment with the ideas of the Italian Futurist.<sup>105</sup> The sounds of urban materials assimilated into its music manifest Russolo's ideas. Moreover, this is also the aspect to which Lindberg drew his attention. He specifically points out the "urban, industrial sound element,"<sup>106</sup> as he refers to the characteristics of the band's sound. This implies that Russolo's way of thinking underlie the aesthetic values of both figures.

The first and final movements of John Cage's *Living Room Music* incorporate household items such as magazines, books, frames of window, etc. These are everyday life objects that are readily available for use. Hence, they come to incarnate the composer's "interest in the real and the proximate in the here and now, and presence of actual sound."<sup>107</sup> Such a notion also appears to be in the same vein with his famous quotation: "Everything we do is music." These ideas bring one's attention to the correlation between everyday reality and its sounds. Therefore, the use of everyday life objects "leads to narratives about shaping relationships with the world."<sup>108</sup>

The focus on the *ordinary* and its sound is inherent in Neubauten's artistic practices. The found metal objects are taken from its vicinity that go on to underscore the relation between the objects and sounds. This is also why the materials become a proper expressive medium for the band's pursuit of *authenticity*. Therefore, the mechanism ultimately highlights the connection between the sounds and the society, which is a central theme of this research. It could be referred to as an important factor behind the cause of Neubauten's influence on Lindberg.

But the matter can be taken one step further. Such an aspect appears to be inherent in *Kraft* as well, though slightly different in its nature. The American conductor Alan Gilbert (1967-)<sup>109</sup> says, "Magnus wants junk taken from junkyards in the city, where the performance

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<sup>105</sup> *Intonarumori* is featured in the band's music video for the track *Blume* (2001), and on the cover of the album *Alles wieder offen* (2007). Blixa Bargeld composed works for The Orchestra of Futurist Noise Intoners, a replica of Intonarumori orchestra; he performed with the unit as well.

<sup>106</sup> Marc Bridle, "S&H Interview: Magnus Lindberg in interview with Marc Bridle," *MusicWeb International*, accessed July 16, 2020, <http://www.musicweb-international.com/SandH/2001/Nov01/Lindberg.htm>.

<sup>107</sup> LaBelle, *Background Noise*, 41.

<sup>108</sup> *Ibid.* The contents addressed earlier (section 3.1), in relation to Neubauten's sonic experimentations, are connected to this.

<sup>109</sup> Gilbert led the New York Philharmonic from 2009-2017. As an admirer of the work, he gave multiple performances of *Kraft* at different locations; he also gave the first American premier of the work in New York. The

is happening. So, it really is from that environment; that location.”<sup>110</sup> Thomas Schwarz (1983-), the percussionist of NDR Elbphilharmonie Orchestra, is of same mind, mentioning that the work cannot be performed the same way twice.<sup>111</sup> This means that the work builds a relationship between itself and the locality of the performance location, which echoes Cage’s aesthetic thinking. Although no sources were found referring to Cage’s influence on Lindberg, this feature would have accompanied the adoption of urban metal objects.

Pierre Schaeffer worked with recorded *concrete* sounds, which could be referred to as ‘samples.’ That is, sound is taken from a source, which then becomes an isolated piece of audio information. This aspect is also in alignment with his ‘reduced’ listening. *Étude aux chemins de fer* is the very first composition of *musique concrète*. In the work, Schaeffer processes the recorded samples, assembling them together as a composition. Neubauten incorporates the actual body of the metallic objects in its performance space. However, in its audio recordings, it involves processing of the ‘raw’ samples, which shares a similar tone to Schaeffer’s methods. Though audio processing already became a much more common practice in the 1980s, Neubauten’s selective use of *concrete* sounds is in the same vein as Schaeffer’s approach.

On the other hand, as aforementioned, Lindberg approaches the matter a little differently. Lindberg draws on the sound classification system proposed by Schaeffer (see chapter 5), while capitalizing on concrete sounds in his work *Action-Situation-Signification*. But instead of assembling the samples as a collage, he turns the samples’ inner contents into instrumental music. And in doing so, he makes use of the extended techniques of respective instruments. This echoes Lachenmann’s *Pression*, a representative work of the composer’s *musique concrète instrumentale*. In other words, Lindberg continues to compose for orchestral instruments in his pursuit of liberating noise in music. In that sense, one could also view this as the work containing Western classical music tradition. But, even with such disparity, the composer recounts that Schaeffer’s ideas on concrete sounds had lasting impact, which culminated in *Kraft*.<sup>112</sup>

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conductor was the main music director of the New York Philharmonic, when Lindberg was serving his term as the composer-in-residence for the orchestra.

<sup>110</sup> “Alan Gilbert and Magnus Lindberg in conversation with Sarah Willis.”

<sup>111</sup> NDR Klassik, “Magnus Lindberg about “Kraft,”” *YouTube*, 4:24, November 31, 2021, <https://www.youtube.com/watch?v=eP9FdBh87LI>. In the same video, Lindberg says that the objects all come in different shapes and colors, and that such *local flavor* is part of the work’s philosophy.

<sup>112</sup> Magnus Lindberg, interview by the author, Helsinki, May 3, 2021. The interview was part of a webinar held via Zoom.

Referring to Stockhausen's *Mikrofonie I*, Lindberg recounts the work has influenced him in terms of bringing noise into his music and organizing them:

*Mikrofonie I*, in many ways, it is almost a bible of how to organize noise, because [...] Stockhausen, in that piece, [...] asked for 34 different ways of playing the tam-tam, describing the kind of sound he wanted, and then giving examples of how to produce them. So, for me, bringing this kind of sounds into the music was really very decisive.<sup>113</sup>

The trace of the reference is certainly evident in *Action-Situation-Signification*, as well as in *Kraft*. For example, in the former, he asks to use a Styrofoam to rub on the tam-tam; in the latter, he asks to use a chain to have it to resonate against the instrument. But the influence seems to be apparent on the conceptual level as well. By amplifying and processing the vibrations of the instrument, Stockhausen concentrates on the inner properties of the vibrations. He refers to this process as “[discovering] the micro-world of the acoustic vibrations.”<sup>114</sup> Such a conception appears to be inherent in *Kraft*. Though the instrument is not utilized the same way per se, Lindberg places the instrument at center of the hall. This configuration implies that it is the *symbolic* foundation of all sound sources, from which the micromaterials stem (see chapter 5). In other words, the influence is underscored not only on a technical level, but also on a symbolic level as well.

Lindberg goes on to mention yet another influence: the Greek-French composer Iannis Xenakis.<sup>115</sup> He specifically refers to the work *Pléiades* as a major influence in terms of grouping the percussion sounds according to different substances – e.g., wood, metal, skin, etc. In particular, he adds that the work provided an insight into selecting *metallic* instruments that have characteristics of occurring in an instant – much like hitting a piece of wood, but with metallic surface. This he mentions after introducing some of the idiophones available in a symphonic orchestra, referring to them as ringing instruments. This is an important observation, for it is the *impulse* sound that assumes a prominent role in *Kraft*, especially, in relation to the use of the found objects.

The final three in Table 1 are examples from popular music. They are specimens that illustrate the emancipation of noise in the genre, as well as newly emerged performance

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<sup>113</sup> Magnus Lindberg, interview by the author, Helsinki, May 3, 2021. Stockhausen himself writes that he asked for 36 ways of playing the tam-tam. See Stockhausen, *Stockhausen on Music*, 83.

<sup>114</sup> Karlheinz Stockhausen, *Stockhausen on Music*, comp. Robin Maconie, (London and New York: Marion Boyars, 1989), 87.

<sup>115</sup> Magnus Lindberg, interview by the author, Helsinki, May 3, 2021.

practices that relate to the emancipation. Jimi Hendrix's use of high-volume distortion and feedback on electric guitar in the 1960s well exemplifies the trend. The method also became a medium to express political dissent. Hendrix's performance of *The Star-Spangled Banner* at the Woodstock Festival in 1969 well exemplifies this. The national anthem is performed in such a way that the noise of the electric guitar invades the heart of the music. Hence, the music becomes a symbolic subversion aimed at the then-current issues, such as racial inequality and the Vietnam war. In a similar way, Neubauten used its sonic experimentations to express its political considerations, incorporating *junk* from its surroundings.

Astonishing performances such as the smashing of guitars by Pete Townsend of The Who and Hendrix burning his at the Monterey Pop Festival represent the parallelism of noise and performance. In a way, they are along the same lines as Artaud's theatrical ideas, which promote the physical and visual elements bringing about transcendental effects. This is, of course, also relevant to the performance strategies of Neubauten. The band embodies Walter Benjamin's ideas of *destruction* by bringing in the metallic noise, as well as fire on stage and drilling into concrete with a jackhammer. These powerful expressions certainly would have enhanced the effect of the sounds, strongly affecting the Finnish composer.

Considering these examples, Neubauten's and Lindberg's music – though disparate in styles – could be referred to as extensions of the identical twentieth century trend. They stem from a shared historical background, namely the emancipation of noise in music. Under this umbrella, both sides were pushing the envelope of musical boundaries in their own respective ways. Their *innovation* mindset was refined to the spirit of their times, which could be referred to as an important commonality between the two. In this respect, the emancipation of noise in music is an important factor behind the subject matter of this study.

## 4.2 Corporeality in the Performance Space

One of Lindberg's remarks serves as a valuable clue for inspecting into the subject matter:

I was living in Berlin at the time when I wrote *Kraft* and the alternative scene in the clubs was quite amazing. They worked with noise as a physical element. They have an urban, industrial sound element to them [...] The noise of traffic, or the demolition and construction of buildings all means something – and I wanted these elements to be present and my task was then to organize them in a way that made sense. It was about

making a wider palate of sound, putting together abstract elements. Its beauty is the fact that it is not tonal, that it doesn't come from the tonic or diatonic sound world.<sup>116</sup>

Though the composer does not directly refer to the name of the group, it is likely that he is referring to Neubauten – or at least it is included among others. Bearing this in mind, the focus is drawn to the *corporeality* of Neubauten's noise. To begin, the compositional styles of Schaeffer and Lachenmann will be compared to that of the band, for the comparison is able to mirror Lindberg's timbral concerns of the time.

Neubauten's compositional ideas are contrary to those of Schaeffer, though they both use *concrete* sounds as a primary source. However, Schaeffer's *musique concrète* is about recording and processing natural sounds via studio technology, and distributing them with loudspeakers.<sup>117</sup> Additionally, Schaeffer advocated 'acousmatics,' a mode of listening that undermines the presence of the sound source. On the contrary, Neubauten outwardly exposes its sound sources at its performance setting, an aspect that echoes Antonin Artaud's theatrical ideas. As Shryane points out, this aspect is what decisively differentiates the two styles.<sup>118</sup> Therefore, the concept of 'acousmatics' cannot be validated in case of the German band.

Taking that into account, the band's method is closer to that of Lachenmann's *musique concrète instrumentale*. Lachenmann's style sensitizes the listener to the manner in which the sounds are being generated. It "focuses on the concrete musical experience of producing sounds on instruments."<sup>119</sup> Notwithstanding, Lachenmann's practice, too, contrasts with Neubauten's as it promotes using extended techniques on *orchestral* instruments. Conversely, the German band uses found metal objects as its primary medium.

Something to note then is Neubauten's direct adoption of its urban environment. On one hand, this is the factor that characterizes the group's sonic palette. On the other hand, it creates a connection between its music and its vicinity.<sup>120</sup> In particular, direct *contact* with the real-world materials is what bears the utmost importance. The urban debris "leads to narratives about shaping relationships with the world."<sup>121</sup> LaBelle complements this by introducing some other exemplars of such practice: Jeph Jerman's (1959-) *Egress* (1997), Akio

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<sup>116</sup> Bridle, "S&H Interview."

<sup>117</sup> Though Neubauten does make use of processed sounds, they are not the most decisive feature that defines its trademark sound.

<sup>118</sup> Shryane, *Blixa Bargeld and Einstürzende Neubauten*, 105.

<sup>119</sup> Ming Tsao, "Helmut Lachenmann's 'Sound Types,'" *Perspectives of New Music* 52, vol.1, (Winter 2014): 226

<sup>120</sup> The contents addressed in section 3.1 are connected to this.

<sup>121</sup> LaBelle, *Background Noise*, 41.

Suzuki (1941-) performing on found stones, and the musical strategies of the Japanese improvisational group Group Ongaku.<sup>122</sup> Neubauten's methodology can be equated with these, and it is this quality that distinguishes the German band from Schaeffer and Lachenmann.

Nonetheless, as is mentioned above, Neubauten's practice is still like Lachenmann's, in sense that it calls the listener's attention to its sound-generation method. The exposure of the urban residues sensitizes the audience to the metal objects as physical objects in the performance space. Such a notion of *physicality* seeks to engender palpable experience, both auditory and visual simultaneously. But how could one describe such a process? The Aristotelean idea of *sensus communis* can provide insight into the matter. For Aristotle, the information furnished by one's sensory system is to be integrated into a unified whole, resulting in his/her perception. At the center of this process lies *sensus communis*, the central mental capacity that unifies the supplied data. Suzuki summarizes the reciprocal relationship:

To each of the individual sense belongs to the functions of apprehending a particular quality. [Sight, sound, smell, taste, and touch] are all sensation-qualities, but they are not percepts, the perception of the object as a whole. [...]. The peripheral organs of touch, taste, and sight furnish us with several ideas or qualities belonging to a concrete thing. [...]. But in order that these various qualities are brought together for knowledge and seen to inhere in a single object, it is necessary to think of some unifying function which is called by the name of the central or common sense; it is only then that a perception is formed in our mind. The function of sensation, therefore, belongs to the peripheral or external senses insofar as they mediate the qualities of an external objects to the inner *sensorium* or common sense. And perception is one of the functions of the central sense.<sup>123</sup>

Based on this conception, Takayama concludes that the listener comes to perceive musical space as an *auditory* as well as a *visual* space, and that such perceptual integration enlarges the sphere of musical reception.<sup>124</sup> Neubauten's performance practice is in a similar vein: the

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<sup>122</sup> Ibid.

<sup>123</sup> Albert Ichiro Suzuki, "The Role of Sensus Communis in Aristotle, Thomas Aquinas, Locke and Kant," (Master's thesis, Boston University, 1952), 24.

<sup>124</sup> Yoko Takayama 高山葉子, "Mauritsur-io Kāgeru "Match-für drei Spieler" ni okeru chikaku-teki tōgō" マウリツィオ・カーゲル《Match-für drei Spieler》における知覚的統合 [Perceptual Integration in Mauricio Kagel's "Match-für drei Spieler"], (PhD diss., Aichi University of the Arts, 2014), 54. She discusses the matter regarding the corresponding work of Kagel.

metallic junk objects on the stage and its piercing noise collectively engulf one's senses, leading the listener to a transpersonal experience. This brings back the attention to Antonin Artaud, for the ideas of the French playwright underlie Neubauten's adoption of *corporeality*. As will be discussed in due course, this *physicality* is an important aspect of Neubauten's influence on *Kraft*.

### 4.3 Semiotics and Meanings

But how is an idea conferred on a thing? And, how is meaning generated and communicated ultimately? This section will explicate such matters from the *semiotic* standpoint. Specifically, the discussion will draw on the American philosopher Charles Sanders Peirce's "Theory of Signs." Philip Tagg, in his book *Music's Meanings – A Modern Musicology for Non-musos*, defines the term 'semiosis' as follows: "the process by which meaning is produced and understood. It includes the totality of, and the connections between, three elements that Peirce called *object*, *sign* and *interpretant*."<sup>125</sup> The three-fold relationship can be referred to as a process, whereby a sign is accomplished – i.e., it is the mediator.<sup>126</sup> By using this concept, the discourse will expound the communicative atmosphere between the artists and the *objets trouvés*.

Before delving into the matter in earnest, the terminology 'sign' needs some clarification. At a glance, there might be some confusion about the term, because it is used in two slightly different contexts. In the following account, Albert Atkin explains the ambiguity:

We appear to be saying that there are three elements of a sign, one of which is the sign. This is confusing and does not fully capture Peirce's idea. Strictly speaking, for Peirce, we are interested in the *signifying element*, and it is not the sign as a whole that signifies. In speaking of the sign as the signifying element, then, he is more properly speaking of the sign refined to those elements most crucial to its functioning as a

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<sup>125</sup> Phillip Tagg, *Music's Meanings: A Modern Musicology for Non-musos* (New York; Huddersfield: The Mass Media Music Scholars' Press, 2012), 156.

<sup>126</sup> "Peircian Semiotics," *Semiotics and UID*, accessed June 10, 2021, <https://cseweb.ucsd.edu/~ddahlstr/cse271/peirce.php>.



signifier. Peirce uses numerous terms for the signifying element including “sign”, “representamen”, [...].<sup>127</sup>

Evidently, the use of the term for both contexts creates confusion, and, therefore, some clarification would be beneficial. Atkins adds that “it is only some element of a sign that enables it to signify its object, and when speaking of the signifying element of the sign, or rather, the [*representamen*], it is this qualified sign that he means.”<sup>128</sup> Accordingly, here, the term ‘representamen’ will replace the term ‘sign’ in the case of referring to it as an immanent component of the semiotic triad. On the other side, when using the term directly, it will refer to the *sign* that constitutes the triadic relationship.

So, how does the semiotic triad work after all? Once again, Atkin gives a comprehensive overview as to the interrelation:

We can think of the sign as the signifier, for example, a written word, an utterance, smoke as a sign for fire etc. The *object*, on the other hand, is best thought of as whatever is signified, for example, the object to which the written or uttered word attaches, or the fire signified by the smoke. The *interpretant*, the most innovative and distinctive feature of Peirce's account, is best thought of as the understanding that we have of the [*representamen*]/*object* relation.<sup>129</sup>

Notice the term ‘sign’ at the beginning is left unchanged in the quotation, whereas the latter one is replaced. This is due to the reason that, in Peirce’s semiotics, signs are classified into different categories; their musical equivalences are yet to be established.<sup>130</sup> Tarasti complements this by pointing out that ‘signs in relation to object’ is the most accustomed one in the world of music.<sup>131</sup> This type of sign consists of three cases (i.e., index, icon, and symbols), which determine the relationship between their respective ‘representamen’ and ‘objects.’ In other words, these cases are not the actual categories of the ‘representamen’ itself, but an overall ‘heading’ that characterizes the context of the sign as a whole. Table 2 describes the three cases with their respective examples.

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<sup>127</sup> Albert Atkin, “Peirce’s Theory of Signs,” *Stanford Encyclopedia of Philosophy*, last modified November 15, 2010, accessed September 9, 2020, <https://plato.stanford.edu/entries/peirce-semiotics>.

<sup>128</sup> Ibid.

<sup>129</sup> Ibid.

<sup>130</sup> Eero Tarasti, *A Theory of Musical Semiotics* (Bloomington and Indianapolis: Indiana University Press, 1994), 54.

<sup>131</sup> Ibid.

**Table 2. The types of signs primarily used in music with their examples<sup>132</sup>**

Index	It has a real-world connection to the signified: the ambulance siren
Icon	It resembles the physical form of the signified: Olivier Messiaen's birdsongs
Symbols	It signifies through the learned conventions: alphabets and numbers

Based on this classification, the discussion now turns to the communicative atmosphere between the subjects and the objects.

### 4.3.1 The Semiotic Triad: Einstürzende Neubauten

So, through what form of representation do the found instruments signify? They can be considered as both *icon* and *index*. For one, as an *icon*, they represent the urban environment, for they have a “physical resemblance to the [...] thing being represented.”<sup>133</sup> Technically, the *icon* can be anything from the vicinity, though, here, things from deserted areas or junkyards would be more applicable. The physical objects function as the *representamen*, signifying the *object* – i.e., the physical surroundings of the musicians. It was this urban environment with which the group was experimenting.

Secondly, as an *index*, the found metals signify *discarded* materials, for they refer to “the state of the object.”<sup>134</sup> Hegarty describes such objects as being “the residual, the inappropriate, the low or abject of technology.”<sup>135</sup> The articles no longer serve their intended purpose in industrial society, and, hence, they are cast off. This state of the *representamen* forms an important framework for this discussion. The *object* is what supplies the context necessary in validating the narrative related to Walter Benjamin’s ‘heroic ragpickers.’

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<sup>132</sup> Ibid., 54-55.

<sup>133</sup> Steven Bradley, “Icon, Index, and Symbol – Three Categories of Signs,” *Vanseo Design*, accessed September 12, 2020, <https://vanseodesign.com/web-design/icon-index-symbol>.

<sup>134</sup> Tarasti, *Musical Semiotics*, 54.

<sup>135</sup> Hegarty, *Noise/Music*, 113.

The *interpretant* then follows the *representamen/object* relation. This is the agent's perception of the *sign*, which "provides a translation of the sign, allowing [one] a more complex understanding of the sign's *object*."<sup>136</sup> Because each sign case determines the nature of the sign in its entirety, it would be important first to consider to which case the *interpretant* belongs. For Neubauten, its pursuit of *authenticity* can be considered in the context of *icon*. Further, its correlation to Walter Benjamin's ideas falls under the category of *index*.

Firstly, as aforementioned, Neubauten's pursuit of *authenticity* was characterized by the members' direct adoption of their *immediate* environment. Such an application was largely driven by their geographical identity, implying that they viewed their vicinity through an ontological lens. In other words, the environment was not simply the physical space itself, but that which represented their authentic selfhood. The *proximate* correlated with their existential dimensions; hence, it was an element they could appropriate as an expressive medium.

But what specifically would have caused the musicians to perceive their surroundings in such a way? The matter becomes clear when contextualized within their *authentic* situations. Visually, the ruined buildings left by World War II would have resonated with their hostility towards the nation's Fascist past. In conjunction, the architecture would also have correlated with their dissent from the city's urban-renewal policy; they were squatters themselves. Unsurprisingly, the name of the band well-represents this correlation, *Einstürzende Neubauten*: the words translate as 'collapsing new buildings' in English. Complementing this, the regular occurrences of violent squatter protests would have provided stimuli, both aurally and visually. Also, the construction noise produced by the rehab-squatters should not be dismissed either. Finally, as forerunners of *Geniale Dilletanten*, the subcultural trend must have been woven into their subconscious as well. All these collateral particulars must have penetrated the musicians' subconscious mind, causing them to perceive (*interpretant*) the *object* in the way they did.

While this was the case, the band's *interpretant* also incorporates the influence of Antonin Artaud – it consummates its artwork. The French playwright makes it clear that musical instruments should be viewed anew. He complements this by saying that research is necessary "into instruments and appliances which, based upon special combinations or new alloys of metal, can attain a new range and compass, producing sounds or noises that are unbearably piercing."<sup>137</sup> Because the *immediate* is an apt medium to illustrate its selfhood, Neubauten appropriates it and combines it with Artaud's aesthetics. The group turns the

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<sup>136</sup> Atkin, "Peirce's Theory of Signs."

<sup>137</sup> Antonin Artaud, *The Theater and Its Double*, 95.

contact between their pursuit of authenticity and the influence of Artaud into its trademark cacophony. In sum, the group's corporeality and noise collectively become the representations of its relevant reflections (*interpretants*).

On the other hand, the *interpretant* in the context of *index* correlates with the narrative of Walter Benjamin's ideas. The discarded wastes open a perspective, prompting the agents to equate their identities with the *abandoned*. As aforementioned, the 'heroic ragpickers' were marginalized people, who metaphorically shared similar identity with the rubbish. They re-assembled the superfluous materials, bestowing on them a new purpose. Neubauten's metaphoric connection to the found metals is along the same lines. The band equates its social identity with the industrial residues, resurrecting them through their adoption as musical devices.

Parallel with the metaphor of 'heroic ragpickers,' Benjamin's positive 'destructivity' underlies the band's *interpretants*. The German band *destroys* the main purpose of the residua (which no longer is valid in the first place) in favor of the *new*. Such an enactment incarnates Benjamin's 'messianic' destruction. With a strike on the urban materials, the musicians impart the idea on the debris, generating their raucous blare. Now the thunderous noise seeks to do away with the past and present, opening a clear future. Therefore, the enactment becomes a semiotic act: a subversive attack, manifesting the musicians as the 'destructive characters' and the Storm from the 'angel of history.'

This attack becomes more relevant when considered in the context of noise as negative force. As Hegarty points out, noise is a negative entity that "is unwanted, other, not something ordered, [...] [it] is negatively defined [...], but it is also a negativity."<sup>138</sup> It provides "a new and subversive interplay between sound as physical force and sound as a symbolic medium."<sup>139</sup> Based on these accounts, one could claim that noise is a feasible medium to signify *disfavor*. Accordingly, it is not surprising that noise was often utilized as a representation of political criticism. Neubauten's sonic experimentation can be referred to as an apt archetype of such representation, equipped by the positive 'destructivity' of Benjamin.

In summation, it is plausible that all these reflections collectively formed the band's *interpretants*. The metallic objects (*representamen*), signifying the city's desolate atmosphere and discarded junk (*objects*), were met with the perception of the agents (*interpretant*). Overall, the band's sound is the embodiment that represents the band's philosophic parameters,

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<sup>138</sup> Hegarty, *Noise/Music*, ix.

<sup>139</sup> Sheila Whiteley, "Kick Out the Jams: Creative Anarchy and Noise in 1960s Rock," in *Resonances: Noise and Contemporary Music*, eds. Michael Goddard, Benjamin Halligan and Nicola Spelman (New York and London: Bloomsbury Academic, 2013), 23.

stemming from its sociopolitical awareness. The members were progressive youths, who were living in an island surrounded by the red-communism sea. They were compelled to react to the tumultuous transitions the city was undergoing. Conclusively, it is possible to assert that the then-zeitgeist of West Berlin gave birth to the catastrophic sound of *Einstürzende Neubauten*.

### 4.3.2 The Semiotic Triad: Magnus Lindberg and *Kraft*

Initially, the important observation is that the sign for Lindberg differed from that for *Neubauten*. For Lindberg, the sign was revealed in the form of *Neubauten*'s sound, not the found objects themselves. Here, *Neubauten*'s sound can be referred to as the succeeding sign, for it embodies the band's *interpretants*. Raquel Ferreira da Ponte describes such a semiotic process:

In the semiotic process, object and interpretants are also signs, which shows the evolutionary aspect of Peircean semiotics: an object (sign) determines a sign, which, in turn, generates an interpretant (also a sign, but more evolved). This interpretant, as a sign, can therefore determine a new sign, becoming its object, which will generate new interpretants, in a process of infinite semiosis.<sup>140</sup>

Therefore, *Neubauten*'s *interpretants* have now become the new *objects*, signified by its metallic noise (*representamen*). This is the sign that Lindberg came across. Thus, the composer's *interpretant* would refer to *his* understanding of the new sign, which he, ultimately, embodies in his work, *Kraft*. This is the part where the influence gets manifested.

For Lindberg, too, the sign in question can be divided into *icon* and *index*. As an *icon*, the cries of urban junk (*representamen*) would have evoked *Neubauten*'s urban vicinity (*object*) in the composer's mind. He confirms this as he says: "they have an urban, industrial sound element to them [...] The noise of traffic, or the demolition and construction of buildings all means something – and I wanted these elements to be present [in my work] [...]"<sup>141</sup> However, this *interpretant* only refers to the noise as a signifier of the environmental surroundings. Hence, it appears to be merely general. To say the least, Berlin was not the only setting where industrial sounds could be heard. Therefore, though its importance is indispensable, the *icon* alone is not sufficient to thoroughly validate the influence in question. Moreover, it should not be forgotten that *Kraft* was initially meant to become a piano concerto.

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<sup>140</sup> Raquel Ferreira da Ponte, "Design in a peircean perspective: the process of creation of existences and its practical consequences," (PhD diss., The University of the State of Rio de Janeiro, 2017), 77.

<sup>141</sup> Bridle, "S&H Interview."

And besides *Action-Situation-Signification*,<sup>142</sup> Lindberg did not employ unorthodox instrumentation regularly. In other words, the adoption of the metallic objects was not an imperative necessity.

Notwithstanding, the metallic noise was so impactful to the composer that he regarded the encounter as a “shock.”<sup>143</sup> Why? What factors could have enhanced the effects of the noise? Initially (also in relation to *icon*) the *corporeality* of the objects can be brought to attention. Analogous to Neubauten’s interpretation of its urbanity, Lindberg’s application of the *concrete* bears the aspect of tangible *corporeality*. As addressed before, the metallic objects are explicitly exposed in the performance space, amplifying the effect of the sonorities. That is, they engender both auditory and visual experience at the same time. Lindberg’s reference to Neubauten’s performance strategy validates his interest in the matter: “[The band] worked with noise as a physical element.”<sup>144</sup> This reference manifests the significance of the physical properties, demonstrating the composer’s attention on the visual aspect of the practice (*interpretant*). Such an intention is also clearly articulated in the score of *Kraft*: Lindberg writes, “the uglier the better,”<sup>145</sup> as a criterion in selecting the metallic objects. Not only this, his way of using *spatialization* in the work also justifies this aspect as well. All these imply that the aspect acted as a determining factor in bringing the influence of Neubauten into play.

In Lindberg’s other remarks, we can find references that imply an *interpretant* of the sign as *index*. The composer often associates the sound with Berlin’s social situations of the time. Take for example the interview with Thea Derks, held before the performance of *Kraft* in Amsterdam Gasholder in 2012. Lindberg recounts that he wanted to bring in the industrial sounds of the ‘society’ to his composition.<sup>146</sup> Additionally, in the interview with *Neue Zeitschrift für Musik*, he recalls that the social situations of West Berlin had particularly sparked his interests.<sup>147</sup> In both instances, the composer associates the sound with the social situations he had witnessed during his residency. These remarks imply that the *zeitgeist* of the society was resonating in his mind. Hence, the reference to social aspects preoccupies the composer’s *interpretant*. It corresponds to the second sign as an *index*, whose *object* refers to Neubauten’s preoccupations as the *Geniale Dilletanten*.

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<sup>142</sup> Although Lindberg adopts found objects in this work as well, he does not specify the materials to be urban junk.

<sup>143</sup> New York Philharmonic, “Magnus Lindberg.”

<sup>144</sup> Bridle, “S&H Interview.”

<sup>145</sup> *Kraft* score, pg. IV.

<sup>146</sup> Thea Derks. “Magnus Lindberg.”

<sup>147</sup> Spangemacher, “Punk und Muttermilch,” 28.

Buildings destroyed during the Second World War still being in sight; the regular demolition and construction works of the buildings (the composer might have heard the ‘rehab-squatters’ at work); the violent protest site of the squatter movement; the alternative lifestyle of the youths and the vibrant art scene of the subcultural milieu, all collectively must have been providing a fresh and powerful impact to the young Lindberg. As an outsider, he would have found the spectacle utterly exotic, something which he had never seen before. Consequently, with all these penetrating his subconscious mind, listening to Neubauten’s noise had to be something unprecedented. He recounts that it felt as if he was in a different planet, hearing 140 decibels with just two chords.<sup>148</sup>

Furthermore, such exoticism and extremity would also have resonated with the composer’s ‘bruitist’ style at the time. Around the time when Lindberg composed *Kraft*, his musical style was characterized by vibrant energy and hyper-complexity – more than any other time in his career. The composer himself refers to this style as being ‘bruitist structuralist.’<sup>149</sup> Otonkoski lays out pieces in this style that predate *Kraft*. He refers to them as being its predecessors – i.e., works such as *Tendenza* (1982), *Zona*, and *Action-Situation-Signification*.<sup>150</sup> Fast in tempo, vigorous and robust in character, these works exemplify Lindberg’s compositional language of this period. Such a tendency appears to be in line with the way he was viewing ‘form.’ As aforementioned, he elaborates on the aspect as he attributes it to his teacher, Vinko Globokar:

My contact with Vinko Globokar in the beginning of the 1980s also made me aware of the necessity of extreme polarities as the basis for thinking on form. Only the extreme is interesting – striving for a balanced totality is nowadays an impossibility. An original mode of expression can only be achieved through the marginal (a romantic perception?) – the hypercomplex combined with the primitive.<sup>151</sup>

This striving for extremity (*interpretant*) must have been in alignment with the spectacle he had witnessed in West Berlin. The social exoticism and Neubauten’s madness must have provided a fresh impetus, sensitizing the composer to a whole new potential.

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<sup>148</sup> Ibid., 27-28.

<sup>149</sup> Anderson, “The Spectral Sounds,” 566.

<sup>150</sup> Lauri Otonkoski, liner notes for recording *Magnus Lindberg: Piano Conerto/KRAFT*, Toimii Ensemble and Finnish Radio Symphony Orchestra, conducted by Esa-Pekka Salonen, trans. by Jaakko Mäntyjärvi, (Helsinki: Ondine Inc., 2004): 5.

<sup>151</sup> Lindberg, “A voice from the 1980s,” 2.

All consolidated, it comes as no surprise to hear Lindberg comparing his experience to Debussy coming across Indonesian gamelan music.<sup>152</sup> Moreover, Neubauten's cacophony (*representamen*) entailing a strong social awareness (*objects*) would not have been unrelated to the whole matter. All these unanimously would have added magnifying effect to the musical setting. Thus, the sound is not simply interpreted as an agent that evokes a *physical* urban environment. It is an entity that demonstrates the dynamism of the society.

The assessment, therefore, is that Lindberg's *interpretant* incorporates his subconscious awareness of the social climate at the time. Based on this observation, this essay argues that the youth dynamism of 1980s West Berlin brought Neubauten's influence on Lindberg. If it was for the sound's industrial element alone, it would not have been likely that the influence was brought into play. In other words, the assertion is that the social dynamism acted as a main force behind Lindberg's adoption of the urban residues in his work.

Having said that, one thing is noteworthy. Lindberg's *interpretant* carefully sets aside a particular aspect of the *object*, namely the aspect of *social criticism*. This is the key difference between the two subjects. Lindberg's employment of the found materials is not meant to be indicative of political defiance. Nor does it seek to challenge the mainstream musical conventions as an expression of political dissent. Over and above, it is not intended to enunciate Benjamin's *positive* destruction directed towards the tragic history either. There is virtually no forthright political defiance involved, at least not explicitly. This means that although the two subjects were both driven by progressive spirits, Lindberg's *interpretants* were more confined to musical innovation. Lauri Otonkoski is of the same mind as he refers to the trace of punk-rock in *Kraft*: "with blinkered social criticism carefully removed."<sup>153</sup> Alternatively stated, Lindberg was affected by the social factors, whereas his expressions were not sociopolitical. The adoption of urban junk was not aimed at creating social art.

But the impetus of the "dry world, or metallic sounds"<sup>154</sup> dovetailing with Lindberg's timbral experimentations is outstanding. It was a period when his timbral experimentation was at its peak, ever-expanding his palette of tone colors. This alludes to his *interpretant* entailing his then-interests in the *concrete*, dramatically dovetailing with his encounter with Neubauten's music. The *interpretant* concerning his timbral experiments was a causal factor behind the influence in question.

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<sup>152</sup> Ibid.

<sup>153</sup> Otonkoski, liner notes for recording *Magnus Lindberg: Piano Conerto/KRAFT*, 10.

<sup>154</sup> NDR Klassik, "Kraft" – Magnus Lindberg at the scrapyards | NDR," *YouTube* video, 2:51, September 11, 2019, <https://www.youtube.com/watch?v=mjyscgj1p5g>.



The discussions in this chapter began by focusing on the matter of liberating noise in music in the twentieth century. It assessed the works of the two main subjects based on the given examples, pointing to the context's connection with the subject matter. At last, it addressed that the liberation of noise in music was a shared background behind the two subjects, and that this factor underlines its importance to the whole discourse.

The next section focused on Lindberg's remark on the *corporeality* of Neubauten's noise. Based on that, comparison was made between Neubauten's ideas and those of Schaeffer and Lachenmann. This was to mirror Lindberg's contemplation on *concrete* sounds at the time. Following that, the discussion addressed the significance of Neubauten's direct adoption of its *proximate* environment. It highlighted the palpable *physicality* of the residues within the performance space – i.e., the very element that engenders both aural and visual experience.

The following section dealt with the matter of how meanings are produced and communicated – i.e., semiotics. Borrowing from Peirce's *Sign Theory*, the discourse expounded the reciprocal relationships between the agents and objects. The findings claim that the tangible *corporeality* of the urban metal objects was a decisive factor within the whole process. In this connection, the sound was complemented by the underlying dynamic status quo of 1980's West Berlin, whose impact was indispensable. The sonic representation of “actively transitioning forward, invoking feeling of needing to react in the heat of myriad social transitions,”<sup>155</sup> must have compelled the composer to incorporate the industrial wastes himself. Finally, the composer eliminating social criticism, yet still being driven by progressivism (musical) was addressed, to further describe his *interpretant*. In conclusion, (1) the noise's palpable *corporeality*, (2) the innovation spirit manifested in the timbral experimentations, and, most importantly, (3) the social dynamism could be referred to as being the causing elements of the impetus in question.

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<sup>155</sup> Hall, “Creative Cities,” 646.

**Chapter 5**  
Analysis of *Kraft*

## 5 Analysis of *Kraft*

After describing his thoughts on Neubauten's sound, Lindberg adds: "[...] my task was then to organize them in a way that made sense. It was about making a wider palate of sound, putting together abstract elements."<sup>156</sup> The discourse thus far has focused on contextualizing Neubauten's noise, and verifying how it came to influence Lindberg. Now it is time to examine the actual work. Accordingly, this chapter will investigate how Lindberg assembles the materials to make them work musically. Ultimately, the chief aim of the analysis is to inspect into the *locational specificity* of the found objects (in the entire structure), and the *function* they are channeled into. This is to clarify how the composer embodies his preoccupations in his composition. Before entering the actual analysis, the sections will lay out the background of the work and the theoretical frameworks necessary for the discussion.

### 5.1 Background of *Kraft*

Some of the key circumstances related to the birth of *Kraft* have already been addressed more than once. For this reason, they will not be readdressed here. Besides the adoption of the found objects, the work has another extraordinary characteristic. It is the very first work in which Lindberg utilizes computer software as a compositional aid. In particular, on behalf of the composer, the software facilitates the transitory phases (interpolations) of the respective parameters.<sup>157</sup> This calls back the attention to the matter of imparting continuity to the presets, that is, the morphing of the *pre-defined* into different entities via gradual process (interpolations). And it is within this process that the computer software exercises mechanical control. Admittedly, this matter is correlated to the composer's perception of time.

It implies that the computer operations consume the temporal development. Taking this into account, the assumption is that, finally, *Kraft* served as the decisive momentum for Lindberg's renunciation of serial aesthetics. In describing the transition, he says:

In fact, it was the first step in a direction leading away from superserial, exact aesthetics; the friction and the morphology in the material could now be avoided by

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<sup>156</sup> Bridle, "S&H Interview."

<sup>157</sup> Lindberg recalls that he had manually carried out such process for a previously composed piece entitled, *Zona* (1983), written for solo cello and orchestra. See Lindberg, "A voice from the 1980s."

processing the material. There was no longer much difficulty in transcribing elastic characteristics like logarithmic proportions into metric notations. Bricks had been transformed into malleable clay.<sup>158</sup>

On top of that, the composer makes reference to the temporal conception of Karlheinz Stockhausen as he articulates his own: “I prefer the word ‘rhythm’ to ‘duration’ [Stockhausen uses this term] – in [his] view, duration is associated with articulation of tones and is thus controlled, in conjunction with instrumentatism, by the rhythm material.”<sup>159</sup> For Lindberg, it is the rhythmic parameter with which he establishes a temporal framework in his music.

The idea might seem like a *cliché* since rhythmic element is already an inevitable feature of metric structure in music. However, the point boasts greater clarity when thought of in association with the ‘chromatic tempo scale’ articulated by Stockhausen. In his article, *...How the Time Passes* (published in 1957), Stockhausen “proposed a scale of durations whose proportions would form a one-to-one relationship with the fundamental frequencies of their associated pitches.”<sup>160</sup> This was to unify the sequence of pitch and rhythm. The German composer “resolved to create a chromatic scale of durations, corresponding to the equal-tempered chromatic scale of pitches.”<sup>161</sup> With Stockhausen’s system, controlling temporal parameters by serial matrix became possible.

Since Lindberg eventually renounced the serial method, it is likely that he did not accept the temporal conception as it was. Regardless, Stockhausen’s time perception is not unrelated to that of Lindberg. The Finnish composer points out: “Ever since I became familiar with Stockhausen’s tempered tempo scales and the organization of time in his 1950s pieces, the rhythmic element has been assuming an increasingly prominent role in my music.”<sup>162</sup> The objective here is not to verify how the conception specifically operates in Lindberg’s music. Rather, it is to contemplate Lindberg’s time perception on a general level and its significance in his adoption of computer aid.

“It’s a theater!”<sup>163</sup> says Alan Gilbert, referring to *Kraft*. As the conductor points out, the composition incorporates theatrical elements, appropriating space as a performance medium.

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<sup>158</sup> Ibid.

<sup>159</sup> Ibid.

<sup>160</sup> Seth Horvitz, “Boundaries of Perception and the Endless Struggle for Unity in the Music of Karlheinz Stockhausen,” accessed August 25, 2020, [http://context.fm/mills/mus212/Horvitz\\_MUS212\\_Stockhausen.pdf](http://context.fm/mills/mus212/Horvitz_MUS212_Stockhausen.pdf), 4.

<sup>161</sup> Ibid.

<sup>162</sup> Lindberg, “A voice from the 1980s,” 1.

<sup>163</sup> “Alan Gilbert and Magnus Lindberg in conversation with Sarah Willis.”

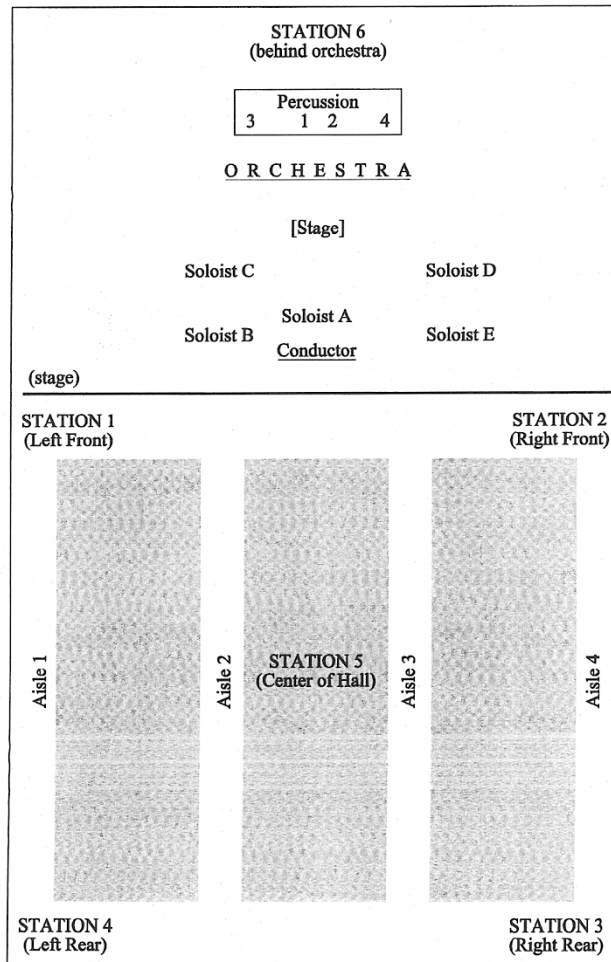
Six separate stations for soloists are placed at different corners of concert hall.<sup>164</sup> During the performance, the soloists move around to their respectively assigned stations (see Figure 4). With such a configuration, Lindberg explores *spatialization* in the work, permitting a three-dimensional aural experience. Referring to the multi-directional resonances, Gilbert says: “[The sound] almost becomes something you can hold or see... and [there is] this kind of contact between sound and physicality... I have never seen a piece that actually achieves it in quite this way.”<sup>165</sup> As it will be covered in the analysis, this exploration of spatialization plays an important role in foregrounding the urban wastes during the performance. Accordingly, this matter is also a proximate correlate to the *corporeality* of the industrial residues.

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<sup>164</sup> In terms of the disposition of 4 channels (loudspeakers), the score does not refer to their fixed position, but it asks to have them surround the audience. Also, other than what is specifically mentioned, all the instruments are on stage.

<sup>165</sup> “Alan Gilbert and Magnus Lindberg in conversation with Sarah Willis.”

STAGING PLAN AND STATIONS FOR MOVEMENTS



In case there are less than 4 aisles in the hall, please adjust the Stations accordingly.  
Passages and corridors must be available for all soloists and orchestral musicians to move on and off stage.

(Figure 4. Staging Plan: Six Separate Stations for Soloists)

As aforementioned, around the time when Lindberg composed *Kraft*, vibrant energy and hyper-complexity were the salient characteristics of his musical style. Take for example *Action-Situation-Signification*: upon listening to it, one is met with a diversely expanded palette of timbres. Also, the work consists of granular texture, comprising multiple contradicting musical spaces (i.e., several single lines). They all move in layers in different tempi, demonstrating individuality of each line. Fast in tempo, powerful and robust in character, these elements go on to impart enormous energy to the music. This is one of the characteristics of the composer's 'bruitist' style, which reaches its pinnacle in *Kraft*. The

consummation is well-described by Nieminen: “The composition blends rational Western thinking and primitive Bruitism in a more clear-cut fashion than any of his earlier works.”<sup>166</sup>

Though too short to describe the composition’s entire characteristics, this section laid out some of the composition’s key features. Mainly, the contents were a continuation of the previous discussions from section 3.2. It drew on the materials specifically in the context of the *opus* in question. All consolidated, *Kraft* became Lindberg’s signature composition, having been already performed multiple times and occasionally still being performed to this day. In one of his recent interviews, Lindberg again refers to his encounter with the music of Neubauten.<sup>167</sup> Yet again, this underscores the trace of the German industrial music pioneers in the work.

## 5.2 Theoretical Frameworks

Much of the discourse in this section, too, will further develop the contents from section 3.2. It will introduce the theoretical frameworks necessary for the upcoming analysis: (1) the framework of texture, (2) the framework of structure, (3) the framework of sound, and (4) the framework of spatialization.

### 5.2.1 The Framework of Texture

As previously addressed, the textural aspect is an integral part of Lindberg’s compositional thinking. This is particularly true regarding the creation of *tension* in the music. The textural surfaces are built on two poles, namely binary opposition. First, the *graininess* of the surface is what characterizes the texture at the outset. The several disparate materials stack up together in layers to form polyphony. The contradiction between the interlocking materials brings about *friction*, which can be deemed equivalent of *dissonance* in a tonal context. Once this is contextualized within the relationship of *tension and resolution*, then, *complexity* becomes an entity that warrants a resolution into *simplicity*, which thus becomes the second pole of the binary opposition.

For example, in mm. 1-3, one notices disparate rhythmic figurations assigned to separate instrumental sections (see Figure 9). Taking a closer look, it is noticeable that the figurations stem from two rhythmic ideas (see Table 3). The individual configurations of each material differ from one another, and, therefore, they come to mask themselves from their

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<sup>166</sup> Nieminen, “The calculation of processes,” 8.

<sup>167</sup> NDR Klassik, “Kraft.” Alan Gilbert is the current musical director of the *NDR Elbharmonie Orchester*.

original forms. Each accentuates different parts of the rhythmic idea, yielding a heterogeneous situation in total (i.e., grainy surface). Such layering of separate figurations exemplifies the *complexity* in question.

**Table 3. The instruments grouped under the two rhythmic ideas (mm. 1-3)**

Rhythmic idea 1	Rhythmic idea 2
Soloist A: Clarinet in E flat	Soloist B: Cello
Soloist C: Tam-tam	Soloist D: Timpani
Soloist E: Tam-tam	Chinese cymbal
Soloist F: Whistle	2 Bass drums
Raganella	

On the contrary, the configuration of the soloist ensemble from measure 34 exemplifies a *unified* texture (see Figure 17). Notice that the general principle stays the same; that is, the configurations of each individual line differ from one another. However, this time, they stem from a *single* line. One layer sustains another or continues the preceding one, forming a single entity; much like atoms formulating a molecule. This brings about a sense of unity in sum – it is the sign of *resolution*. Its gestural contrast to the beginning (i.e., chaos vs calm) goes parallel with the arrangement, emphasizing the *tension and resolution* mechanism. All these comprehensively consummate the binary opposition that propels the music forward.

Hence, the reciprocal relationship between *complexity* and *simplicity* is validated on a conceptual level. This dichotomy is the tool with which Lindberg achieves drama in his music. Under this heading, there are three additional subordinate variants that determine slightly different situations from one scene to another:

- A contrast from an unchanging situation to a changing one
- A comparison between a dense mass and a line
- A relationship between an incoherent texture and a coherent texture<sup>168</sup>

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<sup>168</sup> Mikko Heinö, *Aikamme musiikki 1945-1993 - Suomen musiikin historia 4* (Helsinki: WSOY, 1995), 472, quoted in Takemi Sosa, *Magnus Lindberg – Musical Gesture and Dramaturgy: in Aura and the Symphonic Triptych* (Helsinki: Academy of Cultural Heritages; Semiotic Society of Finland, 2018), 93.



The contrast between mm. 152-166 and mm. 167-192 illustrates the first variant (for mm. 152-166, see Figure 31). The *continuous* note of the horns brings about a stationary situation with the bass drum sporadically interrupting the flow. This instills tension into the scene, although the discourse is momentarily locked in an ‘unchanging situation.’ Conversely, the segment that follows (mm. 167-192; see Figure 33) consists of several rhythmic layers again, pushing the music forward together; hence, illustrating a ‘changing situation’ on the contrary.

The preceding segment, mm. 132-151 (see Figure 29), where the music consists of only *impulses* and silences, well exemplifies a ‘dense mass.’ The *impulses* can be referred to as attacks of large sound masses – they also incorporate the industrial metal objects. They are in sharp contrast with the succeeding section, where the *continuous* note of the horns (‘a line’) stands out (mm. 152-166). Such a distinction is an apt example of the second variant.

Measures 92-109 consist of two contradicting rhythmic materials, primarily assigned to the piano and rototoms. The energetic performance of the rototoms and the complex piano writing amplify the rhythmic contradiction, yielding an ‘incoherent texture,’ (see Figure 23). The two instruments converge on the same rhythmic idea at measure 100, although the tumultuous character of the segment is maintained. Before long, the two instruments are joined by the brass section, whose textural surface assumes a *grainy* characteristic. This helps to maintain the level of tension. From measures 114-123, the brasses are arranged in layering, playing *continuous* notes in relay (see Figure 27). The piano and percussion instruments encourage the flow, and the overall combination makes up a ‘coherent texture.’ Such is the example of the third variant.

### 5.2.2 The Framework of Structure

This leads to the discourse on the realm of structure. In general, the textural and structural aspects work concurrently within the confines of form. But what would be the axis that consumes the entire musical narrative? Sosa offers a good insight into the matter:

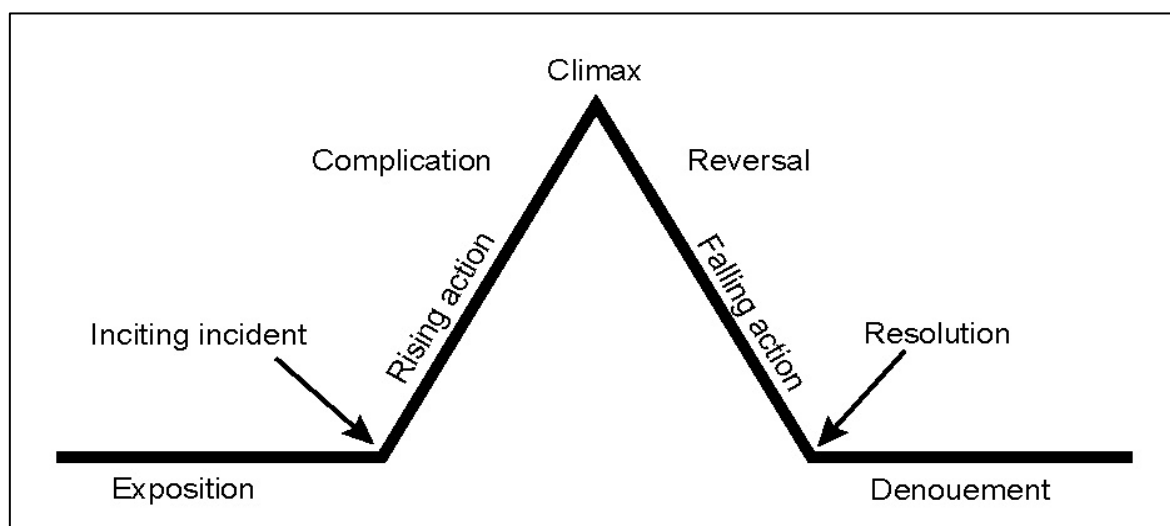
The key finding in my study was that Lindberg’s works are ultimately rooted in Aristotelian dramaturgy. The musical events and harmonies sound complex on the surface, but deep down there is a dramaturgical progression familiar to all of us, with a beginning, a middle and an end.<sup>169</sup>

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<sup>169</sup> Lasse Lehtonen, “Probing the core of Magnus Lindberg’s orchestral oeuvre,” *Finnish Music Quarterly*, August 16, 2018, <https://fmq.fi/articles/probing-the-core-of-magnus-lindbergs-orchestral-oeuvre>, (accessed August 25, 2020), 2.

This observation acquires credence as the pivotal binary opposition (i.e., hyper-complex vs primitive) suggests a goal-oriented discourse. Within that framework, the subordinate variants trigger ‘rising action,’ whereby the music is propelled to the ‘climax.’

Since its proposal, Aristotle’s three-segment structure has been continually developed and expanded by different scholars. Ultimately, it was crystallized by the German novelist and critic Gustav Freytag (1816-1895), as ‘Freytag’s Pyramid’ (see Figure 5).



(Figure 5. Freytag’s Pyramid - The Five-Part Structure)<sup>170</sup>

Notice the global framework of *Kraft* mirroring this five-act dramatic structure (though not identical in its entirety; see Table 4): Following the outburst of complex texture at the ‘exposition’, the music goes through multiple episodes.<sup>171</sup> They comprise alternation of contrasting textures, consuming the phase of ‘rising action.’ This, over the course, is built up towards the ultimate *telos*—i.e., utmost simple texture. The climactic point is then followed by a ‘falling action’ and a moment of ‘resolution.’ Afterwards, the *dénouement* follows, paving the way for the *coda* (or the ‘epilogue’), in which the music has its final say.<sup>172</sup> All considered, the dramatic structure can be referred to as an apt conceptual model in describing the form of *Kraft*. In view of this, the analysis will identify the different *episodes* along the progression (microscopic level). Also, it will point out how their sum comes to mirror the five-part dramatic structure (macroscopic level).

<sup>170</sup> Ann Aubrey Hanson, “7-Step “Freytag’s Pyramid”,” *The Writing Itch About / Writing and Editing*, accessed January 4, 2022, <https://writingitch.com/2014/08/21/7-step-freytags-pyramid>.

<sup>171</sup> The term *episode* refers to certain phases in the music. Please see page 79 for more information.

<sup>172</sup> Though ‘epilogue’ is not mentioned in the pyramid, it is an optional literary device often used at the end of a story.

Table 4. The structure of *Kraft* mirroring Freytag's Pyramid

<i>Movement I</i>		
Segments		Phases
Exposition	mm. 1-33	Exposition
Episode 1	mm. 34-91	Rising Action (Complication)
Episode 2	mm. 92-123	
Bridge	mm. 124-170	
Ending Episode	mm. 171-222	
<i>Movement II</i>		
Buildup	mm.1-73	Rising Action continued
Explosion and Second Buildup	mm. 74-116	
Climax	mm. 117-123	Climax
Falling Action	mm. 124-153	Falling Action
Resolution	m. 154 (30 sec.)	Resolution
Denouement	mm. 155-168	Denouement
Coda	mm. 169-199	Epilogue

### 5.2.3 The Framework of Sound

Section 3.2.2 stated that *Kraft* could be referred to as an embodiment of Lindberg's then-timbral reflections. In particular, the attention was drawn to his interest in concrete sounds. Considering this, as a preliminary stage of *Kraft's* analysis, a study on the sound structures of *Action-Situation-Signification* was carried out.<sup>173</sup> This work stands as “the furthest reaching attempt to work with timbre as the structurally guiding element.”<sup>174</sup>

On a theoretical level, the ideas of Pierre Schaeffer and Helmut Lachenmann served as guidance for the study. To better assess each idea individually, Schaeffer's idea was first selected as the guide for the analysis. Afterwards, comparison between the two ideas was carried out. Both systems classify sounds based on the sound's temporal shape.<sup>175</sup> So, they both

<sup>173</sup> Sechun Tony Uhm アム・セチュン・トニー, “A Study of Sound Structure in Magnus Lindberg's Action-Situation-Signification: Based on Pierre Schaeffer's ‘Tableau Récapitulatif de la Typologie’” [マグヌス・リンドベルイの〈アクション-シチュエーション-シグニフィケーション Action-Situation-Signification (1982)〉における音の構造に関する考察—ピエール・シェフェールとヘルムート・ラッヘンマンの音の分類方法に基づいて—], *The Bulletin of Aichi University of the Arts* 愛知県立芸術大学紀要 No.49 (2019): 125-134.

<sup>174</sup> Lindberg, “A voice from the 1980s,” 2.

<sup>175</sup> Schaeffer additionally proposes three different types of *pitches* (timbres on surface).

confer emphasis on the temporal structure of the sound, rather than the actual sonority. Therefore, as Lindberg says: “Timbres of the most opposing characters can be grouped under the same heading.”<sup>176</sup> For instance, a regular pulse of a sine wave can be equated with that of a snare drum.

The comparison indicated that Schaeffer’s system is *descriptive*, while Lachenmann’s is *prescriptive*. The disparity is well-articulated by Charles Seeger in his article “Prescriptive and Descriptive Music-Writing.” He describes the two different types of music-writing as follows: “a blue-print of how a specific piece of music shall be made to sound [prescriptive] and a report of how a specific performance of it actually did sound [descriptive].”<sup>177</sup> This offers a good insight into comparing the two classifications.

Prior to shifting to the analysis, the succeeding discussions will first summarize the two classifications. For the sake of clarity, only the necessary types will be selected. This owes to the potential that two or more ideas ending up overlapping each other, depending on how one interprets each.

### (1) Pierre Schaeffer: Typology-Morphology

Pierre Schaeffer introduces his classification in his treatise entitled, *Treatise on Musical Objects: An Essay across Disciplines* (published in 1966). In its fifth chapter, the classification is put forward as a table called, *Summary Diagram of Typology*.<sup>178</sup> This essay utilizes its revised version by Robert Normandeau (1955-) due to its enhanced practicality (see Table 5).<sup>179</sup>

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<sup>176</sup> Lindberg, “A voice from the 1980s,” 2. Though he refers this to Lachenmann’s classification, the same can be said for Schaeffer’s as well.

<sup>177</sup> Charles Seeger, “Prescriptive and Descriptive Music-Writing,” *The Musical Quarterly* 44, no.2 (April 1958): 184. JSTOR (740450).

<sup>178</sup> Pierre Schaeffer, “Book Five: Morphology and Typology of Sound Objects,” in *Treatise on Musical Objects: An Essay across Disciplines*, tr. Christine North and John Dack (Oakland, California: University of California Press, 2017), 307-76.

<sup>179</sup> The few changes applied by Normandeau seem more intelligible for readers. For instance, replacing homogeneous sounds (H) – which was placed at the second column from the left in Schaeffer’s original version – with drone (T), provides a more solid description of the sound type. Additionally, Normandeau translates the French word *trame*, which refers to the (T), into the word ‘drone.’ This is more straightforward and easier to understand. (See 3.4 Typology of the Sound Objects)

**Table 5. Summary Diagram of Typology**  
**(Revision of the original by Robert Normandeau)<sup>180</sup>**

	Disproportionate duration Macro-objects No temporal unity		Measured duration Temporal unity			Disproportionate duration Macro-objects No temporal unity		
	Unpredictable facture	Non-existent facture	Reduced duration Micro-objects			Non-existent facture	Unpredictable facture	
			Formed sustainment	Impulse	Formed iteration			
Definite pitch	En	Tn	N	N'	N''	Zn	An	Definite pitch
Complex pitch	Ex	Tx	X	X'	X''	Zx	Ax	Complex pitch
Slightly variable pitch	Ey	Ty	Y	Y'	Y''	Zy	Ay	Slightly variable pitch
	Causal unity				Multiple causes		Multiple causes	
Unpredictable variation of mass	E	T	W	F	K	O	A	Unpredictable variation of mass
← Held sounds					Iterative sounds →			

Initially, to elaborate on this table, it is important to draw the attention to the column placed at the very center. This column is called *impulse*. It describes micro-objects that could be referred to as sounds that occur in an instant. The classification generally stems from this point based on the following three groups of criteria:

- (1) *mass – facture*
- (2) *duration – variation*
- (3) *balance – originality*

The four horizontal rows are divided into two groups:

- ※ The three rows above indicate natural sounds
- ※ The fourth row below the three indicates artificial sounds

<sup>180</sup> Robert Normandeau, “A revision of the TARTYP published by Pierre Schaeffer,” *Electroacoustic Music Studies Network*, accessed June 18, 2019, [http://www.ems-network.org/IMG/pdf\\_EMS10\\_Normandeau.pdf](http://www.ems-network.org/IMG/pdf_EMS10_Normandeau.pdf), 11.

The direction along the horizontal axis represents the types of sounds:

- ※ To the left – held sounds (formed sustainment)
- ※ To the right – iterative sounds (formed iteration)

### **Mass – Facture (Morphological)**

*Mass* applies to the vertical axis of the table, which simply represents the types of pitches. These are placed as follows from top to bottom: *definite*, *complex*, *slightly variable*, and *unpredictable*. The other morphological criterion is the *facture*. This shows the way a sound gradually develops – *formed* (developing in a predictable pattern), *non-existent* (no temporal development) and *unpredictable* (developing in a random way).

### **Duration – Variation (Temporal)**

*Duration* describes literally the duration of the sound (as one perceives it). In addition, changes in accordance with time – proportional to the *duration* – are called *variation*. They are also divided into three types: *formed*, *non-existent* and *unpredictable*.

### **Balance – Originality (Structural)**

The nine cells at the center represent the *balanced* objects. They are “neither too elementary nor too structured.”<sup>181</sup> In other words, the objects that fall into this class are not too simple or overly complex. Hence, they maintain balance; not to mention their optimum duration. Following this is the measure of *originality*. In classes that fall outside of the nine cells, attention is drawn to the temporal changes of the sounds. They are also related to the morphological and temporal criteria. The measure of *originality* is determined by how much surprise a sound can cause. Therefore, the more complex the changes are, the greater the *originality* becomes. This is divided into two criteria: *predictable* and *unpredictable*. Also, notice the classes are respectively labeled with a capital letter followed by a lower-case one. The lower-case letter indicates the type of pitch (e.g., the class *En* means *eccentric sounds with definite pitch*).

### **Typology of the Sound Objects**

The following Table 6 describes the respective cells (namely, the types of sound objects) and the symbols that are in use:

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<sup>181</sup> Schaeffer, *Treatise on Musical Objects*, 345

**Table 6. Types of sound objects**

<b>N</b>	Balanced object: definite pitch	<b>A</b>	Accumulation
<b>X</b>	Balanced object: complex pitch	<b>W</b>	Large Note
<b>Y</b>	Balanced object: slightly variable pitch	<b>F</b>	Fragment
<b>T</b>	Redundant held sounds (e.g., drone)	<b>K</b>	Cell
<b>Z</b>	Redundant iterative sounds	<b>O</b>	Ostinato
<b>E</b>	Eccentric sound	“	Iteration
<b>‘</b>	Impulse		

The typology system cannot be claimed as being an absolute criterion for defining all sound phenomena. However, it can provide a strong conceptual framework for interpretation of sound types. It is possible to perceive each sound as an individual *object* and investigate its characteristics.

## **(2) Helmut Lachenmann: *Klangtypen der Neuen Musik***

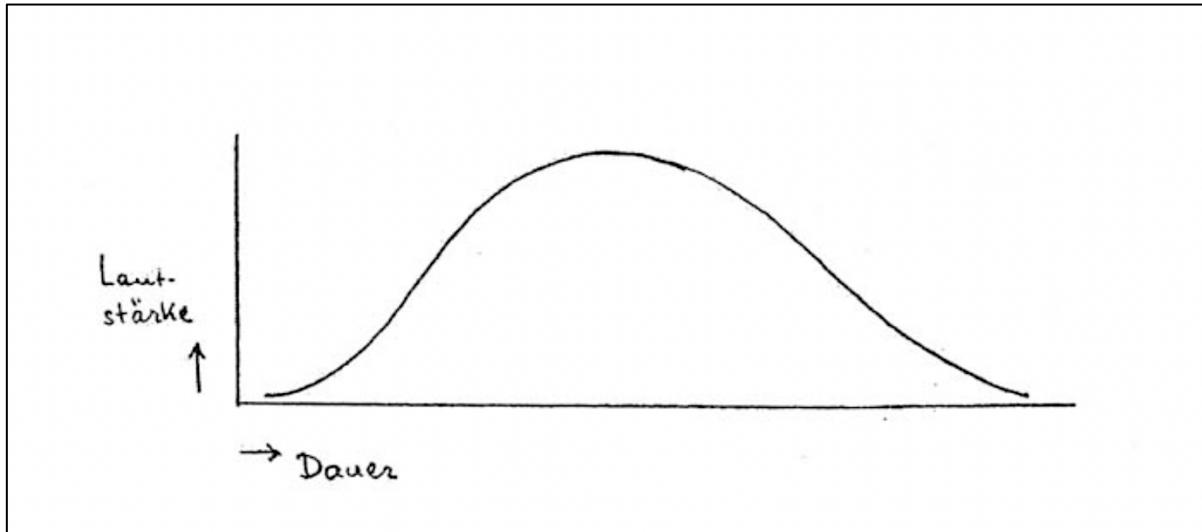
Lachenmann’s system, too, as aforesaid, classifies sounds based on their respective temporal structure. From there, the system consists of two main categories (i.e., (1) sound as process and (2) sound as object) with seven subclasses that fall underneath. There is no necessity to introduce all the types as the analysis only uses the first category: ‘sound as process’ (see Figure 6). On a practical level, most of the linear behaviors of the sounds can be described through Schaeffer’s classification.

### **Sound as process**

The innate time (*eigenzeit*) is identical to the duration (*dauer*) needed for it to thoroughly reveal its characteristic<sup>182</sup> – e.g., tam-tam and piano.

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<sup>182</sup> Helmut Lachenmann, “Klangtypen der Neuen Musik,” in *Musik als existentielle Erfahrung: Schriften 1966-1995*, ed. Josef Häusler, (Wiesbaden: Breitkopf & Hartel; [Frankfurt?]: Insel, 1996), 8. Please see the entire chapter to get the full picture of the classification.



(Figure 6. *Kadenzklang* – the horizontal axis refers to the duration (*dauer*) and the vertical axis refers to the loudness (*lautstärke*))

The *Kadenzklang* representatively exemplifies ‘sound as process.’ This selection is attributed specifically to its shape (shown in the schematic illustration; Figure 6), which resembles *rise and fall* action. For Lachenmann, such a characteristic is analogous to the *cadence* in the context of tonality.<sup>183</sup> In other words, one could use it in creating sound objects in a similar mindset to writing phrases in a tonal context.

In *Kraft*, each framework along the discourse resembles this characteristic unfolding. Therefore, upon listening to the music, one aurally experiences an analogous feeling to that felt when riding on a rollercoaster. During the elevating phase, the energy is accumulated until the materials reach the peak (caesura). Once the music reaches the pinnacle, the accumulated energy is transmitted to the materials, moving them downward with great momentum.<sup>184</sup> This aspect also implies Lindberg’s personal time perception. He says, “for me, [...], time’s function in a piece is more like that of an energy generator and framework.”<sup>185</sup>

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<sup>183</sup> Ibid., 3.

<sup>184</sup> Eybl analyzes the form of *Kinetics* (1989) with reference to Lachenmann’s *Kadenzklang*. The matter is not unrelated to the formal matters of *Kraft*. For more, see Eybl and Mäkelä, “Exploring the Perception of Magnus Lindberg’s *Kinetics*. An Analytical Dialogue,” in *Topics, Texts, Tensions: Essays in Music Theory*, ed. Tomi Mäkelä (Magdeburg: Otto-von-Guerike-Universität, 1999), 64-84. Also, at times, additional gestural play takes place, expanding on the idea. For instance, when in falling motion, some follow the direction all the way down, while others are suddenly interrupted by another impulse (see Figure 21). This picks up the music right from that point to start another phase of elevation.

<sup>185</sup> Voice from 1980s Lindberg, “A voice from the 1980s,” 1.



In a nutshell, Lachenmann's *Kadenzklang* enables description of such a teleological (process-oriented) sonic flow – both macroscopically and microscopically. Thus, it will be utilized in describing how energy is generated, developed, and transmitted within the given durational framework.

#### 5.2.4 The Framework of Spatialization

This framework will be the final of the four. As aforementioned, the work incorporates theatricality, appropriating space as a performance medium. There are six stations set in space, to which the soloists are to move around during the performance (Figures 7 and 8 show the complete list of instruments and movements for the soloists). To elaborate on this aspect, the discussion will make use of the concept of *spatialization*. This will help us to understand how Lindberg utilizes space to amplify the effects of the *corporeality* in question.

Spatialization in music refers to incorporating positioning and movement of sound sources as compositional parameters. Schaeffer points out its objective being “to improve the definition of [sound] objects through their distribution in space.”<sup>186</sup> He continues, “the ear distinguishes two simultaneous sounds better if one comes from the right and the other from the left. [...] and by putting things in perspective with each other allows us to judge their properties and relationships better.”<sup>187</sup> In *Kraft*, the configuration of the stations gives rise to interactions between the locations, unveiling important aspects of the music. It places greater emphasis on a certain palette of sounds over the others. Also, it brings about specific situations that correspond with the important points in the musical discourse. In sum, three-dimensionality set in space regulates the listeners' perceptions, communicating about the meanings of the sounds on a physical level. This aspect ultimately goes on to yield important meanings in relation to the subject matter.

But *localization* is not the singular method, with which Lindberg capitalizes on this aspect. He also utilizes live-electronics to put the sounds into motion. The movements animate the sounds, whereby particular situations are created in space. Stockhausen provides important insights about using space as a compositional parameter by moving the sounds in space:

Musical space has been fixed in the western tradition, for as long as musicians gave up running through the woods for sitting on chairs on a stage. [...]. In the concert hall we always have the same perspective, the one seat as a point of reference, [...]. But the

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<sup>186</sup> Schaeffer, *Treatise on Musical Objects*, 325.

<sup>187</sup> *Ibid.*

moment we have the means to move sound with any given speed in a given auditorium, [...], there is no longer any reason for a fixed spatial perspective for music. In fact, that is the end of it, with the introduction of relativity into the composition of movement and speed of sound in space, as well as of the other parameters of music. And this movement in space of music becomes as important as the composition of its melodic lines, meaning changes in pitch, and as its rhythmic characteristics, meaning changes in durations. If I have a sound of constant spectrum, and the sound moves in a curve, then the movement gives the sound a particular character compared to another sound which moves just in a straight line.<sup>188</sup>

The analysis will reveal how spatiotemporal motions of the sounds come to strengthen the effects of localization. The movements not only impart meanings to the sounds themselves, but also to the locations they are stationed at. Sometimes, the spectacle in the musical space depicts a physical attribute, bringing utmost attention to the core element. Overall, the analysis will point out how all these come to enhance the presence of the found instruments.

Based on these two accounts, the analysis will show how Lindberg utilizes space as a performance medium. The preceding two sections laid out a brief background of *Kraft* and the necessary theoretical frameworks for the analysis. In sum, the investigation will be based on the next four perspectives: i.e., (1) texture, (2) structure, (3) sound, and (4) spatialization. To repeat the chief aim of the analysis, it is to inspect into the *locational specificity* of the found objects in the global framework, and the *function* they are channeled into.

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<sup>188</sup> Stockhausen, *Stockhausen on Music*, 101-102.

COMPLETE LIST OF INSTRUMENTS AND MOVEMENTS FOR THE SOLOISTS

Part	Bar	Soloist A		Soloist B		Soloist C		Soloist D		Soloist E		
		Instrument	Station	Instrument	Station	Instrument	Station	Instrument	Station	Instrument	Station	
I	1	Clarinet in Eb	Stage	Vc	Stage	Tam-tam (heavy tam-tam mallet and a piece of chain)	Station 6	Timpani	Stage	Tam-tam	Station 5	
	7							Rototoms				
	8							El. Drumpads				
	12										Go to Stage	
	24							Go to Stage				
	26									Lion's Roar	Stage	
	34						Spring Coil	Stage				
	37								Metal foil			
	39						Stones					
	41									Suspended Cymbal		
	42									Snare drum		
	45						Almglocken					
	47								Sandpaper			
	48								Suspended Cymbal			
	49						Bongo drum with grains					
	51										Stone blocks	
	55						Bamboo Chimes		Bamboo Chimes			
	63	Clarinet in Bb							2 Almglocken			
	64						Opera Gong (soft mallet)					
	81						Sandpaper Blocks				3 Chinese cymbals	
	84										Opera gong	
	88		Go to Station 4								Go to Station 2	
	91						Piano					
	92					Go to Station 3						
	113										Tamburo basco	Station 2
	114				Maracas	Station 3						
	115	Bamboo Chimes	Station 4									
	125	Chinese Cymbal (2 soft mallets)									Suspended Cymbal	
130											Go to Stage	
131		Go to Stage		Chinese Cymbal (hard Mallet)								
134										Various Metal Objects	Stage	
139						Metal Blocks						
151	Contrabass Clarinet	Stage			Go to Station 5							
169						Various Metal Objects						
171				Metal Block (triangle sticks) or Tam-tam (soft mallet)	Station 5					Metal Blocks (Triangle Sticks)		
175	Castagnets (on Piano)											
181								2 Metal blocks				
182	Claves (on Piano)							Maracas				
190						Chocola						
191	Ping Pong Balls (on Piano)											
193		Go to Station 4		Tam-tam (soft mallet)			Go to Station 1 as quickly as possible		Go to Station 2 as quickly as possible		Go to Station 3	
194						Opera Gong (soft mallet)	Station 1	Opera Gong (soft mallet)	Station 2			
196	Opera Gong (soft mallet)	Station 4								Opera Gong (soft mallet)	Station 3	
215		Go to Stage		Crotale	Start walking to Stage and pick up the Cello in order to start the second Movement		Go to Stage		Go to Stage		Go to Stage	

(Figure 7. The complete list of instruments and movements for the soloists: for movement I)

Part	Bar	Soloist A		Soloist B		Soloist C		Soloist D		Soloist E	
		Instrument	Station	Instrument	Station	Instrument	Station	Instrument	Station	Instrument	Station
II	1			Vc	Stage	Piano	Stage	Crotali	Stage	Wineglass	Stage
	3									Triangle	
	8	Clarinet in Bb	Stage					Bell tree			
	9							Triangle		Spring coil	
	10							Temple bell			
	16							Ceramic blocks		Metal block	
	34									Vibraphone	
	66		Go to Station 6								
	67				Go to Station 4						Go to Station 5
	77	Tam-tam (heavy tam-tam mallet)	Station 6	Tam-tam (Soft mallet + metal sticks)	Station 4	Metal Blocks				Metal blocks (as large as possible)	Station 5
	89									Metal plate	
	90		Go to the back of Aisle 1		Go to Stage		Go to the back of Aisle 2				Go to the back of Aisle 3
	97							Go to the back of Aisle 4			
	105	Crotale G5	Back of Aisle 1			Crotale Db5	Back of Aisle 2	Crotale C6	Back of Aisle 4	Crotale F#5	Back of Aisle 3
	107		Start walking slowly to Stage while playing, be on Stage for bar 124				Start walking slowly to Stage while playing, be on Stage for bar 126		Start walking slowly to Stage while playing, be on Stage for bar 124		Start walking slowly to Stage while playing, be on Stage for bar 124
	121	Water Sounds	Stage	Vc	Stage					Water Sounds	Stage
	126					Water Sounds	Stage				
	129							Water Sounds	Stage		
	138	Paper Crunching									
	141					Branches					
	142							Woodblock			
	145							Radiator			
	146									Bell tree	
	150						2 Ping-pong balls			Rotating objects	
	151	Water Sounds									
	154						Triangle stick				
174	Bass Clarinet										
186						Finger thimbles					
191						Metal ribbon					
194									Big metal block		

(Figure 8. The complete list of instruments and movements for the soloists: for movement II)

## 5.3 Analysis of *Kraft*

### 5.3.1 Movement I<sup>189</sup>

The approximately half-hour long composition is divided into two movements, with each being ca. 15 minutes long – there is a sense of symmetry in length. As aforesaid, the entire structure resembles the shape of Freytag’s Pyramid: exposition – rising action – climax – falling action – resolution – denouement – (epilogue). Complementing this, Lindberg describes the whole structure as follows:

<sup>189</sup> Hereafter, all Schaeffer’s and Lachenmann’s sound objects will be written in *italics*

I sometimes think about the piece in metaphors of a big bridge, where you have two pillars keeping the whole structure together. And, somehow, *Kraft*, in a way is done, such that definitely the loudest moment of the piece is the very beginning and the very end. And those in a way [keep] the whole structure together.<sup>190</sup>

Considering this in connection with Freytag's Pyramid, the powerful *introduction* (the former pillar) could be referred to as the 'exposition.' On the contrary, the *coda* (the latter pillar) can be referred to as the 'epilogue.' Accordingly, the discussion will begin with the 'former pillar.'

At the introduction of the piece, multiple conflicting materials are splashed at once with an enormous energy (see Figure 9). For the time being, only the conventional percussion instruments come into the scene. As it is mentioned above, each layer accentuates different portions of the rhythmic ideas, yielding a heterogeneous situation in total. The heterogeneity then gradually progresses towards simpler or more unified states via interpolations. This can be viewed as an aspect that represents the underlying theme of the work, as Warnaby describes: "the creation of some kind of order from chaos."<sup>191</sup>

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<sup>190</sup> "Alan Gilbert and Magnus Lindberg in conversation with Sarah Willis."

<sup>191</sup> John Warnaby, "The Music of Magnus Lindberg," *Tempo*, New Series, No. 181, Scandinavian Issue (June 1992): 26. JSTOR (945341).

The image displays a complex musical score for measures 1-3. The score is organized into several systems:

- Percussion:** Four staves (1-4) featuring instruments like Chinese Cymbal secco, Bagnalla, Cic. cassa wood stick, and Cic. cassa wood stick. Dynamics include *f* and *ff*.
- Arpa:** Two staves (Arpa 1 and Arpa 2) with melodic lines.
- Pianoforte:** Two staves (Piano and Fortepiano) with melodic and harmonic accompaniment.
- SOLI (Soloists):** Seven staves (A-G) for various instruments:
  - A: Clarinetto piccolo in Mi $\flat$  (Stage)
  - B: Violoncello (\*) Scordatura (Stage)
  - C: Tim-tam (front) with heavy tam-tam beater and a piece of chain (Stage 6)
  - D: Timpani *ff* (Stage)
  - E: Tim-tam (center) (Stage 5)
  - F: Whistle
  - G: El. drum (Electronics) with a control sequence: (A) + (B) BACK, LF, RF, LR, RR.

Measure 1 shows a continuous note for the clarinet (A) and various percussive elements. Measure 2 features a brief retreat in the music. Measure 3 marks the beginning of the main musical material, with multiple instruments splashing in at once.

(Figure 9. Measures 1-3; multiple materials are splashed at once in the beginning)

Already in mm. 1-3, one notices elasticity being at work. The way the force is accumulated through the motions of the materials resembles an archer drastically pulling back the bowstring, accumulating the energy before releasing. Before long, at measure 2, the music makes a brief retreat, akin to a slow-motion scene in a movie or the archer holding the posture before releasing. Notice the *continuous* note being assigned to the clarinet (soloist A) in the beginning, after which it turns into rhythmic figures.<sup>192</sup> Following this, at measure 3, the accumulated energy propels the music towards the second *impulse* at the first downbeat of measure 4. This is the point where the entire orchestra and ensemble finally enter the scene, marking the actual beginning of the ‘exposition.’ As for the length, the ‘exposition’ lasts for 33 measures, consisting of 8 *cells* (see Table 7):

<sup>192</sup> More specifically about such mechanism (i.e., the linear structure of the sound objects), please see pages 86-87.

**Table 7. The outline of the ‘Exposition’**

<b>Tempo: ca. 60</b>	
Cell 1	mm. 1-3
Cell 2	mm. 4-7
Cell 3	mm. 8-11
Cell 4 <sup>193</sup>	mm. 12-14
Cell 5	mm. 15-17
Cell 6	mm. 18-20
Cell 7	mm. 21-23
Cell 8	mm. 24-33

At this point, it should be stressed that the analysis will focus primarily on the soloist group (soloists A-E). This is because the soloists are the ones who perform the core actions of the music. According to Nieminen, they represent “the keystone of the orchestra, the catalyst for action and the summit of the iceberg formed by a massive sound material.”<sup>194</sup> For example, two soloists (the E flat clarinet and the cello) are channeled to perform the two prime rhythmic ideas (see Figure 9). Their respective subordinate variants are assigned to the different parts of the orchestra; they are synchronized to move together in layers. In other words, the local events revolve around the two rhythmic figures, primarily employed to the soloists, and subordinately to the percussion section.<sup>195</sup>

In terms of *spatialization*, one comes across a unique feature at the very beginning. The amplified sounds of the soloists A and B are put into motion from the back of the hall to the front (see Figure 10). This contextualizes the scene, evoking Stockhausen’s remarks on putting sounds into motion. Because the sounds are bound to the front (the soloists are on stage), one can begin to see the *stage* in a different light. The motion regulates the listener’s perception, transporting it from back to front. The *stage*, therefore, becomes the destination point, sharpening the perceptual attention to it. Such use of space could be referred to as a

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<sup>193</sup> From the pickup to measure 12.

<sup>194</sup> Nieminen, “Works,” 93.

<sup>195</sup> Please see the Table 3 for the instruments grouping (mm. 1-3).

reinterpretation of Stockhausen's remarks on musical space and movements of sounds. It is not a breakaway from the western tradition; rather, it is an enhancement of it.

Panning instructions	
The panning of clarinet and violoncello is always done in opposite directions (mirrored) except at bars 1–7, where they move from back to front.	
<b>Part I</b>	
Bars	Event
1–7	clarinet and cello are panned from back to front
21–55	clarinet and cello are panned first slowly around the hall (1 circle in 10 secs) and speeding up towards bar 50 (4 circles in a second)
112	all electronic drums panned to left front
124	all electronic drums panned to left front or right front
131	all electronic drums panned to the four corners
151–193	random panning around the hall for clarinet
170–193	amplification for the conductor
<b>Part II</b>	
Bars	Event
1–45	crescendo in amplification (from zero to normal)
121→	cello fast panning around the hall (e.g. 5 circles in a second)
124→	clarinet fast panning around the hall (e.g. 5 circles in a second)
126→	piano fast panning around the hall (e.g. 5 circles in a second)
150–154	clarinet, cello, piano panning changes from fast to slow (e.g. from 5 circles in a second to 1 circle in 5 seconds). <i>Piano will need some extra help with “metal whistle tone” at bar 153</i>
183–185	clarinet, cello, piano panning stops into normal amplification positions
194–198	electronic drums crescendo in amplification

(Figure 10. Panning instructions; Part I is equivalent to ‘movement’ in this essay)

In terms of quantity, the majority of the metallic materials are placed on stage. The configuration correlates with the aspect just mentioned. The re-emphasis on the stage spotlights the found instruments, magnifying the visual sensations. Accordingly, this aspect goes parallel with the *corporeality* addressed above. It amplifies the perception towards the “noise as a physical element,”<sup>196</sup> encouraged by the sharpened attention to the stage. Given the remark in the score “the uglier the better,” as one of the urban junk’s selection criteria, the matter resonates with the context even more. It confirms the trace of Neubauten’s influence, as the spatial design brings the corporeality to the fore.

At measure 4, the soloist E flat clarinet finally starts to play the *definite* pitch in rapid rhythm (32nd notes; see Figure 11). The material bears the characteristic of *unpredictable facture*. Also, starting off from high register, it descends to lower step by step, after which it ascends back to mid-register.

<sup>196</sup> Bridle, “S&H Interview.”



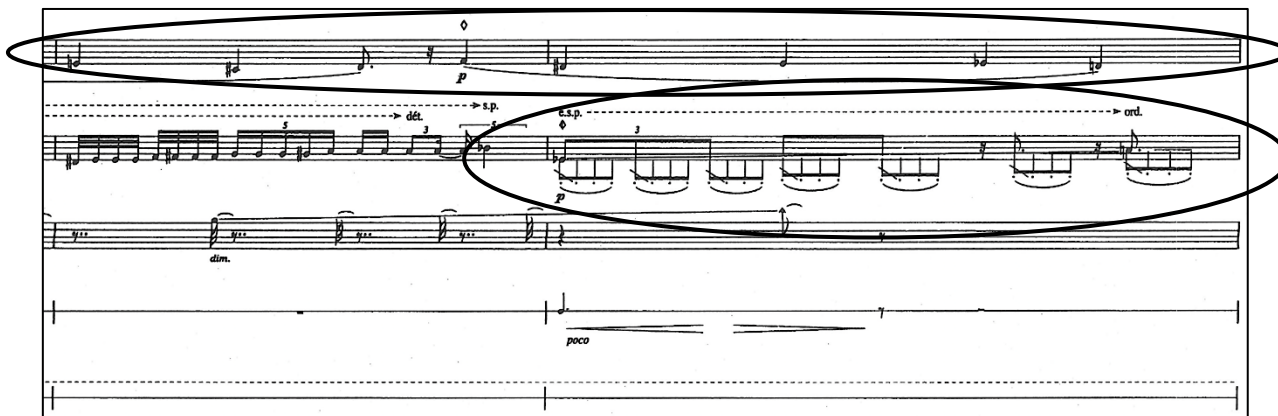
Meanwhile, its rhythmic organization is noteworthy. Initially, two quarter note triplets (3:2) comprise the measure, consisting of condensed rhythms. Over the course, the 32<sup>nd</sup> note figures gradually expand, which, by measure 7 are transformed to 16<sup>th</sup> and 8<sup>th</sup> note figures. And a single quintuplet (5:4) comprises measures 8-12 – i.e., it demonstrates the expansion of rhythm (see Figure 12). Such gradual transformation exposes a step-by-step progress of morphing, lowering the density of rhythm. Further, from measure 13 to 33 the pulse stays steady, no longer involving any extra subdivisions. On top of this, the rhythmic figures go through a variety of transformations that eventually end up in regular pulse in measures 32-33 (see Figure 13). Ultimately, this process manifests the idea of a heterogeneous situation becoming a more simplified homogenous one.

The image shows a musical score for clarinet soloist A at measure 4. The score is written on a single staff. The first part of the measure features a triplet of eighth notes. This is followed by a 32nd note figure, which is circled in black. The score includes dynamics such as 'dim.' and 'sempre non legato'. The 32nd note figure is circled in black.

(Figure 11. The 32<sup>nd</sup> note figures and triplet (3:2) of the clarinet (soloist A) at measure 4)

The image shows a musical score for measure 8. The score is written on five staves. The top staff is for Clarinet A, the second for Bassoon, the third for Snare Drum, the fourth for Timpani, and the fifth for another instrument. The Clarinet A part is circled in black. The score includes dynamics like 'poco dim.' and 'ff'. The Clarinet A part is circled in black.

(Figure 12. The augmentation of note values and single quintuplet at measure 8 (the clarinet; soloist A); this continues until measure 12)



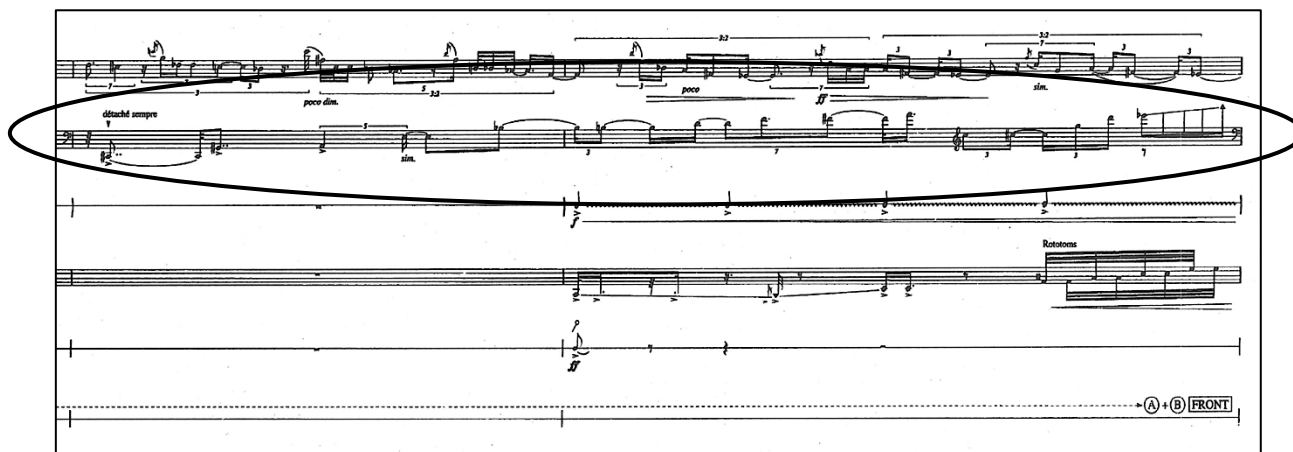
(Figure 13. The simplified figures of the clarinet (soloist A) at the end of 'exposition' (top) and Estremamente Sul Ponticello figures of the cello (soloist B; bottom); mm. 32-33)

The cello enters in a more conservative manner at measure 4. Initially, the figuration consists of simpler rhythm (staccato figure) in *complex pitch*. From measure 6, the instrument finally starts to play the note C sharp beneath the staff (bass clef). In Schaeffer's terms, the *mass* of this sound object would be the *variable pitch*. The passage consists of elevating notes from the C sharp to the highest note possible; much like crossing the borderline between *definite pitch* and *complex pitch* (see Figure 14). In addition, at the outset, Lindberg writes *scordatura*, asking for non-standard tuning (see Figure 9). This is a deliberate design to overcome the instrumental limitation of the cello. The adaptation enables the instrument to cover the wide range of registers:

The range over which these chords are spread is much too wide for the register of the cello. This collision between an instrumental limitation and a larger process creates problems which can end up being productive for the composer's imagination. Solutions must be found in composition which are capable of overcoming this impossibility.<sup>197</sup>

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<sup>197</sup> Jean-Pierre Cholleton, "Time and Force (UR and Kraft)," in *Magnus Lindberg*, ed. Risto Nieminen, trans. by Nick Le Quesne (Helsinki: Editions Ircam – Centre Georges – Pompidou and Finnish Music Information Centre, 1993), 40.



(Figure 14. The elevating notes of the cello (soloist B) from the C sharp to the highest note as possible in mm. 6-7)

Like the E flat clarinet, the cello figure also goes through transitional phases, continuously being expanded/condensed. Ultimately though, unlike the clarinet, the cello closes out by *Estremamente Sul Ponticello*, generating metallic color (see Figure 13). In this respect, the cello's ending is contrary to that of the E flat clarinet. It foregrounds the timbral duality.

That aspect leads to the next point of the discussion. Regarding timbre, there is a necessity to take heed of the dichotomic relationship between the types. The two poles are already evident at the very beginning of the 'exposition.' The initial sound of the E flat clarinet could be viewed as being somewhere between *complex pitch* and *definite pitch*. On top of that, the first three measures consist of mainly unpitched percussion instruments. This implies that *complex pitch* makes up the beginning.

At measure 4, the twelve-tone chord – covering a wide range of registers enters the scene (see Figure 15). The remarkably large harmony is played by the *pitched* instruments, marking the transition from the *complex* to the *definite*. Meanwhile, longer notes are applied to the highest and lowest registers. In other words, the organization of the harmony foregrounds the edges (the extremes): “a hierarchy of durations is set up between the different registers, allowing the extremes, with their longer rhythmic values, to stand out and leaving the mid-range, with very short values, empty. ‘Hollow’ chords are thus created.”<sup>198</sup> Such an organization goes on to highlight a particular transitional process: the more *definite pitch* gets edged out, the more *concrete (complex pitch)* it becomes, and vice versa. Hence the process validates the transition from percussive timbre (non-pitched) to the pitched twelve-tone chords. It underlines the borderline that lies in between the so-called noise and pitch, and the transitional state that lies in between.

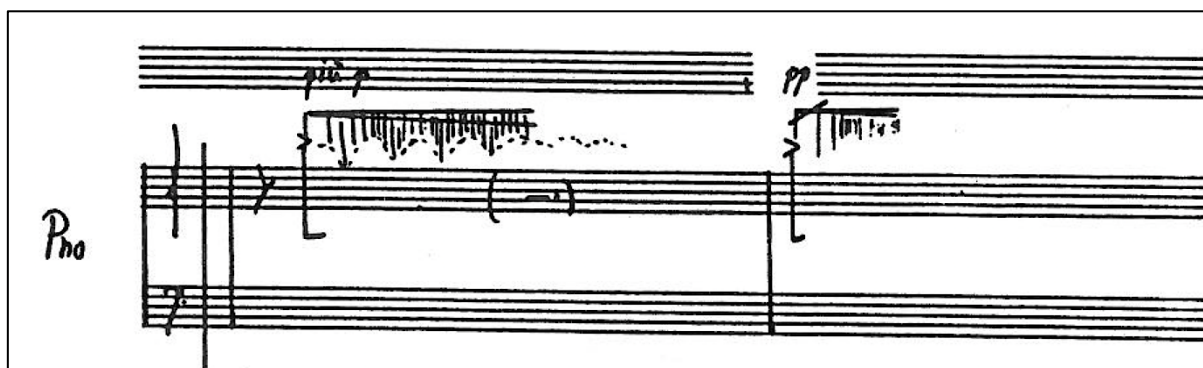
<sup>198</sup> Cholleton, “Time and Force,” 30.

The image displays a page of musical notation for a string ensemble, likely from a score for 'The Sea'. It features multiple staves, each with its own set of performance instructions. The notation includes long, sustained notes and glissandos. Key instructions include 'non div.' (non-divisi), 'viel Bogen' (much bow), 'legato poss.' (legato possible), and 'very slow gliss.' (very slow glissando). The score is marked with a forte dynamic (ff) and includes a measure number '6' on the left side. The notation is complex, with many notes and slurs, indicating a dense and expressive musical passage.

(Figure 15. The 'hollow' chord at measure 4; longer notes applied to higher and lower registers)

Inclination as such is also to be witnessed in *Action-Situation-Signification*. In the second movement of the work *The Sea*, the music evolves around numerous recurring passages of *buildup and release*. The *buildups* accumulate the momentum, and the *releases* emit the energy with sustained notes, usually playing tremolo or trill. This reinforces the intensity of the music, and, all the while, Lindberg employs both *definite* and *complex* pitches along the way. They go back and forth from one to the other, instilling fierceness to the scene. It is as if the timbre is in a constant state of alternation based on the level of the force being transmitted. Some of them even fade away at some point, suggesting excess of force surpassing

the capacity (see Figure 16). Such timbral treatment is integral in *Kraft*, for the dichotomy between the poles is one of the central themes of the work.



(Figure 16. The piano fading away in Action-Situation-Signification (*The Sea*))

The other noteworthy feature is the *impulse* type. Particularly, it functions as the marker of beginning of each cell's (or 'framework') beginning that occurs in sequence. Within the 33 measures of the 'exposition,' there are a total of eight *impulses* that mark the transitions between the cells.<sup>199</sup> In other words, there are eight *frameworks* within which the local events take place. In relation to this, Cholleton describes the meaning of the title *Kraft*:

[The title reflects] the idea of energy imparting a *force* to conflicting elements, thereby conferring them with the capacity to move, to transform themselves in time and to merge. [It] also [expresses] the primitive and extreme nature [...], since [it is] based on a close and continuous relationship between the writing's complexity and raw energy.<sup>200</sup>

The energy is conferred on the materials, causing them to move forward. And it is within this process that *impulse* functions as the *transmitter* of the accumulated energy. Admittedly, such a mechanism, in one way, justifies Lindberg's account that "time's function in a piece, [for him], is [...] like that of an energy generator and framework."<sup>201</sup> At this stage, this aspect is noteworthy, for it offers a criterion to perceive the transitions between the frameworks. It also permits comparison between the respective musical events. Later, this aspect will be further developed in association with the *objets trouvés*.

<sup>199</sup> Please see Figure 9, measure 4, for an example of an *impulse*.

<sup>200</sup> Cholleton, "Time and Force," 28.

<sup>201</sup> Voice from 1980s Lindberg, "A voice from the 1980s," 1.

Contrary to the ‘exposition,’ the initial phase of ‘rising action’ starts off with a simple ring of spring coil and suspended cymbals struck with a brush (measure 34; see Figure 17). There is a sense of relief after all the chaos, ready for the journey to begin in earnest. Accordingly, the configuration of the soloist ensemble comprises a *unified* texture. As aforementioned, each layer stems from a *single* line; one layer sustains another or continues the preceding one. Together they form a single entity, achieving a sense of unity in sum.

(Figure 17. Measure 34: the start of ‘rising action’ phase; the spring coil (soloist C) triggers the discourse. And the performance of ‘voce bisbigliando’)

The textural arrangement in turn becomes increasingly complex over time, signaling the first phase of buildup (metaphorically *tension*). By the time the music reaches measure 47, the surface of the texture is much more complex, with each layer showing greater individuality (see Figure 18). This phase later is to be met with a unified texture again, which refers to the *resolution* of the event. Such sets of *tension and resolution* will be called *episodes*<sup>202</sup> and the analysis will investigate their respective local events.

<sup>202</sup> The term has been used already a few times with the same reference.

(Figure 18. The complex surface of the texture in mm. 47-49)

In the first movement, there is a total of four episodes with one being a little twist in the midpart – this will be called the *bridge*. In a sense, though not without disparity, the form of the work resembles the Sonata form. The two initial episodes can be equated with the ‘exposition’ phase, the ‘bridge’ with the ‘development,’ and the ‘ending episode’ with the ‘recapitulation.’ Viewing the form in such a way was helpful in this study. It was especially instrumental in enhancing the understanding of the locational specificity and function of the found materials. Table 8 organizes the episodes in chronological order and the number of measures corresponding to each:

Table 8. The organization of the episodes in (Movement 1)

	Complex texture	Simple texture	Impulses
<i>Episode 1</i>	mm. 34-80	mm. 81-91	
<i>Episode 2</i>	mm. 92-109	mm. 110-123	
<i>Bridge</i>	mm. 124-131		mm.132-151
		mm. 152-170	
<i>Ending Episode</i>	mm. 171-192	mm. 193-222	

Out of the four episodes, the first episode has the longest length of buildup. Noticeably, the spring coil is assigned to the soloist C, functioning as the *impulse*. It marks the beginning of the framework at measure 34. This is the place where a metallic residue comes into sight for the first time. Therefore, it could be claimed that a *drycolor* engenders the discourse. From measure 37, *voce bisbigliando* is added as a layer, performing voiced phonemes in a whispering manner (see Figure 17). At the second beat of measure 39, with the arrival of the second

*impulse*, the *bisbigliando* turns into a feathered-beam figure (see Figure 19). It consists of 16<sup>th</sup> notes and 8<sup>th</sup> notes, after which the spring coil gives way to the sound of *stones*. Table 9 refers to the timbral transitions, following the order of the soloist C in episode 1:

**Table 9. The timbral transitions of soloist C in episode 1 (\* indicates metallic object):**

*Spring Coil
(Voice Phonemes: added layer)
Stones
Almglocken
Bongo-Drum
Bamboos
*Spring Coil
Opera Gong
Sandpaper Blocks
Opera Gong

This is just one example of how the timbral transition is being carried out. Also, since it is confined to the episode 1, the given picture is only partial. Nevertheless, it still provides a glimpse of insight into how Lindberg treats timbres on a microscopic level.

The *dry* sound at the beginning gradually transforms to the *metallic* color of orchestral instruments (i.e., almglocken). It then continues to expand out to different timbral attributes of idiophones. On the surface, such a process may not perhaps be all that unusual. However, the matter attracts greater attention, given the process occurring over the linear progression. There is a sense of transition from one place to the next.

The linear structure of the sound objects also draws the attention. At an instant, one notices that even this aspect appears to be operating under a binary system. Though momentary, a trace of Stockhausen's influence can be witnessed here once again, namely the idea that time is divided into impulses. And if a pulse (the division of impulses) is played fast enough, the interval between them is no longer perceivable, forming a *continuous* line. On the contrary, when it is played slower, at a certain point, the divisions of impulses (a *dotted* line) can be perceived again. Accordingly, the velocity also implies how much force is being transmitted to the sound objects.



Such duplicity appears to go along with Schaeffer's 'Summary Diagram of Typology.' As is mentioned above, the horizontal axis represents the types of sounds: (1) to the left, *held sounds* (formed sustainment) and (2) to the right, *iterative sounds* (formed iteration). In comparison, the perception of temporality seems to be dissimilar between the two. Stockhausen's concept reflects on the reciprocal relationship between rhythm and musical time, whereas Schaeffer's seeks to observe pure linear unfolding through a phenomenological lens. Nevertheless, they both concern analogous binary characteristics.

At measure 34, both the E flat clarinet and the cello (soloists A and B) start playing sustained notes (*balanced* object; see Figure 17). Meanwhile, Lindberg notates them with *crescendo* and *decrescendo*, and vice versa. They produce *rise and decay* motion, which engenders an aural experience analogous to the inhalation and exhalation process. That is, it is a symbolic gesture reflecting a trait of a living organism, viewed from the biological dimension. Furthermore, such objects are over time transformed to trills, tremolos, or rhythmic figures, from shorter note values to longer, and vice versa. Notice the temporal transitions of each sound through the respective articulations in measures 39-42 (i.e., trills, tremolo, and feathered-beam figure; see Figure 19). They imply the interaction between *continuous* and *iterative* notes, foregrounding the above-mentioned binary characteristics. They produce an effect that resembles fast motion (applying the force) to slow (holding back the force), exposing elastic interplay in movement. Thus, the *rise and decay* effect are not achieved through the dynamics alone, but via the rhythmic control as well.

The image shows a musical score for measures 39-41, consisting of seven staves labeled A through G. Staff A (E-flat clarinet) and Staff B (cello) feature sustained notes with dynamic markings like *p*, *mf*, *f*, and *ppp*, along with articulations such as accents and slurs. Staff C includes percussive elements with markings like 'Stones', 'sub. p', 'non cresc.', and 'mf'. Staff D and E show rhythmic patterns with markings like 'f k U k U k U k ...' and 'VAR against cymb.'. Staff G is labeled '(Electr.)' and contains a dashed line. The score is annotated with various performance instructions and dynamic changes throughout the measures.

(Figure 19. trills, tremolo, and feathered-beam figures in mm. 39-41)

These mechanisms constantly propel the music forward, prompting transformations of the relevant parameters. Moreover, such elasticity operates both on microscopic and macroscopic levels – i.e., the accumulation of the process snowballs, building intensity on the macroscopic level. This is linked to the aforementioned metaphor of a rollercoaster, alluding to the importance of Lachenmann’s *Kadenzklang*. As Eybl points out, it designates “a process in which the individual elements are teleologically directed towards an intensity climax.”<sup>203</sup>

By measure 74, the majority of the instrumental sections join in the scene. Notice that the woodwinds and brasses play sextuplets *fortissimo*, supported by the rototoms (see Figure 20). Altogether, they form a *sound mass*, emitting magnificent energy. The texture is now more unified though not in its entirety yet. Immediately, following this passage, the strings move downwards playing *glissandi*. Once they settle at a point (m. 78), the trombones now move downward, playing *glissandi* in response. Such motion resembles the phase of *Kadenzklang*’s decay, signaling the final phase of the episode.

Just as we are about to expect complete decay, the music is met with yet another *impulse*, which picks up the music right from this point to start another phase of elevation. Finally, at measure 81 the texture is wholly unified, with the entire orchestra playing a monophonic line (rhythmic figures; see Figure 21). The music moves step by step downwards, following a brief elevation; hence, finishing off episode 1.

Episode 2 begins from measure 92. Already at the beginning (from the latter portion of measure 91), one realizes that there is a contrast in the way the episode begins. So far, an *impulse* object marked the beginning of each framework. Here, however, the *impulse* is nowhere to be seen. Instead, the piano (soloist C) takes over from the bottom end of the preceding episode, gradually entering in the scene (see Figure 22). Also, contrary to the discourse thus far, the piano and two percussions (i.e., rototoms and electronic drums; soloist D) are sole subjects of the performance. All the other orchestra parts are at rest for the most part.

All the while, the piano and the percussions move incongruently with great force, generating turbulent friction (see Figure 23). From measure 100, the two are rhythmically united again for a moment, despite being difficult to perceive aurally (mm.100-104; see Figure 24). In general, compared to the preceding episode’s buildup phase, the texture is more disjoint and outrightly turbulent in character. Therefore, by juxtaposing the two, one observes a gestural contrast, whereby greater vitality is imparted to the latter.

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<sup>203</sup> Eybl and Mäkelä, “Exploring the Perception of Magnus Lindberg’s *Kinetics*. An Analytical Dialogue,” 71.

74

Fl. I, 2  
Picc. 1, 2  
Ob. 3  
Cl. in G 1, 2  
Cl. in Bb 3  
Sax. alto in Bb  
Fl. 3  
Cl. in C 1, 2  
Bsn. 3, 4  
Tbn. 1, 2, 3, 4  
Tuba  
Perc. 1, 2, 3, 4  
Arpa 1  
Arpa 2  
A  
B  
C  
D  
Viol. I  
Viol. II  
Vla.  
Vcllo  
Cb.

Magnus Lindberg KRAFT

(Figure 20. The sound masses in mm. 74-78)

22

79

Magnus Lindberg KRAFT

(Figure 21. The circle indicates final impulse of the former segment of episode 1, which is followed by the unified texture; mm. 80-83)

Figure 22 shows a musical score with four staves labeled A, B, C, and D. Staff A is mostly empty with a 'go to Station 4' instruction. Staff B contains a complex melodic line. Staff C is circled, showing the piano soloist's entry with a 'Pianoforte' dynamic marking. Staff D features 'Rototoms / (one stick)' and 'gliss.' markings. A circled detail in staff C shows a specific rhythmic pattern.

(Figure 22. The piano (soloist C) entering the scene, starting episode 2; measure 91)

Figure 23 displays a musical score with four staves. Staves C and D are filled with intricate rhythmic patterns. Staff C includes 'Rototoms' and 'El drums' markings, along with dynamics like 'mp', 'ff', and 'mf'. Staff D also features 'Rototoms' and 'El drums' markings with dynamics like 'f' and 'mf'.

(Figure 23. The piano and percussions (soloists C and D) move incongruently with great force in mm. 96-99)

Figure 24 shows a musical score with two staves, C and D. Staff C is marked 'fff poss.' and staff D is marked 'El drums' and 'Hard sticks'. A 'molto f (colla parte)' marking is present at the bottom of staff D.

(Figure 24. Though aurally unnoticeable, the piano and the rototoms/electric drums are rhythmically united in mm. 100-104)

Such an opposing relation seems to be assimilated into the timbral aspect as well. In episode 1, delicate articulations determined the tonal colors, yielding a calmer mood in general. In other words, despite the more energetic latter part, the emphasis was on softer sounds. Contrarily, in episode 2, the timbres are predominantly percussive and remarkable in a more

straightforward manner. They imply a transition to *noisier* sounds. Notice the piano appearing as the protagonist of the scene. The fact that it is used as a percussive medium stands out. One of Lindberg's remarks, regarding his *Piano Concerto No.1* (1994), reveals his contemplation on the characteristic of the piano:

In spite of the wonderful modern piano concertos which have been written during our century, I still felt that what was missing was the use of the instrument more for its sonorities. Schönberg, Bartók and Prokofiev – like Stravinsky – all treat the piano as a percussion instrument. I spoke with Pierre Boulez about this one evening and he said, “If you start to write harmonic music for the piano, you get back to Debussy and Chopin.” And I said, “Yes, but it is a pity that we miss and actually give up the opportunity for doing things that really sound on the piano.” So I wanted to work against the *martellato* aesthetics of the piano.<sup>204</sup>

Evidently, the twentieth century aesthetics of the piano was weighing on the composer's mind. Such contemplation has helped him to take a different turn in the way he used the instrument in the concerto.<sup>205</sup> Nevertheless, in *Kraft*, he is capitalizing on the *martellato* aesthetics. The composer adopts the methodology in achieving percussive tone color, foregrounding the opposing characteristics between episodes 1 and 2. The locational specificity of this percussive timbre has an important relation with the later part of the music.

Amidst this, the use of the instrument's register grabs the attention. For the span of 9 measures, from the beginning of the episode, both staves are written in bass clef (see Figure 23). Consequently, the overall timbre predominantly assumes a dark color. As the music progresses, the piano writing becomes increasingly complex, consisting of series of trills, rapid notes, and clusters. Through the process, Lindberg again accumulates the energy along the flow. Finally, at measure 100, the piano plays tone clusters in the upper registers, releasing massive energy (see Figure 24). After that, the instrument descends back to the lower registers, forming the characteristic of a slope – a *Kadenzklang* is established.

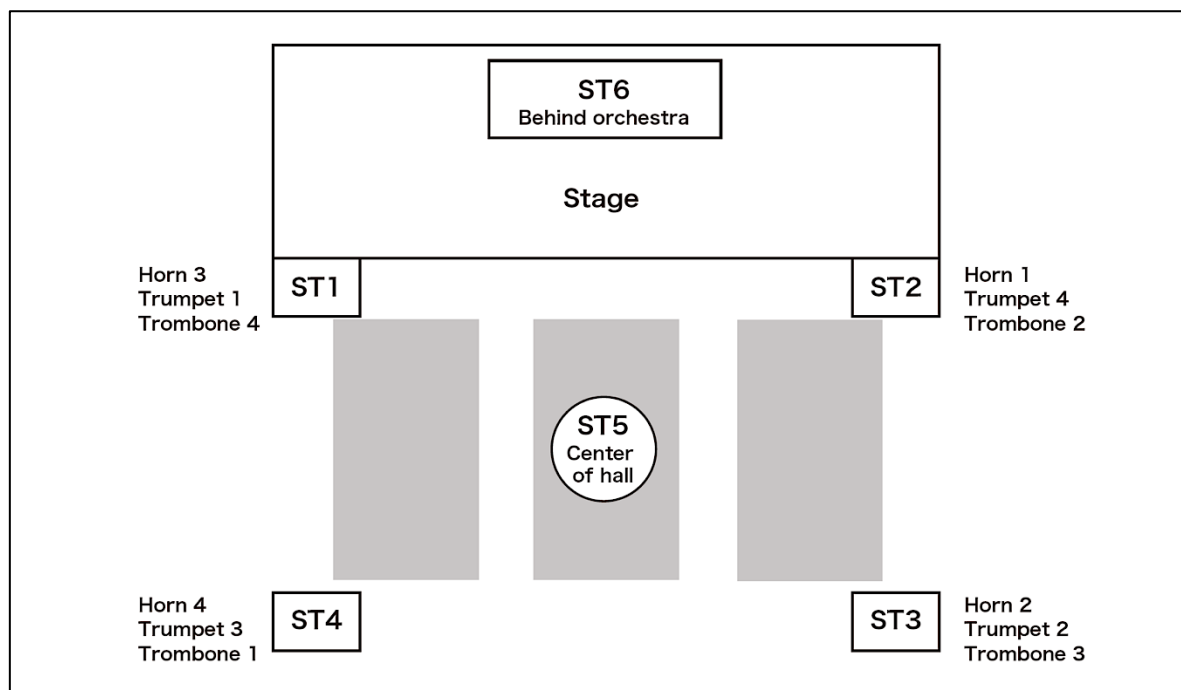
In the heat of the moment, at measure 100, the brass section gradually enters one by one. It moves from the tuba to the trombones and so forth – i.e., from the bass instruments to the soprano ones. In terms of spatialization, they fan out one at a time from right front to left of the hall. At this point, they are only heard from front left and right; besides the tuba, one each of the horns, trumpets, and trombones are placed at each station (see Figure 25). The

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<sup>204</sup> Mäkelä, “Changing Style,” 3.

<sup>205</sup> The work postdates *Kraft* roughly a decade.

rhythms are aperiodically spread out to each instrument, constructing a grainy sound mass on the surface. Though the piano began to move downwards in terms of register, it is by no means tempered in its character. In the meantime, the rototoms are playing glissandi figures from bottom upwards sequentially, adding fierceness to the music. This is yet another cycle of elevation, bound for the next *impulse* played by the orchestra.



(Figure 25. The brasses begin to fan out across the space in groups; they are being heard from front right and left in mm. 100-109, and from all four corners in mm. 110-151)

Finally, at measure 110, the music arrives at an *impulse* played by the strings (notes: E flat and A; see Figure 26). The piano, rototoms, the brass and woodwind sections respond at the latter part of the measure. This is also the point where the brasses start to fan out to all four corners of the hall (see Figure 25). The same is repeated for one more measure, although the strings are tied from the beginning till the end. A brief *General Pause* follows the passage right after. This little segment appears to be making the *impulse* sound to stand out, conferring greater emphasis on it. It functions as the marker of the next beginning (transition), while also bringing the *harmony* to the fore. This is contrary to the preceding events, in which *impulses* were predominantly percussive or momentary. It also provides a short moment of retreat – i.e., a time to breathe after turbulence. An additional *impulse*, played by the strings (notes: B flat, D flat), after the *General Pause*, marks the beginning of the next framework: i.e., the latter section of episode 2.

The image shows a musical score for a string and brass section. The staves are labeled VI. I, VI. II, Vle div., Vc., and Cb. A large circle highlights the string impulse in measures 110-113, showing notes for E flat and A. The score is in 3/4 time and features a variety of rhythmic patterns and dynamics.

(Figure 26. The string impulse (notes: E flat and A) signaling the transition in mm.110-113)

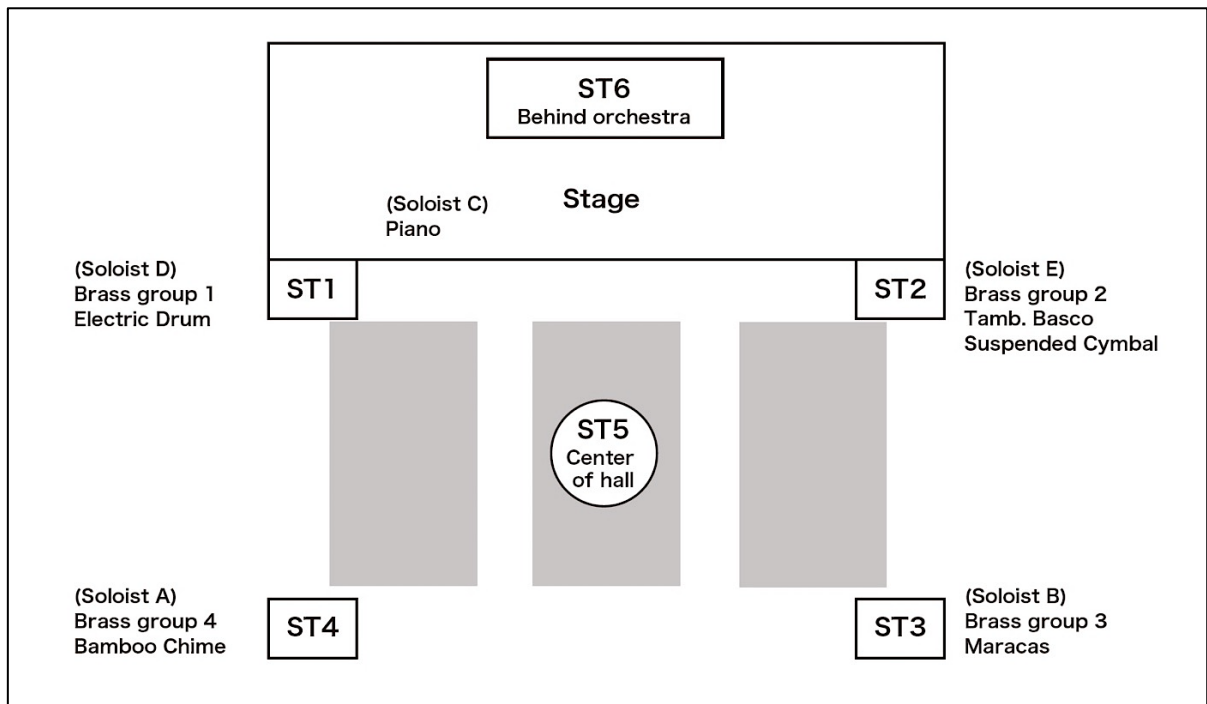
From measure 113, for the next twenty measures, the brass section takes the main role. It is now being heard from all four sides of the hall. The materials from the buildup phase of episode 1 are brought back, though assuming a modified characteristic. Notice the four groups of brass are each assigned to an individual rhythm (see Figure 27). The rhythms themselves are not necessarily complex; in fact, they are all *balanced* objects of sustained note. But, when they are piled up, their entries do not align with one another. It is like a relay happening in sequence, resulting in a texture resembling that of ocean water.

The music continues for ten measures in such a manner, essentially without any major change in the situation. This is contrary to the former period of the episode, and, therefore, the contrast foregrounds the *tension and resolution* mechanism. Meanwhile, from the pickup to measure 113, except the soloist C on the piano, all the other soloists are spread to the four corners of the hall. This means that the performances of the brasses and the soloists are being heard together from all directions. The soloists perform on idiophones (see Figure 28), complementing the musical discourse by playing trills and *crescendi*.<sup>206</sup> This strengthens the effect of ‘rise and fall’ motion of the sound objects, stirring fierceness of the music.

<sup>206</sup> The soloist D plays the electric drum (an *electrophone*), panned to left front (Station 1). In mm. 124-130, the instrument is panned to left front or right front. Also, during the same phase, the soloist E switches to the suspended cymbal.







(Figure 28. The groups of brass are joined by the idiophones at all four corners)

At measure 124, an *impulse* reappears to mark the transition, namely to the ‘bridge.’ The same instrumentation as the preceding section continues to propel the music from measure 125. However, the textural characteristic is not identical. A very simple gesture is played *tutti* for a single measure, going upwards from low register to high. Following this, the surface of the music becomes tremendously grainy, forming a chaotic moment. The polyrhythmic organization intensifies the drama again, although, just as we are about to get carried away by it, a sudden unexpected moment arrives. As the brass instruments gradually reach their respective peak notes, an *impulse*, played by the woodwinds, strings and the piano, abruptly interrupts the musical discourse (measure 130).

From measure 134,<sup>207</sup> for the next 18 measures, the music continues with nothing but *impulses* and silences (see Figure 29). This is contrary to the way the music has been developing thus far, which comprised a series of ever-transforming local events. Notwithstanding, the period lacks no intensity as the effect of the *impulses* are powerfully enhanced. The *impulse* sound no longer plays a supporting role here; it is the very protagonist of the scene.

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<sup>207</sup> The *impulses* gradually enter in the scene from measure 130, but they become most prominent from measure 134.

The image displays a complex musical score for a percussion and string ensemble. The percussion section includes four drum lines (1-4) and three cymbal lines (A, B, C). The string section includes Violins I and II (div.), Viola, and Violoncello. The score is annotated with various musical notations such as dynamics (pizz., marc., mf, f, sf, sfz, sfz), articulation (acc., ppp, pppp), and performance instructions (Chime Cymbal, wood stick, Metal plate wood stick, Wood blocks, Tim-tam, Almglocken, Various metal objects, muta in Metal blocks). Three specific shapes are highlighted: a circle around a note in the second drum line labeled 'Metal plate wood stick', a square around a note in the fifth string line labeled 'Various metal objects', and a triangle around a note in the C cymbal line labeled 'muta in Metal blocks'.

(Figure 29. The impulses at the beginning of the 'bridge' episode; the shapes indicate the employment of metal objects: (the circle) Metal plate wood stick, (the square) Various metal objects, and (the triangle) muta in Metal Blocks)

This is an important aspect. The *attacks* occur sporadically, leaving no room for any prediction. Each motion assumes a rigid character – e.g., the percussions are immediately damped after striking. It is as if the whole linear progression is being compressed to a single moment each time an *impulse* occurs – i.e., attacks of large sound masses. This is the part where the use of metallic blocks/objects resembles Neubauten's adoption of the materials (see Figure 7 for the instrumental details and their corresponding measures). They pinpoint each

moment with raw energy, imparting great force to the attacks. In his own words, the composer elaborates on this aspect: the “drum world with metal.”<sup>208</sup>

A similar application can also be seen in Neubauten’s music. A track in its first release LP *Kollaps, Schmerzen Hören* representatively exemplifies this. In the work, the main pulse is played by *impulses*, consisting of several metallic layers. Upon listening, it becomes evident what Lindberg means by “[blowing] something similar into the symphony orchestra.”<sup>209</sup> Given this, the *impulses* in the ‘bridge’ episode could serve as apt examples that demonstrate the influence in question. They could be referred to as the element that shows Neubauten’s trace in the work.

Complementing this, the silences are also noteworthy. As aforesaid, the *impulses* occur sporadically. Meanwhile, the silences between them carry the weight of the tension, infusing a sense of expectancy. Such a feature is almost like the Japanese idea of *ma* – the effect of silence *in between*. This presence heightens the effect of the actual audible matter. It is like invisible perpetual motion operating behind the scenes, propelling the music forward without anything being heard. The Japanese composer Toru Takemitsu (1930-1996) makes a point about this:

The unique idea of *ma* – the unsounded part of this experience – has at the same time a deep, powerful, and rich resonance that can stand up to the sound. In short, this *ma* this powerful silence, is that which gives life to the sound and removes it from its position of primacy. So it is that sound, confronting the silence of *ma*, yields supremacy in the final expression.<sup>210</sup>

Therefore, the silences exist not just for their own sake, but as a particular mechanism that strengthens the effect of the *impulse*.

This is certainly not unrelated to structural concerns. The fact that such a formation is stationed at this stage is structurally crucial. Following the ‘exposition’ and two episodes, this section is where the music takes a turn of event. It is the phase which can be equated with the ‘development’ section of the Sonata form. It reveals a contrast to what has been happening thus far and to the events that are to come afterwards. Ultimately, it functions as the

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<sup>208</sup> “Alan Gilbert and Magnus Lindberg in conversation with Sarah Willis.”

<sup>209</sup> Oramo, “Magnus Lindberg: EXPO.”

<sup>210</sup> Toru Takemitsu, “A Single Sound,” in *Confronting Silence: Selected Writings*, trans. Yoshiko Kakudo and Glenn Glasow (Berkeley, California: 1995), 51.

preliminary stage of the climactic point of the first movement. It is a pivotal moment, a turning point, to which special attention is drawn.

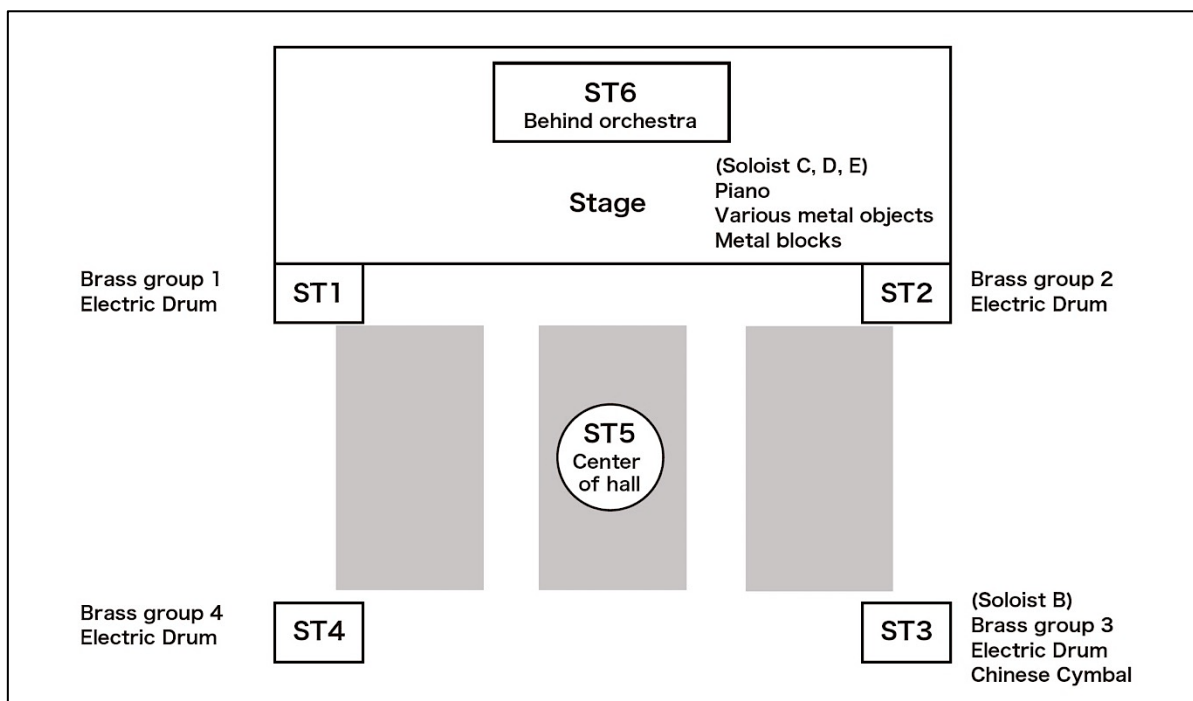
Accordingly, the fact that the metallic materials are specifically channeled into such a salient segment is worthy of notice. It underlines the locational specificity of the metallic *impulses*. Technically, there are numerous orchestral techniques readily available, whereby strong *impulses* can be generated (e.g., the ones in Jukka Tiensuu's *MXPZKL* (1977)). Therefore, the selective adoption of the industrial objects alludes to the composer's specific intention. It demonstrates how much the composer prioritized this element, maximizing its effect. It also implies how much the composer was preoccupied by the powerful impact of the metallic sound. Therefore, this aspect exerting influence even to the extent of the structural design must have been an inevitable result. The specific selection of the urban residues for this purpose highlights the influence of the German group. It validates Lindberg's attempt, "to win power by the use of the metallic objects,"<sup>211</sup> manifesting the impact he had felt at Neubauten's live performances.

Furthermore, the characteristic of the sound becomes a vital element of the composition that determines the work's character. The metallic objects are not merely force generators. They are *signs* that communicate about the dynamic urban surroundings of 1980s West Berlin and its subculture, signs that convey the sensation absorbed by the composer in that setting. Moreover, with the structural design foregrounding the metallic *impulses*, the matter becomes even more plausible. On that account, it would not be an exaggeration to assert that the industrial materials shape a very distinct worldview of the work. They establish an atmosphere like no other materials would be capable of.

The configuration of spatialization shows difference from the previous segments. As mentioned earlier, the idiophones and brasses were being heard from all four corners. At this point, the electric drums displace the idiophones; they are panned to all four sides. Besides a Chinese cymbal being added to Station 3 (soloist B), the sound of electric drums makes up all sides with the brasses remaining the same (see Figure 30).

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<sup>211</sup> Spangemacher, "Punk und Muttermilch," 28.



(Figure 30. The electric drums are panned to all four sides; the metallic objects are being heard from stage)

Amidst this, the metallic objects are disposed on *stage* as they start to make their appearance in earnest. This is the place where their presence becomes prominent for the first time. Coupled with the re-emphasis on the stage (the aforementioned), the visual sensation of the objects pulls the audience's attention to themselves. This mechanism spotlights the *corporeality* of the materials, amplifying the sonorous effects of the *impulses*. The sounds resonate with the visual sensations, while the *spatial narrative* encourages their effects. This aspect exemplifies the principle of *sensus communis*, while bringing the trace of Neubauten's corporeality to the fore.

At measure 151, a sudden burst of B flat contrabass clarinet (playing its highest note possible; Soloist A) interrupts the music as it marks the transition to the next period. This marks the final part of the 'bridge,' starting from measure 152. From this point, the brasses are no longer heard from all directions. Only the two horns are to be heard from the front the on both sides (Stations 1 and 2). This implies that the sounds are being gradually converged on the front, or on the place where the perceptual attention is primarily directed. Retrospectively speaking, from measure 100, the sounds (starting from the brasses) began to spread out into space gradually. In other words, the sounds are now reversing back to where they had begun to fan out. By this point, all the other brasses and the soloists have moved back to the stage as well. In addition to the two horns, one contrabass clarinet, and two bass drums make up the section. All throughout, the horns take turns, playing the note 'A.' This

continuous line (i.e., *balanced* object of *held note*) creates a static situation, drawing the focus on the moment itself. Compared to the preceding segment, the ‘dense masses’ have now become ‘a single line,’ hence consummating a binary opposition (see Figure 31).

(Figure 31. The latter segment of ‘bridge’ episode 2 in mm. 152-156; the continuous notes of the horns create a stationary situation)

The linear flow had been compressed to each *moment* (*impulses*) in the preceding period. Here, the whole segment is completely locked into a singular space, not being able to move anywhere else. It is almost as if zooming in on an *impulse*, transporting the listener to the microscopic space. Meanwhile, the inner events are far from settling. While the horns are playing only a single note, Lindberg employs constant dynamic changes, going from quiet to very loud, and vice versa. He also employs harmonics, trills, flutter tonguing, *pavilion en l’air*; and more to alter the gesture each time the note is played. These violent gestures create a unique situation. It resembles a living creature attempting to break through the space it is locked in, but constantly failing; it engenders an intense feeling of claustrophobia.

The bass clarinet makes dramatic gestures as well. It performs the figures in the low registers in irregular rhythms (in disorderly fashion: *unpredictable facture*), in similar manners to the horns. It, too, makes abrupt changes of registers from low to high, and vice versa. In the meantime, the sound of the instrument is put into motion (mm. 151-193). In the instruction, Lindberg writes, “random panning around the hall for clarinet,” (see Figure 10). This element goes to yield important meanings at last. This matter will become more tangible during the closing episode.

In the heat of the moment, the two bass drums appear sporadically in massive *impulses*. They transmit great force to the scene, whereby the music maintains the level of tension. Such employment of the *impulses* creates a metaphoric imagery. It is as if a huge

stone at the entrance of the space being rolled away. That is, each *impulse* marks a transmission of force, moving the stone one step at a time. In other words, the *impulses* represent the *cause* of the motion. Ultimately, this leads to the emancipation of the materials from the isolated space.<sup>212</sup>

The emancipation begins from the pickup to measure 167 (see Figure 32). Initially, the horns and clarinet begin to move upwards in register – Lindberg marks *staccatissimo presto possibile*. Meanwhile, the bass drums, playing tremolo, gradually fades away from the scene. During the transition, one is under the impression of the *definite pitches* giving away to the *complex*. Metaphorically, it is as if a knot is coming untied, emancipating the materials from the isolated tonal space. The relaxation brings about a transformation of *mass* in time, i.e., the *complex* superseding the *definite*. This recalls the ‘exposition,’ where a similar transition had been witnessed – although, it was the other way around (see Figure 9). Finally, from measure 169, the surface begins to become grainy again, leading to the final episode of movement I (in case of the Sonata form: ‘recapitulation’).

The image shows a musical score for measures 166-167. It features two horn staves (top) and a clarinet staff (bottom). The horns and clarinet parts are marked with 'staccatissimo presto possibile' and 'ff'. The horns are also marked with 'move upwards in register'. The clarinet part is marked with 'ced.' and 'staccatissimo presto possibile'. The bass drum part is marked with 'ff' and 'sim.'. The score is enclosed in a large oval.

(Figure 32. The emancipation from the claustrophobic space in mm.166-167; *staccatissimo presto possibile* assigned to the two horns (top) and the clarinet (bottom; soloist A))

<sup>212</sup> The whole segment also resembles the work, *Ablauf* written in 1983.



The ending episode takes place during measures 171-192 (see Figure 33). In its former half, the polyrhythmic texture propels the music forward; hence, a transition from an ‘unchanging situation’ (the preceding segment) to a ‘changing’ one. In addition, the timbres of the industrial metals dominate the scene (*complex pitch*). No longer are the pitched instruments involved, except the contrabass clarinet. Given that, the attention is drawn to the timbral transformations carried out thus far. The following Table 10 shows the timbral changes over the three main episodes (only the former periods) and the corresponding measures – it excludes the ‘bridge’:

36

The image shows a musical score for measures 171-172. The score is divided into eight parts: 1. Cor. in Fa, 2. A, 3. B, 4. C, 5. D, 6. E, 7. F, and 8. G (Electr.). Part 1 (Cor. in Fa) starts at measure 171 with a dynamic of *pp* and a crescendo to *f*. Part 2 (A) has dynamics *f*, *poco mp*, and *p*. Part 3 (B) has dynamics *f*, *mp*, *f*, *p*, *f*, *pp*, and *poco mp*. Part 4 (C) has dynamics *poco mp* and *mf*. Part 5 (D) has dynamics *p* and *mf*. Part 6 (E) has dynamics *f*, *mp*, *f*, *p*, and *f*. Part 7 (F) has dynamics *mp*, *f*, *p*, *f*, *pp*, *poco mp*, *sfz*, and *poco mp*. Part 8 (G) is marked (Electr.). Annotations include 'Metal blocks // (Triangle sticks) or Tamtam (secco)' circled in two places (one in part B and one in part E) and 'Palatal click-sound' in part F.

(Figure 33. An excerpt from the former part of the ending episode in mm.171-172. The circle indicates metal blocks being assigned to the corresponding soloists. The soloist C has also been assigned to the urban metals in the preceding measures)

**Table 10. The timbral changes over the three main episodes (the former periods only)**

Corresponding measures	Timbral characteristics
mm. 34-79 (the former period of episode 1)	Predominantly orchestral timbre; delicate articulations (Pitch: <i>definite</i> and <i>complex</i> )
mm. 92-109 (the former period of episode 2)	Loud and percussive timbre; <i>martellato</i> style of piano playing and the percussions (Pitch: <i>definite</i> and <i>complex</i> )
mm. 171-192 (the former period of the ending episode)	Metallic and concrete sounds (Pitch: predominantly <i>complex</i> )

Notice the tonal quality of the sounds (or *definite pitch*) gradually being obscured, becoming more and more percussive and concrete (*complex pitch*) at last. This once again foregrounds the transformation occurring over the progression from one state to the other.

Against this background, the fact that *concrete* sound is being set as the destination point is notable. It implies that it represents one end of the timbral dichotomy. In other words, the timbral narrative is bound for the *concrete*, starting from the orchestral tone colors. This feature signals the locational specificity of the urban materials, while also indicating the composer developing the form around this component. It goes on to show their sonorities situated at the heart of the narrative, unveiling the trace of Neubauten's influence in the work.

The spatial narrative is noteworthy as well. Thus far, the discussion has shown how Lindberg capitalizes on the localization of the sounds. Initially, palettes of sound had fanned out to all four corners of the hall. Amidst their timbral transformations, they also gradually converged on the *stage*. Such a spatial narrative implies *classification* of the stations, prioritizing the *stage* over the others – its prominence is highlighted again.

But this leads to another crucial feature. Since measure 151, the bass clarinet has been rotating around the hall in random directions – much like electrons moving around the nucleus of an atom.<sup>213</sup> With that, one notices that a tam-tam is placed at the *center* (station 5)

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<sup>213</sup> In mm. 181-192, Lindberg asks the soloist A to play on various parts of piano (e.g., hitting frame, scratching one wired piano string, noise sounds inside the piano, dropping ping pong balls on piano strings, etc.). Amidst this, the soloist is still being panned, while he/she is asked to hold the clarinet until measure 193.

of the hall. In an interview, Lindberg refers to this tam-tam as the *solar plexus* of the work.<sup>214</sup> For this reason, the interaction between the clarinet and the tam-tam (*center*) brings about a unique scene in the musical space. It comes to depict *centripetal force* being at work between the two instruments (see Figure 34).

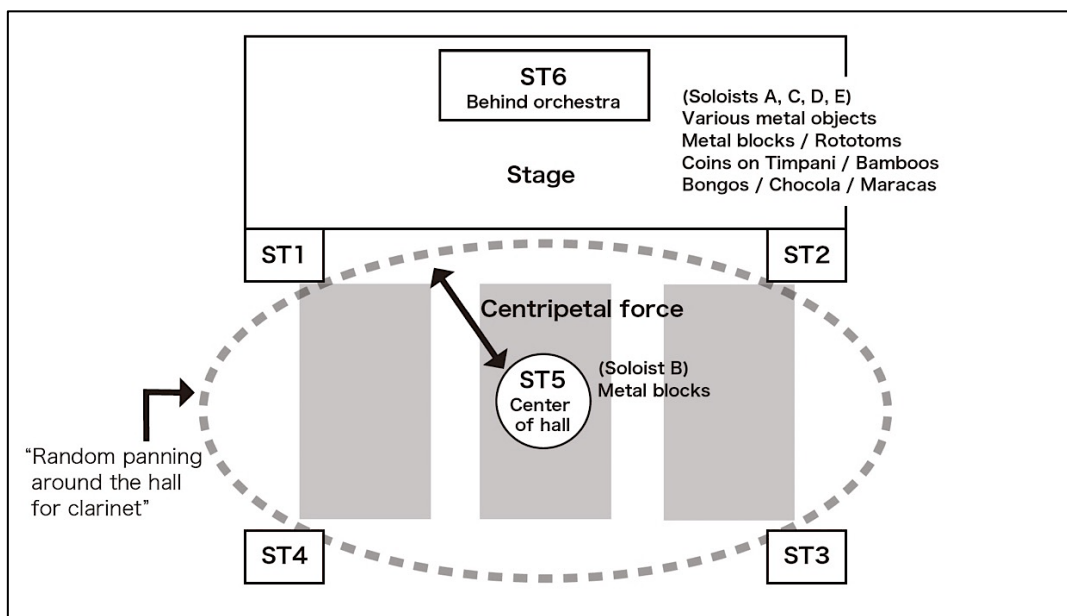
Given that, the configuration underlines the *center* as the *source* of the force in a symbolic context. And the fact that a tam-tam is placed at *center* recalls Lindberg's reference to Stockhausen's *Mikrophonie I*. The composer recounts that the methods of the German composer had an influence on him in terms of organizing noise in his music. Over and above, Stockhausen's idea of "[discovering] the micro-world of the acoustic vibrations,"<sup>215</sup> justifies Lindberg's disposition of the tam-tam at *center*. It alludes to the instrument as the *symbolic* foundation of all sound sources, from which all the other micromaterials stem. Therefore, this factor goes parallel with the spatial representation of *centripetal force*.

On top of that, the disposition of the urban materials forms the direct connection between *center* and *stage*. Notice that Lindberg places the found instruments only on the two stations. Such a configuration indicates the found materials as the most intimate components to the foundation. They are the very first cloud of sound that arises from the *solar plexus*. They open up a pathway towards *stage*, from which a variety of sounds expand to the other corners of the hall. Therefore, the found instruments play a central role in forming the spatial narrative. And the narrative, in turn, comes to heighten the effect of the *corporeality* of the found instruments.

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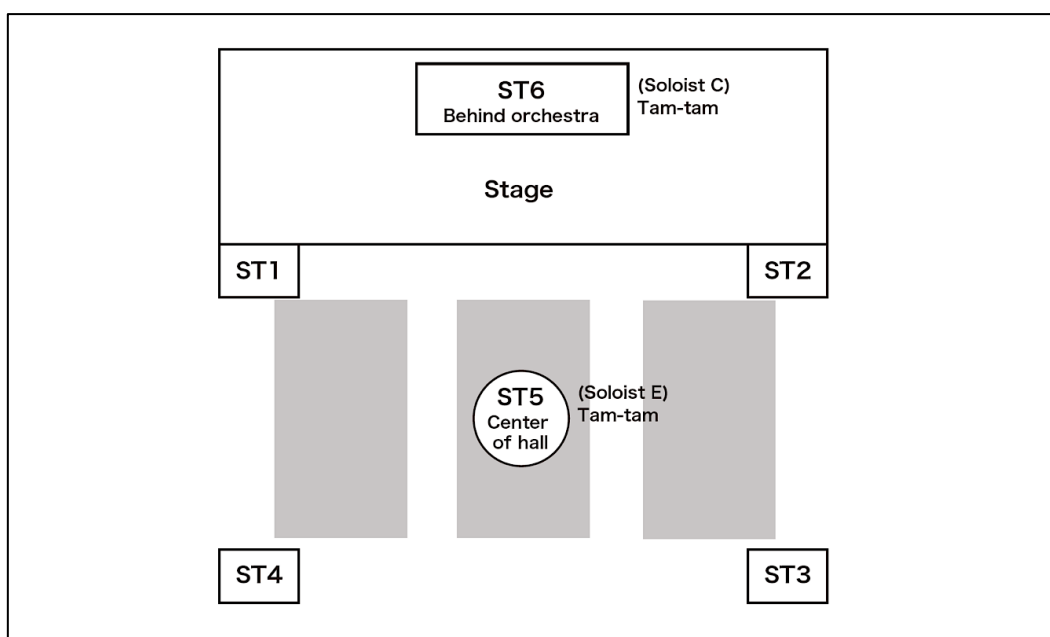
<sup>214</sup> Dresdner Musikfestspiele, "Magnus Lindberg "Kraft" 2013 • Dresdner Musikfestspiele," *YouTube* video, 6:03, May 16, 2013, <https://www.youtube.com/watch?v=A8YnNO4EYxo>.

<sup>215</sup> Stockhausen, *Stockhausen on Music*, 87.



(Figure 34. Centripetal force between clarinet and center, and the disposition of the metallic objects)

Bearing that in mind, one can already notice the relation between *stage* and *center* at the very beginning of the ‘exposition,’ apart from the panning of the clarinet and cello. The two tam-tams, one at *center* and the other placed on *station 6* (behind orchestra), engender the musical discourse (see Figure 35). These two stations sandwich the orchestra on stage, bringing out the important relation between themselves. In other words, the spectacle already hints at the core of the spatial narrative at the outset of the music.



(Figure 35. The relation between stage and center is formed already at measure 1)

Concurrently, there is another feature that is extraordinary in this event. At its entrance (pickup to measure 172), the conductor suddenly starts to perform voiced phonemes. In retrospect, several soloists were performing voice phonemes at the very beginning of the 'rising action' phase – then, in a whispering manner. Here, it is performed by the conductor in a manner which is analogous to 'rap'.<sup>216</sup> Lindberg's first adoption of phonetics dates all the way back to the summer of 1978.<sup>217</sup> This was around the time when he had started studying with Paavo Heininen. The teacher asked him to write a piece for choir and it was for this assignment Lindberg composed the work *Untitled* (1978). The piece adopts phonetic principles that he had learned from studying the Swedish author and poet Bertil Malmberg's (1889-1958) book *Lärebok I fonetik* (Treatise in Phonetics).

Following this piece, Lindberg composed both *Linea d'ombra* and *...de Tartuffe, je crois* in 1981. Including *Action-Situation-Signification*, in all three works Lindberg employs phonemes as an additional category of tone color. This shows that phonetics enabled him to utilize the human voice without needing to incorporate linguistic aspects. Returning to the main discourse, the same principle is applied to *Kraft* as well. The conductor's performance, backed by the polyrhythmic layers of the metallic objects, creates a peculiar space, inexplicably surreal.

Hypothetically speaking, this is another phase of the music, where Neubauten's influence is apparent. The whole sonority echoes the band's *Der Herrscher und der Sieger* (The Ruler and the Winner) from their second studio album *Zeichnungen des Patienten O.T.* (1983). In this track, certain segments consist of Blixa Bargeld's unintelligible vocal performance, accompanied by the metallic cacophony. Though not without disparities, this piece and *Kraft* create an impression comparably similar. Unlike the preceding period, where *impulses* and silences dominated the music, it is unclear here if Lindberg really drew inspiration from the band's performances. However, upon hearing the performances of the band during the 1980s,<sup>218</sup> it is likely that similar segments would have appeared in one of its gigs. In conclusion, it might be an exaggeration to be certain that this section, too, was a byproduct of the influence. However, there is a good potential that such sonorities offered insights to the Finnish composer.

The closing of the first movement starts from measure 193 – the tempo is marked *Lunga* (see Figure 36). At the initial stage, the note 'E' below the staff (bass clef) is played by the contrabassoon and contrabass. After three measures (measure 196), the contrabassoon

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<sup>216</sup> "Alan Gilbert and Magnus Lindberg in conversation with Sarah Willis."

<sup>217</sup> Nieminen, "Works," 93.

<sup>218</sup> Paulus de Boskabouter, "Einstürzende Neubauten live @ Effenaar Eindhoven Netherlands February 19, 1986," *YouTube* video, 1:12:30, July 7, 2019, <https://www.youtube.com/watch?v=IkdjB1PPMEw>.

fades away from the scene, while the contrabass continues right to the ending of measure 198. In the meantime, the harps and the piano provide *impulses* in the background; the piano only stays for a moment and the harps fade away together with the contrabass.

(Figure 36. The tam-tam (soloist B) and four opera gongs (other soloists) from measure 193)

The most prominent feature here is the choir of the percussion instruments. The tam-tam at *center* and four opera gongs that are spread out at all four corners are what characterize this phase of the music. Initially, the tam-tam enters the scene in a magnificent manner, playing *fortissimo*, after which it gets tempered measure by measure. It can be heard at every downbeat up to measure 198; its prominent presence is something that cannot be missed.

All the while, the opera gongs gradually appear on the scene. During measures 193-198, they are played either *piano* or *pianissimo* in a very subtle manner. Once the music reaches measure 199, they begin to *crescendo* until measure 204. This is the place where their performance reaches its peak, playing *fortissimo*; they continue but with lesser prominence. At measure 205, the choir of the piccolos enters the scene in *variable pitch* figures, from high register to low (see Figure 37). Such a decay signals the end phase of the corresponding *Kadenzklang*. Thereafter, the piccolo figures (in 8<sup>th</sup> notes) are piled up again in four layers. Over time they become denser, briefly forming a grainy surface, before spreading out again to finish off the first movement.

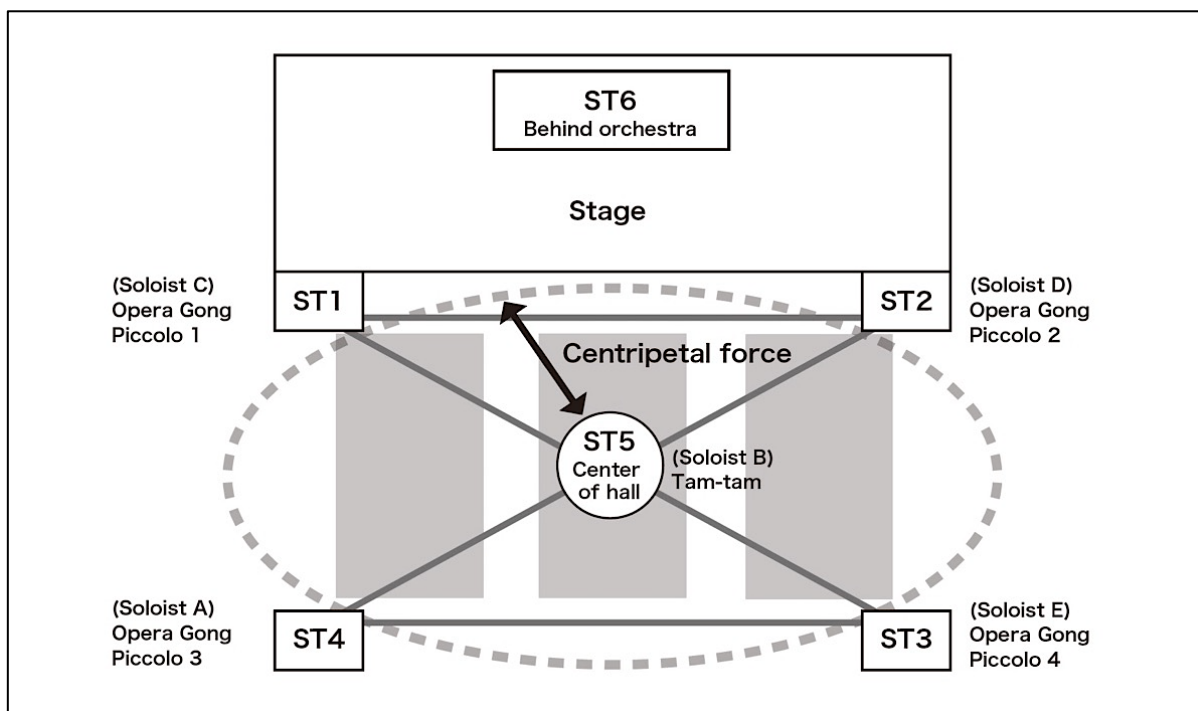
(Figure 37. The piccolo figures coming into the light from measure 205)

Amidst all, the spatial configuration grabs the attention (see Figure 38). While the tam-tam is heard from *center*; the opera gongs are heard from all four corners of the hall. They are played in sequence from *station 1* to *station 4*—i.e., front left – front right – back right – back left. With the tam-tam being heard from *center*, the configuration once again illustrates *centripetal force*—now entirely consisting of metallophones. From measure 205, the piccolos enter in sequence: *station 4*– *station 2*– *station 1*– *station 3*—i.e., back left – front right – front left – back right. Notice a rotation of this writes an ‘X’ in space. These movements of the sounds fill the performance space, creating a chaotic spectacle.

To summarize, the first movement is made up of sequentially revealed events, comprising conflicting textures and spatiotemporal properties. Tarasti makes a point that in *Kraft* (among other examples), “mere alternation between ‘being’ and ‘doing’, along with their indexical connectives, creates the action.”<sup>219</sup> Meanwhile, he equates the modalities ‘being’ and ‘doing’ with tension and rest; that is, *dissonance* and *consonance*. From this point of view, the complex texture could be referred to as being ‘doing,’ “which produce a feeling that something is happening,”<sup>220</sup> while the simple texture can be viewed as its counterpart. This reciprocal interaction creates action, within which the local events incorporate myriad interpolations of the corresponding parameters. In this context, this section has expounded the locational specificity and purpose of the found materials.

<sup>219</sup> Tarasti, *Musical Semiotics*, 116.

<sup>220</sup> *Ibid.*



(Figure 38. The spatial configuration in mm. 205-222. In addition, from measure 215, the soloist B (center) walks slowly to stage, while playing the crotales)

### 5.3.2 Movement II

The development of the second movement assumes a slightly contrasting characteristic from its predecessor. As Warnaby points out, it is rather more “fluid.”<sup>221</sup> The musical discourse no longer consists of different events in sequence. It follows linear progress, comprising construction and deconstruction of the materials. At times, a single aggregate is brought to the surface, while at other times, the inner organization characterizes the flow. In other words, the music contains contrast between microscopic and macroscopic dimensions. It proceeds through the process of the latter *becoming* (referring to Tarasti’s points) the former, and vice versa. This could also be viewed as a dichotomic aspect.<sup>222</sup>

For instance, the very first note ‘A,’ played by the cello, piccolo, piano, and crotale could be referred to as an apt example of a concrete aggregate (see Figure 39). It appears to be representing a *compound* of the myriad sound materials introduced during the preceding movement. This continuous sustainment gets zoomed in over time, whereby the music is brought to microscopic space, revealing the elaborate inner organization.

<sup>221</sup> Warnaby, “The Music of Magnus Lindberg,” 26.

<sup>222</sup> “Alan Gilbert and Magnus Lindberg in conversation with Sarah Willis.” Lindberg briefly points out the macroscopic/microscopic relationship embedded in the work.



The image shows a page of a musical score for measures 1 through 4. The staves are labeled as follows: 3 (Piccolo), 4 (Flute), 1 (Clarinet), 2 (Clarinet), A (Bassoon), B (Violin), C (Viola), D (Cello/Double Bass), and E (Percussion). The score includes various performance instructions such as 'mufa in Fl. gr. go back to the orchestra', 'non vibr.', 'pizz.', 'Crotali aereo', and 'Wineglass'. A large circle highlights the first measure across all staves.

(Figure 39. An example of a concrete aggregate of micro-materials at measure 1)

Looking at the overall picture, except the final *coda*, the movement consists of six main segments (see Table 11). Largely, it revolves around two climactic moments; that is, it incorporates two large *Kadenzklänge*. Both consist of their respective linear transitions, zooming in and out on the musical space.

Table 11. Seven Phases of Movement II

Measures	Phase
mm. 1-73	<i>Buildup</i>
mm. 74-116	<i>Explosion and Second Buildup</i>
mm. 117-123	<i>Climax</i>
mm. 124-153	<i>Falling Action</i>
m. 154	<i>Resolution</i>
mm. 155-168	<i>Denouement</i>
mm. 169-199	<i>Epilogue (Coda)</i>

The first 'buildup' phase (mm.1-73) consists of six different phases. Though indefinite as the previous movement, each point of transition refers to either an introduction of new materials or a slight alteration to the original ones. As aforesaid, the phase begins with a single note 'A' played by the cello, piano, piccolo, and crotale. The cello and piccolo play a *held* note, while the others perform either tremolo or shorter note values sporadically. Thereby, the cello stands out over the other parts. The tremolos and trills show glimpse of intensity hidden beneath the surface – retrospective of the intense previous movement.

Before long, at measure 8, the clarinet enters the scene again, together with the idiophones – i.e., the bell tree, spring coil, triangle, and temple bell. This eventually leads to the next part from measure 11; the harps and strings begin to take part as well (measure 10). The figurations of the three key soloists (the clarinet, cello, and piano) now turn to *iterative* notes (see Figure 40). With the pitches becoming obscure, they lose the form of *definite pitch*.

(Figure 40. Continuous notes shifting to iterative ones, signaling transition in mm. 11-12)

At measure 16, the soloists D and E are assigned to metal/ceramic blocks, reoffering a glimpse of the concrete tone colors (see Figure 41). Simultaneously, the harmony, played by the strings, becomes increasingly richer, as the parts start to join in one by one. This is followed by additional appearances of pitched percussions from measure 17 (i.e., crotales, glockenspiel, and celesta). And, as for the piano, the single pitches give way to chords. Right after, at measure 20, the figurations of the cello are now more elaborate, after which the clarinet tags along (see Figure 42).

Figure 41 is a musical score for five staves. The top three staves feature complex rhythmic patterns with dynamic markings: *mf*, *mp*, *poco f*, and *f*. The bottom two staves show a soloist's part with dynamic markings *f* and *pp*. A circled section on the right side of the score highlights two parts: 'Ceramic blocks' and 'Metal blocks', both marked *p* and *sim.* (sustained).

(Figure 41. The metallic/ceramic blocks making appearance (soloists D and E) at measure 16)

Figure 42 is a musical score for five staves labeled A through E. Staff A (clarinet) has dynamic markings *p*, *mf*, *ff*, *f*, and *mf*. Staff B (cello) has dynamic markings *pp*, *mp*, *mf*, *f*, and *p*. Staff C (piano) has dynamic markings *p*, *f*, and *mf*. Staff D (soloist) has dynamic markings *p*, *ff*, and *f*, with performance instructions 'Triang.' and 'Metal blocks'. Staff E (soloist) has dynamic markings *mf* and *p*.

(Figure 42. Elaborate figures of the cello (soloist B) and clarinet (soloist A), and piano chords (soloist C) in mm. 20-22)

Measure 23 marks the next phase as the woodwinds emerge into light, starting from the flute and clarinet. By now, all the three key soloists play more complex rhythmic figures, involving a greater number of pitches: single pitch iterations make a brief return during mm. 26-31 (see Figure 43).

The image shows a musical score for five parts, labeled A through E. Part A (Clarinet) and Part B (Cello) feature complex, rhythmic patterns with dynamic markings such as *f* and *mp*. Part C (String section) consists of dense, repetitive rhythmic textures. Part D (Ceramic blocks) and Part E (Metal blocks) provide percussive accompaniment with specific performance instructions. The score is written on five staves, with Part C being a grand staff (treble and bass clefs).

(Figure 43. Iterative figures briefly returning to the scene in mm. 26-28)

Meanwhile, all five parts of the string section are now also present, generating a much richer sound. By measure 32 (the fourth phase), the involvement of the orchestra is greater, especially the strings. Amidst this, the clarinet and cello (soloists A and B) begin to perform alternately in an imitative manner (see Figure 44). Two measures later (measure 34), the vibraphone (soloist E) joins the dialogue with the celesta stringing along as well. Additionally, the brass section participates, starting from the horn and trumpet. Evidently, the overall texture is now much thicker. The music proceeds this way for a while, developing constantly. At measure 46, it reaches a brief peak.

(Figure 44. The alternation between the cello and clarinet (soloists A and B) and thicker texture of the strings in mm. 32-35)

At the latter part of measure 46, the clarinet and cello play sustained trills (*redundant object*), bridging the current phase to the next. All the other strings except the second violins take a sudden rest; the brass and woodwinds make a stop as well. The second violins, together with the trills of the clarinet and cello, play long glissandi, gradually moving from one chord to the next.

For a moment, the density of the texture (mainly referring to the soloist ensemble) is much lower than before, although, by measure 52, they return to the previous state. From measure 55, the strings partake in the polyphony as well. Their figurations are now turned

into rhythms from *held* notes. Around this time, the brasses slowly start to fade in, preparing for the crucial moment – i.e., the first climax.

Measure 61 (phase five) is the point where the brasses get underway to accumulate force in earnest. From this point onwards, until measure 73, the increasing entrances of the brasses propel the music. All the other sections die out by measure 67, except the lower strings and woodwinds. The greater density of the brass section confers the music with daunting force – almost like an omen (see Figure 45).

The image displays a musical score for measures 69 through 72. The score is divided into four systems, each representing a different brass instrument: Cl. basso in Sib (measures 69-72), Cor. in Fa (measures 69-72), Tbn. (measures 69-72), and Tuba (measures 69-72). Each system contains multiple staves, indicating a large ensemble. The notation is dense, with many notes and rests, and includes dynamic markings such as *mf*, *ff*, and *ppocf*. The overall impression is one of a powerful, dense brass section.

(Figure 45. The dense mass of the brasses in mm. 69-72)

Strong *impulse* is finally brought back to the scene at measure 74. This is retrospective of the *impulses* of the preceding movement.<sup>223</sup> From this point onwards, the music takes the listener on a new journey; it is the decisive moment that paves the way for the final ‘climax.’ The timpani moving downward and the piano and woodwinds moving in the opposite direction creates a contrary motion (measure 77). This causes an impression that the materials stored thus far are about to be released through a hole (see Figures 46 and 47). Unsurprisingly, a massive burst of sounds follows right after. Metaphorically, it is almost as if a person is pouring down the materials from a bucket (like there is no tomorrow).

In the heat of the moment, the tremolo of the ‘metal blocks’ imparts the music with raw energy. The power won from the *dry* tonal color radiates the urbanity. Accordingly, this is

<sup>223</sup> Specifically, the one that appears in measures 110-111 (movement I).

another passage that validates the selective use of the metallic objects. It is another embodiment of the powerful sounds that the composer came across during his residency in West Berlin. Also, in terms of spatialization, the 'metal blocks' are being heard from the *stage* and *center* again, justifying the reciprocal relationship between the two. Hereafter, the soloist ensemble is demoted to a minor role; instead, the force of the symphonic orchestra is maximized.

The image displays a musical score for a percussion ensemble. At the top, the piano (Pno) part is written in treble clef with a *ff* dynamic. Below it, the timpani part is written in bass clef, also with a *ff* dynamic. The score is divided into five staves labeled A through E. A large circle highlights a section in measures 77-78, where soloists C and E play metal blocks. Annotations include 'Station 6 Tam-tam heavy tam-tam mallet', 'Station 4 Tam-tam', 'Metal blocks as large as possible', and 'Station 5 Metal blocks'. A dashed line at the top indicates an *8va* transposition. Arrows point to the right, indicating the direction of the music.

(Figure 46. The contrary motion between the piano and timpani; the soloists C and E playing the metal blocks *ff* in measure 77)

The image shows a musical score for measure 77. It features several staves for woodwinds and strings. The woodwinds include Piccolo (Picc.), Flute (Fl. c-a. in Sol), Oboe (Ob.), and Clarinet (Cl. in Sib). The strings include Timpani (Timp.). The score shows complex rhythmic patterns with many notes and rests, indicating a dense texture. The woodwinds are playing a melodic line that moves upwards, while the timpani plays a rhythmic pattern that moves downwards.

(Figure 47. The upward motion of the woodwinds; contrary to the timpani (measure 77))

Once the most turbulent phase has been exceeded (measure 96), the music sets off for a final journey towards the *telos*. Along the discourse, the strings and the woodwinds govern the process. From measure 106, the woodwinds start to take a rest and the strings become the only source that propels the music. The extensive overlap of the pitches forms high-linear mass density (see Figure 48), echoing what Lindberg refers to “somewhere in between timbre and harmony (in the spirit of French composers).”<sup>224</sup> Amidst this, from measure 105, 4 soloists (A, C, D, and E) start playing *crotales*, while standing on their respective ‘aisles’ (see Figures 4 and 8 for details). What is more, from measure 107, they start walking towards *stage*, while playing the instruments (see Figure 49). This is reminiscent of the very beginning of the ‘exposition,’ when the clarinet and cello were put into motion via live-electronics. Although the method is contrary, such a feature once again comes to emphasize the presence and significance of the *stage*.

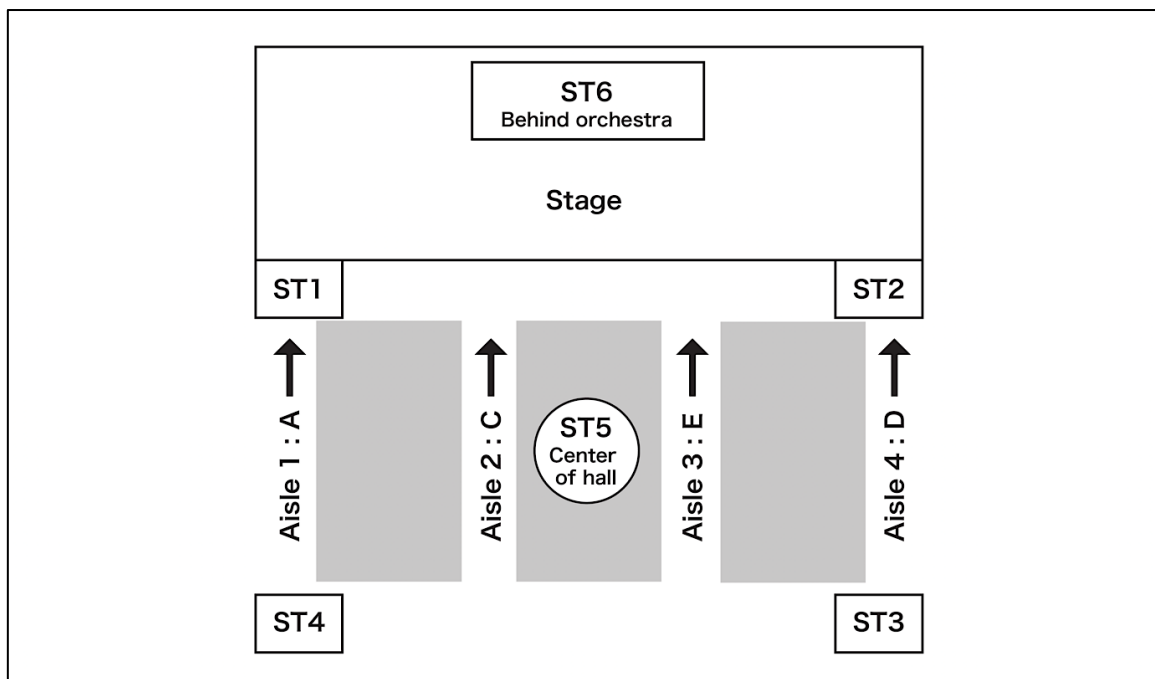
The army of strings carries the music all the way to the climax – i.e., the final *telos*. Finally, the climax begins to take place at the pickup to measure 117, starting with the glissandi played by the strings (see Figure 50). It follows the registral order from the contrabasses to the violins. Their figurations echo the cello figures from the ‘exposition.’ This is the very moment when the ‘ultimate simplicity’ or the ‘primitivity’ is being established. It is the ultimate consummation of the binary opposition.

<sup>224</sup> Lindberg, “A voice from the 1980s,” 3.



The image displays a complex musical score for an orchestra, spanning measures 100 to 103. The score is divided into several systems, each containing multiple staves. The instruments and parts are labeled on the left: VI. I (div. in 2), VI. II (div. in 4), Vle (div. in 4), Vc. (div. in 6), and Cb. (div. in 6). The notation is dense, with many notes and rests overlapping across the staves, illustrating a high-linear mass density. The score includes various musical notations such as beams, slurs, and dynamic markings like 'pizz' and 'ppp'.

(Figure 48. The extensive overlap of the pitches: high-linear mass density in mm. 100-103)



(Figure 49. The soloists A, C, D, and E start walking back to the stage from the aisles while playing crotales; measure 107)



(Figure 50. The start of the 'climax'; the glissandi in mm. 116-117)

At measure 121, the solo cello reenters the scene, playing artificial harmonics glissando. Its part is highly virtuosic (extended techniques) mainly playing in the extreme high registers (see Figure 51). The segment can be referred to as a cadenza of the instrument; hence, an analogous aspect of a concerto. Moreover, the instrument is panned around the hall, rotating in circle. In parallel, during measures 124-158, the sound of blowing into water buckets (amplified) is to be heard behind the activities, signaling the 'falling action' phase. This spectacle brings about a metaphorical depiction of 'sublimation' – i.e., a solid evaporating to gas. Together with the cello, these sounds are being rotated around the hall as well, enhancing the spectacle.

The musical score for Figure 51 consists of five staves. The top staff is a cello solo, starting at measure 54 and ending at measure 74. It features a virtuosic passage with various dynamics including *pp*, *ppp*, and *poco cresc.*. The second staff is a blank staff with a wavy line representing a sound effect. The third staff is labeled 'Stage Water' and shows a wavy line starting at measure 74 with a dynamic of *p*. The fourth staff is another wavy line with a dynamic of *poco cresc.*. The fifth staff is a blank staff with a wavy line.

(Figure 51. The virtuosic passage of the cello (soloist B) and the blowing in water bucket in the background; mm. 128-129)

The music concludes this way finally ending with dropping of ping pong balls on the high register of the piano strings (inside the piano), moving upward. This way the discourse proceeds with subtle disappearance of the sound. The metal arco on piano strings (played for 30 seconds) bridges the ending and the *coda* – it is the ‘resolution’ phase (see Figure 52).

The musical score for Figure 52 consists of five staves. The top staff is a blank staff with a wavy line representing a sound effect. The second staff is a blank staff with a wavy line representing a sound effect. The third staff is labeled 'Metal arco' and shows a wavy line starting at measure 154 with a dynamic of *ppp* and a *morendo* marking. The fourth staff is labeled 'Water' and shows a wavy line starting at measure 154 with a dynamic of *pp* and a *morendo* marking. The fifth staff is a blank staff with a wavy line. A box at the bottom left contains the text '© ROTA SLOW'.

(Figure 52. The metal arco on piano strings at measure 154; the ‘resolution’ phase)

At measure 155, a mystifying orchestral timbre sets off the ‘denouement’ (see Figure 53). The composer assigns the strings with *flautando ponticello*, while he employs microtone alterations to the other parts. The music slowly proceeds forward with the entire orchestra joining the scene, playing *pianissimo*. This creates an impression that the music is being taken into an uncharted territory (mm. 155-168).

Finally, at measure 169, a recurring held note played by the cello (i.e., the one consisting of *crescendo* and *diminuendo*) returns to the scene (see Figure 54). This signals the arrival to the corresponding space: the *coda* (or epilogue). In the beginning, quoting the composer himself, it was mentioned that the two ‘pillars’ sustain the entire structure of the work. Accordingly, the ‘exposition’ was referred to as the ‘former pillar.’ Now the discourse has finally reached the ‘latter pillar.’

(Figure 53. The strings playing *flautando ponticello* in ‘denouement’ phase; from measure 155)

The image shows a musical score for a cello part. The top staff contains performance instructions: 'senza vibr.', 's.l.', 's.p.', 'e.s.p.', 'arco', and 'ord.'. Below these are several measures of music with dynamic markings: *pp*, *f*, *p*, *f*, *p*, *f*, *pp*, and *f*. A large oval is drawn around the first few measures of the score. At the bottom left, there is a box containing the text '+ (B) ROTA SLOW'.

(Figure 54. The return of the cello (soloist B) figure sets off the coda at measure 169)

For a while, the presence of the brasses and woodwinds becomes weaker gradually, while the strings continue to sustain the discourse. Before long, the piano (playing pizzicato on the inner strings), the bass clarinet, and cymbals (placed on the timpani) string along. They accumulate the energy for the upcoming pivotal event. Also, as a continuation of the previous segment, the cello, clarinet, and piano are still being rotated; this continues until measure 185. The timpani finally uncover their presence (measure 182), with whom the other soloists (the bass clarinet, cello, and piano) show a change in their manner as well. Following this, with the abrupt arrival of the extended technique applied on piano strings, the music now heads for the loudest part of the entire discourse.

By measure 190, the whole orchestra plays tutti, striking (or blowing) *impulses* at every beat – the music is in common time. The flutes and piccolos respectively move to the upper registers to encourage the extremes. This is followed by a brief section, where only the bass instruments play. The heavy *impulses* encourage the opposite extremes, evocative of the heavy footsteps of a giant (see Figure 55). Following this, a sudden burst of the soprano instruments stirs up the moment, making it even more formidable. Finally, mm. 195-199, the music has its final say when the snare drum, electric drums, and none other than, the 'big' metal block, perform powerful *balanced* objects. The figuration consists of 32nd notes, played six times (see Figure 56). Its sonority is rather suggestive of an instant *impulse*. The crashing cacophony of the metallic blocks brings enormous energy to the ending. The sonority echoes the powerful sounds of *Einstürzende Neubauten*, characterizing the title *Kraft*.

The image shows a page of musical score with multiple staves. A large, hand-drawn black oval highlights a section of the lower staves, starting from approximately measure 180 and extending to measure 200. The highlighted section features several staves with notes in the low register, including some with dynamic markings like *mf* and *f*. The text "Les paroliers au Fidi" is visible on the right side of the score, and "Les paroliers au Fidi" is repeated on several staves in the lower section. The overall layout is a standard musical score page with a system of staves.

(Figure 55. The huge impulses in the low register, evoking steps of giant at measure 193)

(Figure 56. The soloist E playing 'big metal block' at the finale of the work, together with the bass drum and electric drums; mm. 195-199)

The objective of this analysis was to inspect into the *locational specificity* of the metallic objects and the *function* they are channeled into. To that end, the analysis focused on the textural, structural, timbral, and spatial aspects. The harmonic parameter was set aside, for it is the aspect of *timbre* that holds the importance for this study. One of Lindberg's accounts helped to make the decision to leave out the harmonic analysis: "Up to the trilogy *Kinetics-Marea-Joy* (1988-90) I had avoided working with harmony. Harmony was a 'byproduct' of the work with timbre and rhythm."<sup>225</sup> Taking this into account, the four parameters were used as the basis.

The structural property unmasks the locational specificity of the industrial metal objects. Their presence becomes most prominent in the most salient phases of the music. Especially, the 'bridge' episode of movement I well exemplifies this, where the music only comprises *impulses* and silences. This segment is contrary to the preceding discourse; much like the 'development' section of the Sonata form. For this reason, particular attention is called to it, referring to its locational specificity. And it is in this part where the urban metals come into light in earnest for the first time. It is also where they come into their own, intensifying the *impulses*, which are also most akin to those of Neubauten.

The timbral transitions are assimilated into a structural configuration, which, likewise, demonstrates the locational specificity of the materials. The discourse of movement I culminates in the 'ending' episode, one which could be equated with the 'recapitulation' section of the Sonata form. The urban metals (*complex pitches*) now make up almost the entire scene,

<sup>225</sup> Martin, "Harmonic Progression," 2.

becoming its most prominent feature. Retrospectively thinking, such a configuration implies that the timbral transitions were bound for the metallic ones (i.e., *concrete* sounds of the found objects). They began from the orchestral colors (*definite pitches*) in the beginning of ‘episode 1,’ and, in the ‘ending’ episode, they have become almost entirely *complex pitches*. In other words, the latter is set as the destination point, consummating the timbral dichotomy – i.e., *definite pitch* vs *complex pitch*. Hence, this is another aspect that justifies the locational specificity of the objects.

In movement II, these metallic objects become fully effective in the most vigorous phases of the music. At the beginning of the ‘explosion’ phase, the music becomes extremely powerful in character. It releases the energy it had been accumulating up to that point, readying itself to set off for the ‘climax.’ That is, it is the segment that paves the way for the peak of the narrative. And it is at this point where the urban junk objects become prominent again, transmitting great energy to the music. Finally, they also prove their merits at the very ending of the *coda* (the latter pillar) when the music has its final say. The urban debris generate energetic sonority as they conclude the musical discourse. Notice that these two segments are the *loudest* in the movement, which, therefore, are the most salient ones together with the ‘climax.’ Such a structural feature once again justifies the locational specificity of the industrial metals, for they foreground the important phases of the music.

The *locational specificity* also implies the *function* of the *objets trouvés*. One notices that they often function as the *force transmitter*; their unique sonorities add force to the music, enhancing the atmosphere. The composer wins power through the adoption of the materials, justifying what he refers to in his own words: the “drum world with metal.”<sup>226</sup> Meanwhile, the found instruments assume a central role in the spatialization property as well. They go on to underscore their own *corporeal* presence in the performance space. The discussion initially expounded how the spatialization aspect spotlights the *stage*. Bearing that in mind, it also addressed that the industrial metals form the *stage-center* connection, that is, the *stage’s* connection to the *solar plexus*. The composer placing the found instruments only on the two stations justifies the matter. From this connection, various sound palettes expand to the other corners of the space. Therefore, the urban residues function as the centerpiece of this spatial narrative, which, in turn, comes to amplify the effect of their *corporeality*. That is, they are the element that engenders twofold experience (i.e., aural and visual) simultaneously, which is another trace that indicates Neubauten’s influence.

At last, the overall assessment indicates Lindberg’s adoption of the materials demonstrates his willingness to capitalize on the vigorous noises he had come across at the

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<sup>226</sup>“Alan Gilbert and Magnus Lindberg in conversation with Sarah Willis.”



subcultural milieu. The metallic noise becomes a *sign* that evokes the dynamic urban setting and its artistic scenes, along with the wild performances of Einstürzende Neubauten. Therefore, the metallic cacophonies do not function only as force transmitters or timbral mediums. They are the entities that go on to shape the *worldview* of the work. This aspect decisively manifests Neubauten's influence on the work, highlighting the trace of 1980s West Berlin in the music.

**Chapter 6**  
**Conclusion**

## 6 Conclusion

The chief aim of this study is to understand the influence of Neubauten's sound on Lindberg's work *Kraft*. Lindberg often mentions about the correlation between the sound and social situations he had witnessed in Berlin, which served as a cornerstone for the investigation. Largely, the discussion revolved around the following four points: (1) the social development of West Berlin that gave birth to its subculture, (2) the factors – both social and philosophical – that were instrumental to the emergence of Neubauten, (3) the background that lies behind Lindberg's adoption of the sonic field, (4) and the actual application of the ideas to the composition.

Chapter 2 focused on the historical background of the youth activism and other alternative variants in West Germany during 1960-80s. The main finding indicates that the legacy of National Socialism was at the heart of the youth protests. This was also inherently a German problem. The matter underlay a variety of forms of movement, such as the Cold War tensions and the Vietnam war. Moreover, it left the emerging generation with collective guilt, forbidding them to face their past without shame. Such were the recurring sociopolitical tensions of the youth activism in *Bundesrepublik*.

However, the student protests in West Germany during the 1960-70s failed to bring changes to the nation's political system. This is important in the sense that it went on to yield different forms of subversion, which directly correlated to the birth of the subculture. Over the span of two decades (1970-80s), the emergence of *micropolitics* involved alternative lifestyles and cultures. The squatter movement and the artistic scene were affiliated with this. The investigation pointed out that the alternative activism no longer pleaded for changes to the political system. Rather, they attempted to undertake reforms at local level, building a utopian microcosm set apart from the public.

Such a mindset was extended to its artistic scene as well. The prime concern of the *Geniale Dilletanten* was *authenticity*, which enabled them to distance themselves from the mainstream. The young artists actively practiced DIY aesthetics, widely celebrating amateurism. Also, the situation relating to the legacy of Nazism cast hindrance to practice any prewar traditions, necessitating a new start from zero. This was in line with the 68ers' dissent from the nation's fascist past. As a whole, the research indicated that the sole aim of the brilliant dilettantes was to live out their *authentic* artistic passions. Their aim was to segregate themselves from any type of existing conventions, which reflected the political agenda of the milieu.

It was in this setting that the band Einstürzende Neubauten emerged. Section 3.1 addressed the art and aesthetics of the band. The assessment indicated that the sociopolitical conditions spurred the musicians to their self-reflections. The reflections stemmed from their geographical identity, and, therefore, their *vicinity* carried both physical and ontological meanings. Accordingly, their appropriation of the physical surroundings characterized their self-defined *authenticity*. Grounded in that, the band embodied Walter Benjamin's idea of *destruction* in its noise, drawing on the artistic conceptions of Antonin Artaud's *Theatre of Cruelty*. These observations reveal how the sociopolitical background influenced the musicians, and how that extended to the birth of their sounds.

Section 3.2 deliberated about Magnus Lindberg's biographical information and his compositional preoccupations. It placed its emphasis on his early years, focusing on the background behind the birth of *Kraft*. Lindberg belongs to the generation of musical artists, who emerged from the conservative Finnish music scene in the mid-1970s. The majority of the generation were students in the Sibelius Academy, studying under Paavo Heinen. Influenced by the teacher's progressive thought, the youths proactively sought for *new* music. They also worked towards disseminating modern works to their nation's public sphere. Some of them (including Lindberg) went overseas to further their exploration of the modern trend. In terms of going against the existing conventions, the composer's progressive attitude shared a similar tone to that of the *Geniale Dilletanten*. And it was his proactive pursuit of new music that ultimately led him to his residency in Berlin. At last, it extended to his encounter with the idiosyncratic milieu and Neubauten's music.

By the time Lindberg arrived in Berlin, he was already a different composer from the one he had been before. By renouncing 'serialism,' he focused on imparting temporal *continuity* to the music via morphing (interpolations) of pre-devised materials. And this went in parallel with his new approach to musical texturing. The multi-layer texturing method enabled him to inject dramatic elements into his compositions. Both aspects brought about *narrativity* in the music, which was complemented by the Aristotelean dramatic structure on a macroscopic level.

In addition, at the time, Lindberg was experimenting with *concrete* sounds, expanding his timbral palette from the orchestral ones. This tendency dovetailed with his encounter with Neubauten's music, and, for that matter, the metallic noise must have caught his special attention. Comprehensively, these shifts in musical approach collectively went on to give birth to his characteristic compositional language. And these compositional preoccupations are adequately embodied in *Kraft*. With that, they go on to formulate a musical narrative that brings out the metallic objects as an indispensable element of the work.

Chapter 4 addressed Neubauten's influence on *Kraft* in more depth. Section 4.1 delved into the matter of liberating noise in music – a convention that arose in the twentieth century. It assessed the works of the two subjects within this context, based on relevant examples. It pointed out how their works were relevant to the trend, foregrounding the matter's connection with the main topic of this study. In conclusion, though disparate in styles, both could be referred to as extensions of the identical twentieth century trend, that is, the emancipation of noise in music. And, under this umbrella, both sides were pushing the envelope of musical boundaries in their own respective ways. Therefore, their *progressivism* goes in parallel with the trend, implying the correspondence between the two. In sum, both figures stem from a shared historical background, an important factor behind the subject matter of this essay.

Section 4.2 examined the importance of the *corporeality* of the metallic objects. Based on the Aristotelean idea of *sensus communis*, it covered the notion of *physicality* that engenders both auditory and visual experience. Neubauten's performance methodology capitalizes on this aspect: the body of the materials and its noise collectively engulf listeners' senses, leading them to transpersonal experiences. This aspect seemed to have affected Lindberg. His way of using *spatialization* regulates the spectators' perception, bringing visual attention to the industrial metals. Moreover, he emphasizes the *ugliness* of the debris as he provides their selection criteria for *Kraft*. This accentuates the importance of the *corporeality* in question, as well as its extramusical associations.

Section 4.3 elaborated on the correlation between the artists and the materials, through the lens of semiotics. First, the discussion began with the contents concerning Neubauten. The rusty debris (*icon: representamen*) had a capacity to conjure up the band's *physical* surroundings, representing its *authentic* selfhood (*object*). The rusty and wrecked outlooks of the junk must have resonated with the ruined buildings and the violent protest scenes. Therefore, the *proximate* environment correlated with the musicians' existential dimensions, a factor which rendered the materials to present themselves as a proper expressive medium. The musicians appropriated the materials as their instruments, imparting them with their sociopolitical awareness and aesthetic ideas (*interpretant*).

Meanwhile, the wastes (*index: representamen*), as the *abandoned*, represented the social identity of the artists as left-wing youths (*object*). Given that, the band *destroys* the main purpose of the materials in favor of the new. It resurrected the materials to an *attack*, signifying the 'clearing away' of Benjamin's 'destructive character,' and the 'Storm' in the 'angel of history' (*interpretant*). Overall, the observations were that these *signs* point out that the then-sociopolitical zeitgeist of West Berlin gave birth to Neubauten's sounds. The cacophonous experimentations were *semiotic* acts that yielded powerful sonorities that represent the social dynamism of the city in the Eighties.

This was the sound Lindberg had come across. The objects' body in the performance space (*icon: representamen*) and the sounds it produces would have conjured up the city's vicinity (*object*). The powerful sonorities of the musical 'ragpickers' (*index: representamen*) must have rendered the junk into sonic devices for 'clearing away' (*object*). Furthermore, with the exotic social dynamism penetrating Lindberg's subconscious (*interpretant*), the effect of all these elements must have been something unprecedented. And such *extremity* would also have resonated with the composer's 'bruitist' style of the time. It would have complied with his tendencies of using *extreme* polarities as a means of constructing form. He confirms this by saying, "only the extreme is interesting [(*interpretant*)]."<sup>227</sup> In this respect, one could understand that his pursuit of new music and vigorous style (*extremity*) was congruent with his residency in the city. With the exotic social situations amplifying Neubauten's cacophony, the whole spectacle must have compelled him to incorporate the element himself. It impacted him so much that he shifted the style of the work from what he had originally meant to write in.

Having said that, Lindberg's *interpretant* subtly removes the aspect of social criticism. Lindberg achieves transmutation of the materials by focusing on the musical concerns (*interpretant*). He clarifies that expressing a political stance through music was never a part of his compositional language.<sup>228</sup> This brings the attention to the differences between Neubauten and Lindberg in their aesthetic and social goals and values, which are not confined to the aspect of social criticism.

Underground pop/rock music and contemporary art music are of two different worlds with different sets of values. They share distinct aesthetic practices that set one apart from the other. Setting Neubauten and Lindberg as a model, one already recognizes the contrary elements. First, the textural properties: the former incorporates lyrics, which have concrete messages that it tries to put across. The latter, however, draws on abstraction of ideas, disengaging any descriptive messages. This is still plausible in the case of *Kraft*, even if the music has extramusical associations related to West Berlin. This aspect functions as an evocative mechanism, but it does not explicitly seek to communicate a specific message.

Second, their respective performance spaces are in sharp contrast. The former usually performed in pubs, nightclubs, and live venues, whereas the latter could only be performed in a concert hall, where a full orchestra could fit. This would also allude to the difference between the nature and type of the audience that the two respectively attract. Additionally, in the case of *Kraft*, the performers and composer himself are formally trained, and have strong affiliation

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<sup>227</sup> Lindberg, "A voice from the 1980s," 2. This he mentions when he talks about the influence of Vinko Globokar.

<sup>228</sup> Magnus Lindberg, interview by the author, Helsinki, May 3, 2021.

with the conventions of Western music. This aspect is decisively disparate from the aesthetic values of *Geniale Dilletanten*.

Lindberg draws a sharp contrast with Neubauten in the structural aspect as well. For Lindberg, structural concern is an imperative aspect that makes up his compositions; he also notates everything precisely in the score. Neubauten incorporates improvisations as an integral part of its music, especially in live settings. All in all, not all these criteria might be absolute, since one case might slightly differ from another. However, they do provide an objective lens through which the two worlds could be assessed. And these contrary properties also imply the limits of influence from underground pop/rock music to contemporary art music.

Chapter 5 discussed how Lindberg embodies the inspiration in *Kraft*, giving the account through an analysis of its score. The investigation was based on the frameworks of texture, structure, sound, and spatialization. In particular, the emphasis was placed on how the transitions of textures and timbres develop the overall structure. With that, the main objective of the analysis was to inspect into the *locational specificity* of the metallic objects and the *function* they are channeled into.

In movement I, the 'bridge' episode and 'ending' episode indicate the locational specificity of the materials. By and large, their presence becomes most prominent in the salient phases of the music. Structurally, the 'bridge' episode is analogous to the 'development' section of the Sonata form. The segment is contrary to the discourse up to that point, and, therefore, draws extra attention to itself. It is in this part where the urban metals start to appear on the scene in earnest, signaling their locational specificity.

Looking at the timbral transitions, one notices that they, too, demonstrate the matter in question. The 'ending' episode is analogous to the 'recapitulation' section of the Sonata form. Here, the urban metals (*complex pitches*) become the most prominent feature of the scene, consummating the timbral dichotomy – i.e., *definite pitch* vs *complex pitch*. In particular, initially, the timbral transitions began from the orchestral colors (*definite pitches*), while they were bound for the metallic ones (i.e., *concrete* sounds of the found objects). In other words, the latter is set as the destination point, justifying the locational specificity of the objects.

In movement II, the 'explosion' phase and *coda* incorporate the found metals. Both are pivotal moments in the musical narrative that capitalize on the effects of the materials. What is more, the two segments are the most vigorous in the movement, which, therefore, are the most salient ones together with the 'climax.' Such structural features allow the urban noise to become fully effective in the segments. This aspect also demonstrates the locational specificity of the materials.

All these also allude to the *function* of the *objets trouvés*. They operate as *force transmitters*, as well as components that instill a distinct *Weltanschauung* into the music.

They convey the excitement and vitality the composer experienced during his stay in the exotic microcosm. Over and above, they also function as the centerpiece of the spatial narrative of the work. They help to form the *stage-center* connection, which goes on to amplify the effect of their own *corporeality*. This is another aspect that indicates Lindberg drawing on “[Neubauten working] with noise as a physical element.”<sup>229</sup> In consolidation, all these underline the trace of Neubauten’s influence in *Kraft*. They manifest the powerful social dynamic of 1980s West Berlin and the thunderous urban cacophony of Einstürzende Neubauten assimilated into the work.

Underground industrial rock music influencing a concert orchestral work is a rare occurrence. Given the implicit differences between these genres, the realization of the idea seems unlikely. Nevertheless, a close look reveals several factors acting behind and enabling Neubauten’s influence on Lindberg. Their shared commonalities as musicians of the twentieth century, and the decisive situational causalities all provide valuable insights into the matter. Above all, the study indicates the social dynamism of West Berlin in the 1980s as the principal cause of the event. Its subcultural milieu and vibrant artistic scenes provided a unique setting that enabled the event to take place. The urban phenomena of “actively transitioning forward, invoking feeling of needing to react in the heat of myriad social transitions,”<sup>230</sup> collectively brought about a powerful social dynamic. This was ultimately what compelled Lindberg to incorporate the urban junk into his key work, *Kraft*, bringing Neubauten’s influence into play.

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<sup>229</sup> Bridle, “S&H Interview.”

<sup>230</sup> Hall, “Creative Cities,” 646.



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