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**ERNST KURTH'S DYNAMIC FORMAL PROCESS
and
SONATA DESIGN IN BRUCKNER'S SIXTH SYMPHONY**

by

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ABSTRACT

According to Ernst Kurth (1886-1946), musical form is not a *fixed state*, but a *dynamic process*. Psychic energies, which exist beyond our perception, manifest themselves to us only when they die at which point we perceive them as musical phenomena. These energies shape music by creating varying amounts of tension in what Kurth calls dynamic waves. These waves exist on several different levels in music, and form a hierarchical dynamic structure.

In this paper I test the practical application of Kurth's theory by analyzing several aspects of Bruckner's Sixth Symphony in A major. I begin with a conventional formal analysis of the symphony, restricting the study only to those movements written in sonata form: these are I, II, and IV. Then I focus on four idiosyncratic features and several extended passages selected from the three movements and analyze those sections according to Kurth's concepts and terminology.

I conclude that Kurthian analysis offers insight into the functions of musical events and their relations to the work as a whole that conventional formal analysis does not, and suggest several possible contemporary applications.

Keywords: Anton Bruckner, Ernst Kurth, Sonata Design, Music Theory, Romantic Music, Vienna, Dynamicism, Form, Nineteenth Century, Analysis

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CHAPTER 1

INTRODUCTION

According to Ernst Kurth's (1886-1946) theory of music, form is not a fixed state, but a dynamic process. In this paper I discuss from this dynamic perspective the differences among the first, second, and fourth movements, each in sonata form, of Anton Bruckner's Sixth Symphony in A-major.

In this chapter I present a background of Bruckner's symphony, and of Kurth and his theories. Although Kurth incorporated both melody and harmony into his dynamic theory, I focused primarily on the thematic component of sonata design, and therefore my discussion of Kurth's theory is largely restricted to his treatment of melody. Chapter 2 examines sonata-design in the three movements in order to familiarize the reader with the material in this symphony. A study of the three movements from a *dynamic* perspective follows, where I examine certain aspects of the work in detail. Chapter 4 is a discussion of my observations and conclusions about what Kurth's theory can offer the modern music theorist.

Anton Bruckner

Anton Bruckner (1824-1896) was one of the great symphonists of the late Romantic period.¹ Many of his nine symphonies were ill-received, however, and he rarely

¹For readers interested in more biographical detail about Bruckner, I suggest the following sources: Erwin Doernberg, *The Life and Symphonies of Anton Bruckner* (London: Barrie &

heard complete performances of them during his lifetime. Bruckner found it difficult to establish a career in Vienna in the second half of the nineteenth century. His work embodied aspects of both ends of the Wagner-Brahms continuum.² Thus, because of his traditional background Bruckner adhered to classical forms, such as *sonata form*, in his compositions, but because of his more "modern" inclinations the forms were greatly expanded and modified.

The Sixth Symphony

Three of the most recent published analyses of the Sixth Symphony revealed that Bruckner employed sonata form in three of the four movements: the first, the Adagio, and the Finale.³ I have corroborated this feature through my own examination of these movements. My analysis below will illuminate Bruckner's treatment of this formal

Rockcliff, 1960); Philip Coad, "Bruckner," in *A Guide to the Symphony*, ed. Robert Layton (New York: Oxford University Press, 1995), 155-172; *Chord and Discord* (New York, 1932-41, 1947-) [the journal of the Bruckner Society of America].

²Bruckner had been classically trained in counterpoint by Simon Sechter in the 1850's. After his correspondence with Sechter ended, Bruckner began studying form and instrumentation with Otto Kitzler (1834-1915). These lessons took place from 1861-1863 and through him Bruckner became a great admirer of the work of Richard Wagner, and thus began absorbing some more contemporary ideals. So, despite his conservative background, which would have placed him closer to Brahms in style, Bruckner's work displayed radical influence as well: modulations to seemingly unrelated key areas, massive orchestrations requiring expanded ensembles, and the expansion of classical forms. While the Sixth Symphony does exhibit an expansion of form, Bruckner used a standard, late nineteenth-century orchestration.

³Erwin Doernberg, *The Life and Symphonies of Anton Bruckner* (London: Barrie & Rockcliff, 1968); Paul-Gilbert Langevin, ed., *Anton Bruckner, Apogée de la Symphonie* (Lausanne: L'Age D'homme, 1977); Robert Simpson, *The Essence of Bruckner* (Philadelphia: Chilton Book Co., 1967).

design in the three different circumstances.

Due to their length, Bruckner's symphonies are often intimidating (to instrumentalists, listeners, and analysts alike!) and published formal analyses of these works are few and far between. Stephen Parkany remarks in his article "Kurth's *Bruckner* and the Adagio of the Seventh Symphony": "[t]he publication of any substantial Bruckner analysis is still a rare and welcome event."⁴ Those that exist are no more recent than the 1970s, and where sonata design is discussed all rely on conventional thematic, key and cadence analysis for comparison. Identifying cadence-types, motives, and thematic groups is a useful exercise if the goal is to discover the formal structure of a work. Such an exercise shows formal landmarks: sectional divisions, phrase structure, thematic unity. From such an analysis one can ascertain *how* a work is laid out, but not *why* it unfolds in this way. I believe that for my purposes an alternate system of analysis is necessary, one that can explain more profoundly the differences among the three sonata design movements in Bruckner's Sixth Symphony.

In this study I employ the theories of Ernst Kurth to analyze Bruckner's sonata designs in the Sixth Symphony. Kurth was a contemporary of Bruckner who was not only familiar with his work but in fact used his own system to examine each of Bruckner's nine numbered symphonies.⁵ In dealing with Bruckner's work, one must be aware of the

⁴Stephen Parkany, "Kurth's *Bruckner* and the Adagio of the Seventh Symphony" *Nineteenth Century Music* 11/3 (1988), 269.

⁵These analyses make up the second volume of Kurth's monumental work, *Bruckner* (Berlin, 1925). This publication will be discussed in more detail later in this chapter, and also in table I.

problem of revision that plagued the composer both during and after his lifetime. At the time Kurth was writing, different editions of Bruckner's scores were being consulted than are used today, and this can cause some confusion. Bruckner was constantly revising his work: often changing one symphony long after its successor was completed. For example, Bruckner began composing his Sixth Symphony in the fall of 1879. According to Leopold Nowak, "the earliest date on the autograph is 24 September 1879."⁶ The completion date is 3 September 1881, nearly two years after its commencement. "As usual, other compositions intervened in the course of its completion: the new Finale for the Fourth Symphony, the *Te Deum* (first version) and a new Intermezzo for the String Quintet (emphasis mine)."⁷ So while Bruckner was working on his Sixth Symphony, he was also revising part of the Fourth, which had been completed four years earlier (originally written in 1874-75). Between his own revisions and those made by "well-meaning though presumptuous pupils--with their wholesale cuts, rescoring in the style of Wagner and even reharmonizations," many posthumous performances of Bruckner's symphonies barely resembled the original manuscripts.⁸ Editors at the beginning of the twentieth century who attempted to remain true to the composers intentions were flummoxed by the many existing, though unauthorized, editions. Fortunately, three symphonies in the middle of Bruckner's output remained "largely unscathed": the Fifth.

⁶Anton Bruckner, *Symphony No. 6*, ed. by Leopold Nowak (London: Ernst Eulenburg Ltd., 1992), preface. Other important dates in this paragraph are also taken from this source.

⁷Nowak, preface to *Symphony No. 6*.

⁸Philip Coad, "Bruckner," in *A Guide to the Symphony*, ed. Robert Layton (New York: Oxford University Press, 1995), 156.

Sixth and Seventh. This means the edition of the Sixth Symphony that Kurth would have consulted in the 1920's is virtually identical to the critical edition in use today, prepared by Leopold Nowak in 1952.

German Music Theory in the Late Nineteenth Century

According to Robert Wason, "[t]he first few years of the twentieth century marked an extremely fertile period for the study of harmony."⁹ In Vienna, the leading theorist in the late nineteenth century had been Simon Sechter, who had adopted and taught fundamental bass theory. After the turn of the century two different theories of harmony emerged in Vienna: one of these came from Heinrich Schenker (1868-1935), the other from Arnold Schoenberg (1874-1951). In German music theory, however, the late nineteenth century was dominated by Hugo Riemann's function theory and harmonic dualism, but a general movement in late nineteenth-century toward a better music education for the "folk," or common people led to a new, *dynamic* theory of music.

The movement had been initiated in part by Hermann Kretzschmar (1848-1924), who had noticed a "lamentable decline in the popular cultivation of art music...in inverse proportion both to the tremendous growth of education for professional musicians and to the artistic achievements of German composers."¹⁰ A new, broader-based music

⁹Robert Wason, *Viennese Harmonic Theory from Albrechtsberger to Schenker and Schoenberg*. (Ann Arbor, Michigan: UMI Research Press, 1985), 115.

¹⁰Lee A. Rothfarb, "The 'New Education' and Music Theory," in *Music Theory and the Exploration of the Past*, ed. by Christopher Hatch and David W. Bernstein (Chicago: University of Chicago Press, 1993), 453.

education for the general public was very compatible with the other educational reforms taking place in Germany. There was a shift in focus toward student-centred learning, which encouraged creativity and first-hand experience. New, private “free school communities” were founded--generally away from larger cities--in order to escape resistance from older-generation conservatives.

August Halm

At one such free school community, in Wickersdorf, “music was the symbol of [its] educational mission and the hub of its life.”¹¹ It is not surprising then that August Halm (1869-1929) thrived in such an environment. Halm was the head music instructor and resident composer at Wickersdorf from 1906 to 1910, and again from 1920 to 1929. Previously, throughout Europe, music theory had been taught at a scholarly level, and only to aspiring musicians. Halm, however, wrote and taught with the *amateur* in mind. In fact, “[h]e is remembered for his lifelong commitment, as author and composer, to educating music amateurs and enthusiasts.”¹² Halm was interested in “restoring the then-derogatory epithet ‘dilettante’ to respectability.”¹³

By creating an audience of true dilettantes, Halm hoped to reunite the composer with the public, the two having become estranged in the late nineteenth century because of the gradual decline of true education and

¹¹Ibid., 458.

¹²Ibid.

¹³Rothfarb, “New Education,” 459.

concomitant growth of specialized, technical training.¹⁴

He gave a musical lecture-demonstration every week at the school. He used non-technical language without over-simplifying the substance of the lectures. Halm considered musical form the “only true communicable element,” and he believed the best way to investigate this was through the “intramusical processes” themselves.¹⁵ Halm disagreed with the hermeneutical practice of using extra-musical metaphors to describe musical events, “as if the meaning of music could lie in something other than the music.”¹⁶ Instead he “dynamicized” musical events, claiming “[t]he dynamic activity, the drama of the dynamics is wholly sufficient for me, is for me also the only truly concrete aspect.”¹⁷

Ernst Kurth

August Halm may not have had a strong influence in university circles but his “writings influenced a generation of audiences, music amateurs, and music educators.”¹⁸ Ernst Kurth was Halm’s successor at the Wickersdorf free school community in 1911, and was greatly influenced by Halm’s ideas, especially the notion that dynamic processes in music govern its form, writing:

¹⁴Ibid.

¹⁵Ibid., 458.

¹⁶Ibid.

¹⁷Ibid., 462.

¹⁸Rothfarb, “New Education,” 462.

The central task of all music theory is to observe the transformation of certain tension processes into sounds. Only in this way is it possible to awaken, even in theoretical reflection, an empathy and internal sympathetic resonance with the animated creative forces, and so to restore once again the connection, long since torn asunder, between theory and art.¹⁹

Ernst Kurth was born in Vienna in 1886 and died in Bern, Switzerland in 1946 at the age of 60. While he was growing up Vienna was the centre of activity for some of history's most well-known figures: Sigmund Freud in psychiatry, Ernst Mach in physics and philosophy, and Gustav Mahler and Arnold Schoenberg in music. Kurth's was a middle-class family--his father was a successful jeweller--and he took cello and piano lessons in his youth, and regularly attended concerts and the opera. He entered the University of Vienna in 1904, at the age of eighteen. There he studied musicology, harmony and counterpoint, and took private piano lessons. He also took courses in philosophy and history; in fact more class time was devoted to these areas than to music courses.²⁰ This broad base of course work at the university would account for his later outlook on music theory and analysis, which "attributes equal importance to intramusical and extramusical elements, such as philosophical influences, psychological dispositions, psycho-auditive effects, and dramatic criteria."²¹ He studied musicology with Guido

¹⁹from *Die Romantische Harmonik und ihre Krise in Wagners "Tristan,"* quoted and translated in Rothfarb, "New Education," p. 463. See table 1 for complete bibliographic information on this treatise.

²⁰Lee A. Rothfarb, *Ernst Kurth as Theorist and Analyst*, (Philadelphia: University of Pennsylvania Press, 1988), 3.

²¹Rothfarb, *Theorist and Analyst*, 3.

Adler, the founder of *Musikwissenschaft*.²² Adler was a classical scholar, a conservative, who had studied with Anton Bruckner when the latter taught at the University of Vienna. He held his former teacher in very high regard, and this respect for the master and his works was passed on to Kurth.

In 1908 Kurth received his Ph.D. and moved to Germany. In 1911 he began his term in Wickersdorf, teaching music to primary and secondary school children. He was unprepared for this position, having been trained as a research scholar. However, teaching adolescents helped to develop his pedagogical approach to music and music theory. In his teaching he “vivified music through imaginative interpretations,” avoided the “common music-theoretical systems of his day,” and “‘humanized’ an otherwise mechanical music theory.”²³ Because Kurth’s focus was on the non-musician his written analyses were often more narrative than systematic, highlighting only the most crucial elements in a work in order to determine its form. The idea was to “maximize” the audience’s musical experience.²⁴ In fact, “by relying on impressionistic explanatory devices as teaching aids and so encouraging the students to experience the music inwardly, Kurth’s style of analysis took on the psychological tone that characterizes his published work.”²⁵ By 1912 Kurth had sufficiently developed his own ideas on music theory to complete a paper on

²²Adler defined the field in terms of two branches: systematic musicology and historical musicology.

²³Ibid., 6.

²⁴Rothfarb, “New Education,” 463.

²⁵Rothfarb, *Theorist and Analyst*, 6.

the subject.²⁶ He sent this along with his application for a teaching position to the University at Bern, Switzerland, and was hired as a lecturer in musicology, although no formal degree in music was being offered there at that time.

Kurth's Theory and Premises

Kurth believed that, previously, music theory had obscured rather than explained music. “[He] considered it his task to bridge the abyss between theory and the music of his time and to seek musical explanations not in absolute, acoustically based systems, but in the empirical examination of musical compositions and the psychological forces underlying their creation.”²⁷

Kurth wrote five major treatises in his lifetime between 1912 and 1936 (these are shown in table 1). His ideas on music theory changed slightly from publication to publication, but the general theme of *music as motion* remained constant throughout.

Table 1. Ernst Kurth's Theoretical Works

1. *Die Voraussetzungen der theoretischen Harmonik und der tonalen Darstellungssysteme* [The Premises of the Theory of Harmony and of Tonal Systems]. Bern: Drechsel, 1913. In this work, his inaugural dissertation, Kurth first sets out his theories of tension and motion in music. He questions the scientific nature of music theory and suggests psychology and intuition play a bigger role. He introduces his notion of “dynamism”, which is connected to the “psychic energies” he claims control movement (striving tendencies) in music.

²⁶*Die Voraussetzungen der theoretischen Harmonik und der tonalen Darstellungssysteme* [The Premises of the Theory of Harmony and of Tonal Systems]. See table 1 for complete publication information.

²⁷Patrick McCreless, “Ernst Kurth and the Analysis of the Chromatic Music of the Late Nineteenth Century,” *Music Theory Spectrum* 5 (1983), 56.

2. *Grundlagen des linearen Kontrapunkts: Bachs melodische Polyphonie* [Foundations of Linear Counterpoint: Bach's Melodic Polyphony]. Bern: Drechsel, 1917. This is Kurth's counterpoint treatise. In it he uses his idea of music as motion to examine Baroque counterpoint (in particular that of J. S. Bach) from a linear perspective.

3. *Die romantische Harmonik und ihre Krise in Wagners "Tristan"* [Romantic Harmony and its Crisis in Wagner's "Tristan"]. Bern: Haupt, 1920. Meant as a harmony textbook for advanced students and guide to the philosophical aspects of Romantic harmony, this book represents Kurth's attempt to account for the chromaticism that pervaded the Romantic period.

4. *Bruckner*. 2 Vols. Berlin: Hesse, 1925. This is a two-volume work which gives an extensive biography of the composer (vol. 1) as well as analyses of all nine of Bruckner's symphonies using Kurth's dynamic-formal process (vol. 2). It was the first of Kurth's publications to discuss his ideas on musical form in detail.

5. *Musikpsychologie* [Music Psychology]. Berlin: Hesse, 1931. This is a summary of Kurth's life work involving the psychic energy behind music. He worked to separate the idea of music psychology from the psychology of sound. For Kurth, music psychology was "intended rather as an inquiry into those psychological functions that constitute the basis of musical hearing and thus serve as the ultimate foundation of theory, aesthetics and all the other phases of music."²⁸

Kurth adopted August Halm's idea of music as motion but also expanded it by discussing the *origin* of the motion, which Halm had not done: "For the origin of the melody...a connection with *dynamic phenomena* arising from psychic activity comes into play, rather than an analogy to the *rigid phenomena* of harmonic materials (italic emphasis mine)".

Kurth's ideas on melody, harmony, and form all rely on the notion of *dynamism*, or motion. According to Patrick McCreless, Kurth used the terms *kinetic* and *potential* energy, borrowed from physics, to distinguish between motion in melody, and motion in harmony.

²⁸Hsu. "Music as Motion," 7.

Melody...involves kinetic energy, for it arises from tension-processes that externalize the movement of musical will through tones. Harmony, however, involves potential energy, for a chord in a sense "freezes" the kinetic or melodic possibilities of each of its tones, so that there is, on the one hand, an identifiable structure of pitches, and on the other, a sea of contexts and possibilities for motion that the chord can realize once it is activated.²⁹

In fact, Kurth seemed to adopt principles from several modes of contemporary thought: philosophy, psychology, and phenomenology.

Kurth adopted philosopher Arthur Schopenhauer's view that music is a "direct representation of the Will."³⁰ Kurth explained that "psychic energies," guided by the Will, govern dynamic motion in music, creating tension and relaxation. An increase in tension creates a forward motion, while a decrease slows down this motion. Kurth believed in two realms of music: the *outside*, which is the transitory "phenomenal" world of appearances, and the *inside*, which is the unchanging "noumenal" world of ultimate reality.³¹ "The inside of music constitutes the ultimate Reality, of which we hear only the

²⁹McCreeless, "Ernst Kurth," 59.

³⁰Dolores M. Hsu, "Ernst Kurth and His Concept of Music as Motion," *Journal of Music Theory* 10/1 (1966), 6. According to Lawrence Ferrara, "Schopenhauer on music as the embodiment of Will," in *Schopenhauer, Philosophy, and the Arts*, ed. by D. Jacquette (Cambridge: Cambridge University Press, 1996), 185-186. Schopenhauer believed there were two levels of existence in the world: the perceived world of representation; and the deeper world of the Will. The Will, he claimed, is an energy source outside the realm of our perception that yet directs how and what we perceive; an "instinctive force of desiring, yearning, and endless striving." Music, for Schopenhauer, was the embodiment of the Will for it expresses that which is non-representational: satisfaction, desire, nobility, suffering, anxiety, etc.

³¹Clear definitions of "noumenon" and "phenomenon" according to the philosopher Immanuel Kant can be found in Peter A. Angeles, *Dictionary of Philosophy* (New York: Barnes and Noble Books, 1981). A noumenon is "[t]hat reality (power, substance) which transcends experience and all rational knowledge...Reason can know *that* it exists but not

last reverberations when it becomes phenomenal, that is, acoustical music.”³² For Kurth, music was a “constant surging up, or an overflowing of energy into the phenomenal world.”³³ The life of the music is in its energy; once the energy is released into the phenomenal world, so that we perceive it as sound, the energy dies. The sound signals the “death” of the energy. As Kurth put it, “sound is dead; what lives in it, is the will to sound.”³⁴

As well as having ties to the world of philosophy, Kurth’s theory also resonated with early phenomenologists. According to Rothfarb, contemporaries of Kurth cited his work as being phenomenological: aesthetician Arthur W. Cohn, and musicologists Hans Mersmann, Herbert Eimert, and Rudolf Schäfke.³⁵ They identified with Kurth’s method of analyzing and theorizing about music as *heard*. He dispensed with accepted theories and concepts and focused on the musical experience itself. Rothfarb points out, however, that Kurth’s analyses are not strictly phenomenological: certain aspects do not conform to phenomenological principles. For example, “he contradicts Cohn’s ‘musical understanding,’ which avoids evaluating musical events as ‘symbols of any sort of

what its existence is like. That there is a noumenon is apprehended by reason alone” (p. 191). A phenomenon, on the other hand, is defined as “[t]hat which is perceived. That as it appears to our consciousness...our senses” (p. 211). In other words, noumena are non-observable, while phenomena are observable.

³²Rothfarb, *Theorist and Analyst*, 11.

³³Hsu, “Music as Motion”, 9.

³⁴From Kurth, *Romantische Harmonik*, p. 3, quoted in Hsu, 9.

³⁵Rothfarb, *Selected Writings*, 17.

psychic motions of its creator’.”³⁶ It is the psychological side of Kurth’s theory--his reference to “psychic energies” governing musical events--that prevents his theory from being considered entirely phenomenological. In effect, Kurth needs the listener to “empathize” with the music in order for them to sense its psychic origins. One difference between Kurth and August Halm is that Halm avoided such psychologizing: “In music, one ought not to take the psychological for the logical.”³⁷

In its dynamic, holistic view of melody, Kurth’s theory can be linked to the Gestalt theory of psychology. Rothfarb claims that Kurth “tacitly employs...illusion theory when he speaks of individual melodic tones containing energy derived from a pervasive dynamic current.”³⁸ He reminds the reader that early Gestalt writings by Max Wertheimer, Kurt Koffka, and Wolfgang Kohler are contemporary with *Grundlagen* (1917) and *Romantische Harmonik* (1920), and that the major works in Gestalt theory still lay ahead. The similarities between Gestalt principles and Kurth’s theories, however, led Rothfarb to suggest that “Kurth intuitively explored in the aural-temporal domain what Gestaltists later scientifically explored and experimentally verified in the visual-spatial domain.”³⁹

³⁶Arthur W. Cohn, “Das musikalische Verständnis: Neue Ziele,” *Zeitschrift für Musikwissenschaft* 4.3 (1921), 129-130, quoted in Rothfarb, *Selected Writings*, 18.

³⁷August Halm, “Humor und Musik,” *Von Grenzen und Ländern der Musik. Gesammelt Aufsätze* (Munich: G. Müller, 1916), quoted in Rothfarb, *Selected Writings*, 20.

³⁸Rothfarb, *Selected Writings*, 20.

³⁹*Ibid.*, 21.

In order to understand fully the following discussion of Kurth's theories, as well as the analysis in chapter 3, it is necessary for the reader to become familiar with Kurth's terminology. Kurth's metaphorical prose may have aided musical amateurs in the past, but many of his terms have since acquired new meanings that may confuse the modern-day reader. I have placed a section at the end of the present chapter devoted to placing the terms in their proper context. This can be read prior to, or concurrent with, the following discussion and later analyses.⁴⁰

From table 1 above it is clear that Kurth incorporated both melodic and harmonic elements of music into his theory. I discuss his harmonic writings below where necessary, but Kurth's notion of melody is the primary focus of this paper, beginning with an examination of his counterpoint treatise, published in 1917.

Grundlagen des linearen Kontrapunkts: Bachs melodische Polyphonie

It is important to examine Kurth's study of Baroque counterpoint before moving on to his theories of musical form. Kurth was primarily a melodic, not a harmonic, theorist, and thus his theories of melody and line really provide the foundation for his analytical system. Kurth's dynamic approach to counterpoint is summarized in the following presentation of elements from his counterpoint treatise. Understanding his views on Baroque melody will help clarify Kurth's treatment of melody of subsequent

⁴⁰I have relied on Lee Rothfarb's translations of Kurth's texts, and Rothfarb seldom provides the original German for Kurth's terms. Therefore, I have used only Rothfarb's English terms, citing Kurth and/or Rothfarb where appropriate.

time periods, specifically in the music of Anton Bruckner.

Developmental Motives

In his examination of Bach's style of counterpoint, Kurth discovered that the way each individual line unfolded (i.e., its overall shape) could be traced back to what he called "developmental motives." Developmental motives represent patterns of melodic motion.⁴¹ These small fragments are not thematic in nature, but are indistinct and generalized in contour. For this reason they tended to make up contrapuntal episodes rather than subjects or themes: although one or several of these developmental motives might be found *within* a subject, it would not *by itself* be thematically important. For Kurth, the developmental motives' simplicity (in being indistinct) indicates a closeness to their "primal origins," which are the psychic energies that are the life of music before it becomes acoustical sound.⁴²

Developmental motives fall into three categories: ascending, descending, and oscillating. Kurth offers a model for each of the three categories:

Ascending (see example 1)

This is the upper tetrachord the C major scale. The leading tone is a point of extreme

⁴¹Rothfarb, *Theorist and Analyst*, 55. In Kurth's words, developmental motives "represent tiny units of motion" which are a "distillation of melody down to pure symbols of motion."

⁴²Ibid., 55.

tension, and this draws the motive upward toward the tonic. The leading tone's energy is released when it resolves to the tonic, C.

Example 1. Ascending Developmental Motives - Model⁴³



Descending (see example 2)

The model shows the same four pitches as in example 1, descending. This can now be seen as the lower tetrachord of a G major scale, moving again toward the tonic, the most stable pitch. One can see from examples 1 and 2 that Kurth viewed the tonic note as having the least amount of tension in a passage--it is the point of relaxation of tension.

Example 2. Descending Developmental Motives - Model⁴⁴



Oscillating (see example 3)

This example shows "single tones embellished by 'a slight flickering of motion', the primary function of which is to preserve a given pitch level" (see example 3).⁴⁵ This is accomplished through simple or double neighbour note motion.

⁴³Ibid., 58.

⁴⁴Rothfarb, *Theorist and Analyst*, 62.

⁴⁵Ibid., 63.

Example 3. Oscillating Developmental Motives - Models



Example 4. Hybrids⁴⁶

a) Ascending



b) Descending



c) Oscillating



Hybrids, or combinations, of the above models are very common, perhaps more common than the basic forms. Once Kurth had identified the models, it would have been a simple matter to view all melody as being comprised of combinations of developmental

⁴⁶Examples 3 and 4 from Rothfarb, *Theorist and Analyst*, 63.

motives. In example 4a, b and c are three examples of what Kurth called hybrids of descending developmental motives. Example 4a shows an overall ascent from g^1 to e^2 (shown with beams) embellished with oscillating patterns (double neighbour notes--circled in the example).⁴⁷ In 4b there is an overall descent from e^2 to b^1 (beamed), but it is embellished by descending oscillating patterns at every beat (circled). Finally, 4c is an example of an oscillating hybrid: the overall neighbour note motion (beamed) from e^2 to f^2 is itself embellished with oscillations (circled). By keeping the basic models in mind, Kurth believed we could discern the dynamic-formal development of virtually any melodic fragment, be it upward arching, downward arching, or oscillating in nature. I discuss later how Kurth viewed this small-scale development as representative of formal processes at a larger-scale in a work.

According to Kurth, both the composer and the listener tend to overlook developmental motives, being generally preoccupied with themes and other distinctive features of a given work. He claims this is because developmental motives "operate at an 'unconscious' level. Nevertheless, they are the first and most primitive musical embodiment of a composer's creative-psychic stream."⁴⁸

⁴⁷Whenever specific pitches (as opposed to pitch classes) are referenced in the text they will be designated according to the following system: ascending from C three octaves below middle C as $C_1, C\sharp_1, D_1, \dots, B_1$; from C two octaves below middle C as $C, C\sharp, D, \dots, B$; from C below middle C as $c, c\sharp, d, \dots, b$; from middle C as $c^1, c\sharp^1, d^1, \dots, b^1$; from C above middle C as $c^2, c\sharp^2, d^2, \dots, b^2$; etc.

⁴⁸Rothfarb, *Theorist and Analyst*, 56.

Polyphony

For Kurth, the biggest challenge in contrapuntal theory is to explain “how two or more lines can unfold simultaneously in the most unhampered melodic development.”⁴⁹ Much of what Kurth says in *Grundlagen* about melody can be seen in his later discussions of dynamic-formal “waves” and form as motion. In linear counterpoint, motion is essential in each line in order to propel the melody forward and avoid too many points of repose. Too many cadences, or points of repose, would diminish the forward motion or momentum, and would therefore lead to a weak composition. Kurth claimed that in polyphonic works the multiple lines work together to propel the motion forward. Small-scale waves are created in each individual line but their intensifications and apexes are staggered. In this way, when one line is resting the other takes up the linear action, and vice-versa; there is a constant interchange between the lines of action, contour and intensity (see example 5).⁵⁰ Even when the two voices are moving with the same amount of activity simultaneously, there is often an interchange of high points (see example 6a and b).

⁴⁹Lee A. Rothfarb, *Ernst Kurth: Selected Writings*, (New York: Cambridge University Press, 1991), 47.

⁵⁰The crosses [+] in examples 5 and 6 indicate small-scale apexes or high points.

Example 5. A constant interchange between the lines of action, contour and intensity
J. S. Bach. "Inventio in A major." mm. 8-9⁵¹



Example 6. Two voices moving with the same amount of activity simultaneously

a) J. S. Bach. "Clavier Duet in G major (BWV 804)," m. 17⁵²



⁵¹Rothfarb, *Selected Writings*, 49.

⁵²Ibid., 50.

Example 6b. J. S. Bach. "Clavier Duet in E minor (BWV 802)." mm. 29-30⁴³



Kurth's Writings on Form

Though Kurth does not treat form as a separate topic in either *Grundlagen* or *Romantische Harmonik*, many of his ideas about form as a dynamic process come across in his discussions of melody and harmony. As with these two elements, motion is the underlying factor in the determination of form:

The ebb and flow of psychic motion, once actualized in sound, guarantees continuity. A piece of music, then, is shaped psychic motion. The particular *shape* that motion takes in a work amounts to its musical form.⁴⁴

In *Bruckner*, Kurth did articulate more clearly his ideas on form. Rather than thinking of form as a mold, a static idea, Kurth saw form as a state of tension:

Form is neither the pure streaming of the formation process nor the pure fulfillment of borders, but rather the transition, the active transformation of the former into the latter...In music...form is neither movement nor its synoptically grasped rigidity, neither flux nor outline, but rather the lively struggle to grasp something flowing by holding onto something firm.⁴⁵

⁴³Ibid.

⁴⁴Rothfarb, *Theorist and Analyst*, 190.

⁴⁵from *Bruckner* vol. I, p. 239, quoted and translated in Rothfarb, *Theorist and Analyst*, 191.

In other words melody, harmony, and rhythm together “achieve equilibrium in what we call form” by the tension and relaxation Kurth describes.⁵⁶ For Kurth, form is the *goal* of the creative process, not the basis of it—it is the “active shaping of sound...[a] *shaping* process.”⁵⁷

Form in *Grundlagen*

In his study of counterpoint, Kurth examined closely elements of monophony and polyphony that contribute to accretions and releases of energy in Baroque music (see table 2). Many of these ideas were later applied to other periods, and especially to his analyses of the symphonies in *Bruckner*. A good example is Kurth’s model for the dynamic form of the music of J. S. Bach (see example 7). Although Kurth does not make the connection in this treatise, this model seems to parallel the “classical” notion of sonata form. Tension begins to build immediately in the exposition, where the harmony typically moves from I (at the beginning) to V, or some other related key (at the end). The tension continues to build through the development section, where the new key is explored. Finally, in the recapitulation, material from the exposition returns in the tonic key: this is the apex. From there, the tension decreases until finally the piece ends with an authentic cadence, signalling a total relaxation of tension.

⁵⁶Rothfarb, *Theorist and Analyst*, 191.

⁵⁷Ibid.

Example 7. Dynamic Form, or Shape⁵⁸

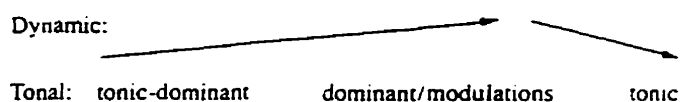


Table 2. Contributing Factors to Increases in Energy

Monophony	Polyphony
Progressive rhythmic agitation (quarters, eighths, sixteenths)	Gradual addition of voices
Contour turbulence (increasingly wider melodic leaps, dissonant melodic intervals)	Expanding register
Chromaticism - accidentals associated with tonicization and modulation	Contour turbulence Rhythmic agitation among voices Augmentation, diminution, inversion, stretto (familiar Baroque compositional devices)

Form in *Romantische Harmonik*

“The far-reaching modulatory and sequential schemes, unusual key arrangements, and apparent lack of large-scale tonic return in Romantic music lead Kurth to focus attention entirely on tonal form.”⁵⁹ Kurth compared Romantic music, where harmony seemed to move away from points of tonal closure, to Classical music, where the harmony seemed to move toward tonal closure. In the Classical period, the tonic was the

⁵⁸Rothfarb, *Selected Writings*, 152.

⁵⁹Rothfarb, *Theorist and Analyst*, 199.

goal, whereas in Romantic music the modulations were the goal:

One can characterize the opposition of late Romanticism and Classicism in that the latter, with all expansion of proportions and with modulations reaching so far, emphasizes the closed arch form, tonal integration, while Romanticism, by contrast...[emphasizes] the flowing forces, the endless possibilities of modulation...Therefore even in closed forms, which return to the main key, it is often only a remote substructure, concealed and overrun with digressions.⁶⁰

Naturally for Kurth, modulation and evading of the tonic points to one thing: tension. Tension builds in music the longer the tonic is avoided, and Rothfarb states that in the Romantic period this led to a new kind of tonality: so-called "tension tonality" (Rothfarb's term). The idea of tension tonality is that Romantic listeners and composers preferred the "striving toward and allusions to an ideal but unstated tonic" to the actual blatant statement of the tonic.⁶¹ As Kurth put it:

The importance of the *sound* [of the tonic] is completely supplanted by the importance of the *tension*. The *sound* [of the tonic] is no longer necessary if the *striving of the will* directed toward it is present. It [the striving] suffices for the sensation of key and tonic, not only suffices but rather in much greater, more intensive measure is its bearer.⁶²

⁶⁰from *Romantische Harmonik*, pp. 328-29, quoted and translated in Rothfarb, *Theorist and Analyst*, 199.

⁶¹Rothfarb, *Theorist and Analyst*, 200.

⁶²from *Romantische Harmonik*, 327, quoted and translated in Rothfarb, *Theorist and Analyst*, 200.

Form in *Bruckner*

While several works were published on Bruckner's symphonies prior to Kurth's *Bruckner*. "Kurth was the first...to go beyond topographical analyses and to delve into the very philosophical and artistic fibre of the music."⁶⁵ By the time Kurth published *Bruckner*, his ideas on music theory had matured as shown by the fact that he analyzed the nine numbered symphonies of the composer. I have assembled a list of important terms that Kurth used in the analyses in *Bruckner*, and that I used in my own analysis.

Because the material is so different from standard musical terminology, often I was required, in defining a term, to refer to one or several other terms not yet defined. Rather than alphabetizing the terms, therefore, I decided to present them in order of importance, with most important terms first, followed by more and more peripheral terms.

The reader will want (or need) to consult this section repeatedly, as it prepares the analysis I present in Chapter 3.

⁶⁵Rothfarb, *Theorist and Analyst*, 192. Max Auer, August Halm, and Oskar Lang all published books on Bruckner prior to Kurth.

Important Kurthian Terms and Concepts

Wave. Kurth believed that in order to understand Bruckner's

“thematic content, arrangement, construction [and] outline...[one must illustrate] how basic symphonic motions appear in developmental *waves*, as energetic events, in light of which themes and, likewise, the further expansion up through the formal design as a whole first become understandable (emphasis mine).”¹

Developmental waves are the units of overall symphonic motion for Kurth, just as motives are the units of dynamic phrases in Bach's music.² In order to merit a dynamic wave, any piece of music or any important section within the music must have three parts: a period of **INTENSIFICATION**³, a climax or **APEX**, and a period of **DE-INTENSIFICATION**.⁴ Kurth explains that symphonic music proceeds from the larger waves back to the smaller component waves, i.e., from the whole back to the detail. Thus a hierarchical structure presents itself; elements of large-scale waves can be seen in the smaller-scale waves. The overall form of a symphonic movement, then, is the result of a process, the shaping of developmental waves within a work. Figure 1 shows this hierarchy of waves. The motion of the component waves (the smallest-scale waves) not only governs the small-scale motives and phrases in a work, but also contributes to the shape of the developmental

¹Rothfarb, *Selected Writings*, 151-52.

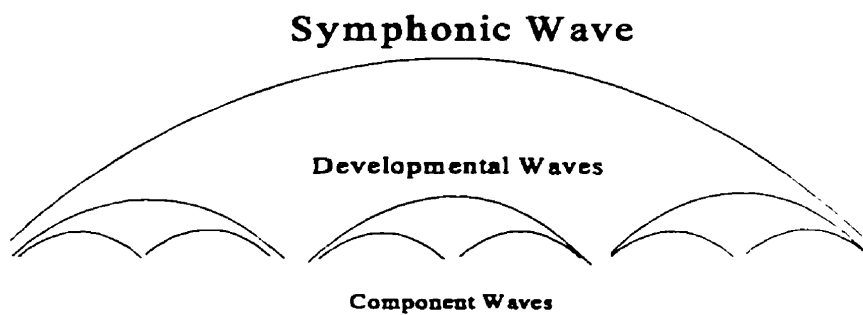
²*Ibid.*, 152.

³Whenever a word used in a definition has an entry of its own in this section it will appear in bold, small capitals.

⁴Kurth describes this in *Grundlagen des linearen Kontrapunkts* (1917), in discussing linear writing and form in the music of J. S. Bach.

waves on a larger level.

Figure 1. Hierarchy of Waves



Example 8 shows a passage from the second theme-group of the first movement of the sixth symphony.⁵ This passage outlines what Kurth would call a component wave. The way this wave unfolds will determine the shape of subsequent component waves in this piece. This is the first theme of the second theme-group, and the first violins have the melody. This melody rises and then falls, outlining a wave shape in itself (marked on the example with arrows). There is no **ADDITION or SUBTRACTION OF VOICES** in these four measures, but the widest register span is on the downbeat of m. 51, between the basses and the first violins (39 semitones--between A in the bass and c² in the first violin).

According to Kurth, the wider the register span in a passage, the greater the

⁵Throughout the subsequent examples and analyses I will define every notated part as a *part*, and any independent line or melody as a *voice*. Thus a voice might be comprised of one or many parts playing in unison, whereas a part could be the same as a voice, or it might be just a unison or octave doubling.

intensification. In this case, therefore, I will use register span as the determining factor of the apex point, and this coincides with the fact that the highest melody note in the violins' theme also occurs on the downbeat of m. 51. The **RHYTHMIC AGITATION** decreases slightly after the apex, slowing from nine attacks per measure in mm. 49-50 to six attacks per measure in mm. 51-52. According to Kurth this constitutes a de-intensification, and contributes to the downward **ARCH** of this component wave.

Example 8. First Movement, mm. 49-52

The image shows a musical score for four instruments: Violin 1, Violin 2, Viola, and Cello and Bass, covering measures 49 to 52. The score is written in treble clef for Violin 1 and 2, and bass clef for Viola and Cello and Bass. The key signature has two sharps (F# and C#). The time signature is 4/4. The score includes several annotations: a downward arrow above measure 51, a horizontal line with arrows at both ends spanning from the beginning of measure 49 to the end of measure 52, and an upward arrow below measure 51 pointing to the first note of the Cello and Bass part. Below the upward arrow is the text "39 semitones (violin I - bass)".

Apex. Kurth used this word to describe the point of maximum tension, or the climax, in a **WAVE**.

Intensification and De-intensification. Intensification is the term Kurth used to describe the experiential effect that results when musical events show progressive increase of one sort or another. Possibilities include increase in *energy* (for example, in loudness or in frequency, as in a crescendo, or an ascending line or series of entrances at ever-higher pitch levels), or in *density* (for example, in the number of parts or in rhythmic activity--see **AGITATION**). According to Kurth intensifications in music are accomplished by the composer in various ways: “gradual **ADDITION OF VOICES**, expanding register, [and] contour turbulence, or rhythmic **AGITATION** among voices.”⁶ Any of these can occur in reverse order to effect a de-intensification. Bruckner employed many of these techniques in the Sixth Symphony, as will be seen in Chapter 3.

Arching. Kurth mainly used the term arch to describe a component of a **WAVE**, and usually with the qualifier “upward” or “downward” in front of it. For Kurth an “arch” was not the complete half-circle shape that we envision today (as in an “arch bridge” for example--see figure 2). For him, the word derived from the verb, to arch; the process of arching. Therefore, Kurth’s upward arch is the beginning of the above figure; the beginning of an arching motion (see figure 3a). Similarly a downward arch would resemble

⁶Rothfarb, *Selected Writings*, 193.

the end of an arching motion (see figure 3b).

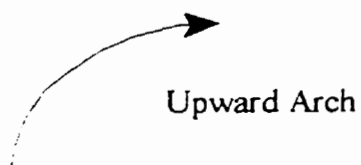
Figure 2. Modern-day Notion of Arch--as in "Arch Bridge"



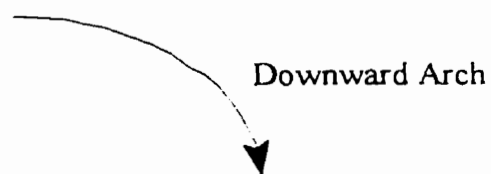
Kurth also applied this notion of an upward or downward arch to musical events (see SURGE).

Figure 3. Kurth's Notion of Arch; a) upward and b) downward

a)



b)



Surge. Kurth used the word “surge” to describe melodic motion covering a large number of intervals in a short amount of time.⁷ If a group of instruments (flutes for example) were playing a melody with a range of only four pitches, then suddenly leapt up one octave and continued the same melody in the new register, that octave jump would constitute an *upward surge*. Kurth might also describe this motion as **ARCHING upward**, or creating an *upward arch*.

There are several examples of surges in Bruckner’s Sixth Symphony. In the second movement, for instance, the energy accumulated over the first ten measures is considerable. The violas, cellos and basses play a unison *f* on beat 1 of measure 1. On beat 2 the violins begin the main theme one octave above, on *f*¹. The beginning of an upward **ARCH** is created by this octave leap--a surge in itself. The **ADDITION OF VOICES** in this section was discussed above. The introduction of the oboe in m. 5, with its contrasting timbre, rhythm, melody, and register, contributes to the intensification. Finally, the dynamics also increase throughout this section, from piano in m. 1 to forte in m. 9. Kurth would consider this intensification the “cause” of a massive surge in the violins in m. 11 (see example 9). The main theme is stated in the violins, beginning in m. 1. The entire theme (from mm. 1-10) has a range from *a* to *b* ^{♭1}, and in mm. 9-10 the pitches *a*¹ - *c* ^{#1} are repeated. I will give more attention to the main theme later but for now it will suffice to focus on the upward surge of nearly two octaves (21 semitones) in the violins, from mm. 10-11.

⁷Rothfarb, *Selected Writings*, 157. Kurth used this word to describe the clarinet entrance in m. 11 of the fourth movement of the Sixth Symphony.

Example 9. Second Movement, mm. 1-12

The musical score is presented in two systems. The first system consists of three staves: Oboe (top), Violins 1 & 2 (middle), and Cello and Bass (bottom). The second system consists of two staves: Violins 1 & 2 (top) and Cello and Bass (bottom). The Oboe part features a melodic line with a prominent octave leap, which is annotated with an arrow and the text "Octave leap = surge". The Violins 1 & 2 part has a similar melodic line, also annotated with "Upward Surge" and an arrow. The Cello and Bass part provides a harmonic accompaniment with a steady rhythmic pattern. The key signature has one flat (B-flat), and the time signature is 4/4.

As I mentioned earlier, higher frequency (i.e., register) for Kurth meant higher tension. A sudden, drastic change in register therefore signified a more immediate increase in intensification. Kurth also recognized *downward* surges in register, if the amount of energy in a line decreased to the point of not being able to support its current register.

Forward Motion. I will use this term periodically to describe the sense of momentum the listener can experience in music. The more tension created, the more one is drawn into the music and “propelled” toward a climax, and from there toward resolution. This is not necessarily Kurth’s term, but I believe it is related to his notion of INTENSIFICATION in music, and I will use the two interchangeably.

Striving. This is not Kurth’s term. Generally, I will use this term interchangeably with “ARCHING,” and “FORWARD MOTION” (e.g. Forward motion = forward striving, Upward arching = upward striving).

Addition or subtraction of parts. Kurth believes that adding voices or parts increases tension in a passage of music, and that subtracting parts has the opposite effect. The texture is thickened by the addition of instruments, and often the complexity of the surface rhythm (i.e., number of attacks per beat or per measure) increases as well. A good example of this technique can be found in the first twenty-four measures of the second movement (see example 10).

Example 10. Second Movement, mm. 1-24

1
Flöte 1
2

Oboe 1, 2

1 in B
Klarinette
2 in B

Fagott 1, 2

1, 2 in F
Hörn
3 in F

1, 2 in F
Trompete
3 in F

Alc. Tron
Snare
Bass

Bass-Tab.
Percussion
C-F (1/2) (2/4)

10

Violin 1
Violin 2

Viola

Violoncell

Kontrabaß

Bahr feierlich

Lang bewegt

Lang bewegt

Lang bewegt

Lang bewegt

Lang bewegt

Example 10. Continued

Musical score for Example 10, Continued, measures 11-15. The score includes parts for Clarinet (Cl), Flute (Fl), Oboe (Ob), Bassoon (Bsn), Horns (Hr), Trumpets (Tr), Trombones (Tbn), Percussion (P), Violins I (Vln I), Violins II (Vln II), Violas (Vla), Cellos (Vcl), and Double Basses (Cb). The notation shows complex rhythmic patterns and melodic lines across the instruments.

Musical score for Example 10, Continued, measures 16-20. The score includes parts for Clarinet (Cl), Flute (Fl), Oboe (Ob), Bassoon (Bsn), Horns (Hr), Trumpets (Tr), Trombones (Tbn), Percussion (P), Violins I (Vln I), Violins II (Vln II), Violas (Vla), Cellos (Vcl), and Double Basses (Cb). The notation shows complex rhythmic patterns and melodic lines across the instruments.

The movement opens with six parts sounding in the strings (including divisi violas). In m. 5 the first oboe enters, followed in m. 6 by the temporary addition (for only two beats) of two more parts, oboe 2 and clarinet. In m. 9, the now nine-part texture increases to fourteen parts (clarinet, bassoons 1-2, and horns 1-3 added; violas no longer divisi). At m. 11, the texture thickens further, to seventeen parts, with the addition of flutes 1-2 and trumpets 1-2 (horn 3 exits after two beats). At mm. 13-14 the texture thickens to tutti with the addition of horns 3-4 and trombones 1-3 for a total of 24 parts. Only timpani is missing. Beginning immediately in m. 15, the reverse process occurs as parts begin to disappear, first with the loss of all winds and brasses except for horns (10 parts--violins 2 and violas are divisi). At m. 17 oboes 1-2 and clarinets 1-2 return, and timpani appears for the first time, but the strings are reduced to only 'cellos and basses, and only one attack per measure at that. In m. 20 only the oboes, clarinets, first horn and timpani remain (6 parts). The texture is reduced further in mm. 23-24 to four horns only. One can see then, that the movement began with few voices (strings only), rose to a near tutti at m. 13, then gradually voices exit out until only the horns remained at the end of the section, at m. 24.

Agitations. Agitation is a term Kurth used to describe several aspects of rhythm. A single line of melody can become more agitated if the rhythmic activity increases. Rhythmic agitation has to do with the number of notes sounding successively for a given unit of duration. If a single part or voice was moving in steady quarter-notes, then changed to eighths, sixteenths, or a dotted rhythm, its rhythm would be described by Kurth as becoming more "agitated." So would a change from a simple division of the beat (e.g.,

eighth-notes or triplet-eighths) to a complex subdivision (e.g., triplet eighths against eighths). Bruckner uses both of these techniques in the Sixth Symphony. The combination of different subdivisions of the beat pervades the first movement, beginning in the very first measure (example 11). The violins (doubling each other at the octave), play an ostinato-type line below which the main theme will enter two measures later (in m. 3). The ostinato's rhythm is composed of two alternating parts: a dotted-eighth/sixteenth rhythm (duple division of the beat); and three triplet eighth-notes (triple division of the beat). This is a linear mixing of subdivisions. In m. 4 there is a vertical mixture of subdivisions when the low strings play triplet quarter notes against the violins' ostinato (refer again to example 11). The violins present a duple division of the beat (which is the half-note) (four quarter notes in a measure), and the low strings a triple division (six quarter notes in a measure).

Example 11. First Movement, mm. 1-6

The musical score for Example 11, First Movement, mm. 1-6, is presented in two systems. The top system shows the Violins I & 2 and Cello and Bass parts. The Violins I & 2 part is in the treble clef with a key signature of one sharp (F#) and a 3/4 time signature. It features a complex rhythmic pattern of eighth notes and triplet eighth notes. The Cello and Bass part is in the bass clef and features a simpler pattern of quarter notes and triplet quarter notes. The bottom system shows the Violins I & 2 and Cello and Bass parts again, continuing the rhythmic patterns from the first system.

Example 12. Second Movement, mm. 45-52

The image displays a musical score for Example 12, Second Movement, mm. 45-52. It is organized into three systems of staves. The first system consists of two staves: Violin I (treble clef) and Bass (bass clef). The Violin I staff features a prominent, repeated rising sixteenth-note pattern. The Bass staff provides a simple accompaniment. The second system also consists of two staves: Cello (treble clef) and Bass (bass clef). An annotation 'Cellos added' with an arrow points to the Cello staff, indicating the entry of the cello part. The Cello staff continues the rising sixteenth-note pattern, while the Bass staff provides a similar accompaniment. The third system consists of two staves: Violin I (treble clef) and Bass (bass clef). The Violin I staff continues the rising sixteenth-note pattern, and the Bass staff continues its accompaniment.

In the second movement Bruckner uses agitation in a different way--he alters the surface rhythm of the piece in order to *decrease* tension. Beginning in m. 45, there is a repeated rising sixteenth-note pattern in the first violins (see example 12). In mm. 49-50 the same figuration is taken up by the cellos and basses, except in rhythmic augmentation where eighths replace sixteenths. This rhythmic augmentation continues two bars later, as the eighths change to quarter-notes. I will show later how both types of rhythmic agitation described above contribute *dynamically* to the work.

Registral exchange. When INTENSIFICATION approaches a climax, it is common for a theme that previously occurred in a low register to recur in a higher register. Since, for Kurth, higher frequency signalled more energy, he saw this as a manifestation of intensification. He called this specific form of intensification “registral exchange.” There is

an example of this phenomenon in the first movement, at the apex of the first thematic complex. Notice first of all that in the first statement of the main theme (mm. 3-6) the theme itself is in the low strings, while the violins play a duple/triple rhythm above (see example 11). An intensification takes place from mm. 1-24, leading to the APEX of the first developmental WAVE at m. 25. This apex marks an large release of the energy that has built up over the first 24 measures, signalled by several factors (see **INTENSIFICATIONS AND DE-INTENSIFICATIONS**). One can see in example 13 that the main theme is now in a high register. Kurth might describe the previous intensification as having forced the “principal line...up into the high register” while the high “quivering” motive (in the violins) has descended to the low strings and tympani, and now provides the foundation for the main theme”(see example 13).⁸

Example 13. First Movement, mm. 25-28

⁸Rothfarb, *Selected Writings*, 173.

Tiering. Sometimes in a section where one would expect an *INTENSIFICATION*, the melodic material appears to exhibit a *downward* tendency more characteristic of a decrease in tension. There is just such a problem in the introduction to the Finale. This being the introduction, the main theme has not yet appeared, and one would expect that the role of this introductory section is to create an intensification preparing the entrance of the main theme. However, observe the violins' melody in mm. 3-6, which serves as thematic material for the entire introduction (see example 14). It is a *downward STRIVING* melody, moving in a step-wise pattern from f² in m. 3 to d¹ in m. 6. This material is exploited in various ways throughout the introduction (mm. 1-28), but the downward striving tendency is never lost. How, then, can there be a sense of intensification in this section? Kurth explains that "Bruckner is fond of...large tierings, whose individual component motions do in fact lead downward from the very outset, but which build up linked series' of intensifications."⁹ The downward lines in the violin in a sense "correct" themselves by occasional upward leaps, and this gives each of these lines an individual *UNDULATING* shape. Even though the violins' melody in mm. 3-6 exhibits a downward motion, it surges upward again in m. 7, and this provides the line with a forward-striving tendency.

Kurth himself would probably agree that tiering alone does not create enough energy to sustain a large section like an introduction. In chapter 3 I show how a combination of factors contribute to the overall intensification of this introduction toward the exposition, and the entrance of the main theme.

⁹Rothfarb, *Selected Writings*, 156.

Example 14. Fourth Movement, mm. 3-6

Undulations. “[T]he examination of symphonic music can also proceed from the larger *undulations*, whose course more properly refers back to the smallest component WAVES (emphasis mine).”¹⁰ Note the word *undulations* in the above quotation; what does Kurth mean by “undulation”? The meaning is fairly clear in the quotation: literally several small waves in a row creating a larger undulating pattern, similar to the pattern a snake would leave in the sand (see figure 5). Although several examples of undulations exist in the Sixth Symphony, a simple illustration can be made using mm. 141-144 of the first movement (see example 15). These are the last four measures of the exposition; the development section begins in m. 145.

¹⁰Ibid., 152.

Figure 5.

Undulating Pattern



The first flute (the only active voice here) is called upon to link these two sections, so that the energy does not die out altogether. In order to carry the remaining energy from the exposition to the development there is an undulating pattern in its melody which conveys a sense of **EQUILIBRIUM** because of its repetition, but which also keeps a small amount of **FORWARD MOTION** due to the steady eighth-note triplets. The undulating effect comes in the pitches themselves: f^3 down to g^2 and back up again, over and over for four measures

Example 15. First Movement, mm. 141-144

Musical notation for Flute I, showing a melodic line with eighth-note triplets. The notation is on a single staff in treble clef with a key signature of one sharp (F#). The melody consists of a series of eighth-note triplets that create an undulating effect. The word "Development" is written above the staff on the right side.

The image of undulations is often closely associated with the notion of **TIERING**, as Kurth explains: “Such an undulant buildup that arises from downward hastening tiers is, on a large scale, one of the most powerful formal ideas[;] a forward urgency transcending constantly waning and newly waxing forces.”¹¹

Equilibrium and Exact Directional Reversal. This phenomenon occurs when two energetic events (one **INTENSIFYING** and the other **DE-INTENSIFYING**) cancel each other out, thus keeping the energy static for a short period of time within a section. The effect of equilibrium is not to stop **FORWARD MOTION** altogether, but rather to hold the energy at a certain level so as not to intensify or de-intensify too quickly. A sense of equilibrium is often created by an *Exact Directional Reversal*. In the first movement, the horn plays two short passages that sound as if they are “echoing” the theme from the basses and cellos. The first is in mm. 5-8 (see example 16). In mm. 5-6 the cellos and basses complete their theme with a dotted half note, quarter note, then half note. In mm. 7-8, the first horn repeats this gesture up a third. The second statement of “theme-echo” (mm. 11-14) represents the same timbral shift (low strings to horns), but it is an “exact directional reversal” compared to the first statement; the bass theme ascends instead of descending, and the horn echo leaps down instead of up (see example 17).

There is another example of “equilibrium” in mm. 15-18 (see example 18). For each of the two upward surges in the cellos and basses, there is a downward “echo” in the following measure in the flutes and oboe.

¹¹*Ibid.*, 156.

Example 16. First Movement, mm. 5-8

Horn I in F

Violins I & 2

Viola

Cello and Bass

Violin I

Violin II

Viola

Cello and Bass

Example 17. First Movement, mm. 11-14

Musical score for Example 17, measures 11-14. The score is arranged in four staves: Horn I in F (top), Violins I & 2, Viola, and Cello and Bass (bottom). The key signature is one sharp (F#) and the time signature is 3/4. The Horn I part has a whole rest in measure 11 and a half note in measure 12. The Violins I & 2 and Viola parts play a rhythmic pattern of eighth notes. The Cello and Bass part has a whole note in measure 11 and a half note in measure 12.

Example 18. First Movement, mm. 15-18

Musical score for Example 18, measures 15-18. The score is arranged in two staves: Flute 1 and Oboe 1 (top) and Cello and Bass (bottom). The key signature is one sharp (F#) and the time signature is 3/4. The Flute 1 and Oboe 1 part has a melodic line starting in measure 15. The Cello and Bass part has a rhythmic pattern of eighth notes.

Void. When Kurth uses the term “void,” he is referring to an effect of nothingness created in the music, rather than to nothingness itself. It is a relative idea of inactive, “background” material as opposed to active, “foreground” melodic material. At the beginning of the first movement, for example, there is a contrast created between the high ostinato in the violins (m. 1) and the main theme in the low strings which enters two measures later (see example 10). When the theme begins it “occasions the contrasting effect of evolved material and a void...the opposition of sonic mass and sonic space”¹² The high strings’ ostinato therefore creates the effect of a void into which comes the main theme, or “active energetic gesture.”¹³

¹²Ibid., 165.

¹³Ibid., 164.

CHAPTER 2

SONATA DESIGN IN MOVEMENTS I, II, IV

In this chapter I will familiarize the reader with movements I, II, and IV of Bruckner's Sixth Symphony, the principal themes, and sectional divisions. By identifying the component parts of sonata design for each movement using conventional musical terminology, I will introduce the reader to the material I have chosen for the "Kurthian" analysis in Chapter 3. The analysis I present in this chapter is based on my own interpretation, as well as two published analyses of this symphony.¹ When my analysis differs from those of Doernberg and Langevin, or where I have adopted their interpretations I state as much in footnotes.

Figures 1, 7, and 8 show the basic sonata structure of each of the three movements respectively. Measure numbers mark the beginnings of sections; large sectional divisions (e.g., beginnings of theme groups) are labelled above the measure numbers, and subdivisions of these sections (individual themes) are denoted by number only (e.g., 1.1, 2.1) are labelled in between.² Key areas are located between the subdivision labels and the measure numbers; upper-case letters represent major keys, and lowercase letters represent minor keys on these figures. A pedal does not necessarily represent a key area, only the

¹E. Doernberg, *The Life and Symphonies of Anton Bruckner* (London: Barrie and Rockcliff, 1968), 174-182, and Paul-Gilbert Langevin, *Anton Bruckner: Apogée de la Symphonie* (Lausanne: L'Age D'homme, 1977), 160-166.

²Hereafter I will denote themes with two numbers separated by a period: Theme 1.1=first theme group - first theme. (Theme 2.1 would therefore represent the first theme of the second theme group and so on.)

repetition of a certain *pitch* in a bass voice over several measures. Prolongation, however, refers to a certain *key* that is repeated over several measures. Parenthetical information on this line (e.g., “V of E”) applies to passages which emphasize a current key area by special harmonic relation, but which do not themselves represent key areas. I refer to cadences by the following abbreviations on these figures: P.A.C. (Perfect Authentic Cadence); I.A.C. (Imperfect Authentic Cadence); H.C. (Half Cadence); P.P.C. (Perfect Plagal Cadence); I.P.C. (Imperfect Plagal Cadence). Cadences are marked below measure numbers on figures 1, 7, and 8. I identify two types of transitional passages: I use the term “bridge” to describe the transitional passage in the exposition and the recapitulation that occurs between the first and second theme groups where it serves to accomplish the modulation from the tonic key to the secondary key; all other transitions I call “transitions.” Finally, it should be noted that in the first and fourth movements I identify three theme groups, and in the second two theme groups and a closing theme. In this case I use “closing theme” to describe a third theme group containing only one theme.

There are several similarities and differences among the three movements. The first and fourth movements are similar because they contain three theme groups and a codetta. The second movement contains two theme groups, and a closing theme, but no codetta. The fourth movement has an introduction to the exposition while the first and second do not.

Some of the analytical problems I encountered in identifying theme groups were due to Bruckner’s chromatic, sequential developmental passages that tend to obscure the current key area, as well as his apparent penchant for the avoidance of tonal closure at

section-endings. Another aspect of Bruckner's writing that makes harmonic analysis difficult is his enharmonic notation in the woodwinds (where he tends to use flats) versus the strings (where he tends to use sharps).³ However, an exhaustive harmonic analysis of this symphony is not the purpose of this paper, and indeed would only distract the reader from the more important analysis presented in Chapter 3. Therefore I only discuss the cadence points and key areas (whether definite or ambiguous) of important sectional divisions and thematic groups.

First Movement - *Majestoso* (A Major)

Exposition

First Theme Group⁴

This movement begins in A major. The first two measures comprise introductory material in the first and second violins. There are two themes in the first theme group (which I will refer to as themes 1.1 and 1.2), the first stated in the tonic and the second in the dominant. Theme 1.1 begins in m. 3, in the cellos and basses, and is a four-bar unit (see example 1a). Theme 1.2 begins in m. 15 (also in the low strings), and is a two-bar unit (see example 1b). Although shorter than the first phrase (at two measures instead of

³One such example is in the second movement, m. 125. The D \flat , B \flat , A \flat , and G \flat in the flutes' melody are written as C \sharp , A \sharp , G \sharp , and F \sharp (respectively) in the same melody in the violins.

⁴I recognize two themes in this group. Langevin identifies the same two, while Doernberg has labelled four. Both writers identified the first theme-group as comprising mm. 1-48, as I have.

Figure 1. First movement, sonata design

Exposition

1st Theme Group (mm. 1-48)

Introduction	1.1	1.2	(Trans)	1.1	1.2	(Bridge)
	A	E		A	various harmonies	
m. 1	3	15	21	25	37	41
				I.A.C. in A		

2nd Theme Group (mm. 49-100)

2.1	2.2	2.1	2.3	(Trans.)	2.1	2.3
e	(V of E)	e	pedal on D ^b	pedal on A	E	dominant pedal on B (V of E)
m. 49	53	57	61	73	81	89
					87	

3rd Theme Group (mm. 101-120)

3.1	3.2	(Trans)			(Trans)
C	various harmonies		Ger. Aug 6th on E ^b	6/4	pedal on E
m. 101	111	115	120	121	137
				125	141

D.C. in E

Development

Beginning	1.1 (inverted)	1.2 (inverted)	False Recapitulation
c#	G	D ^b	E ^b
m. 145	159	175	183
			189
			195
			208
			P.A.C. in E^b

Figure 1. Continued

Recapitulation

1st Theme Group (mm. 209-244)

1.1	1.2	(Trans.)	1.1	(Bridge)
A	B (V of E)	E	A	C# (V of f#)
m. 209	219	223	229	241
<hr/>				
I-A-C. in A				

2nd Theme Group (mm. 245-284)

2.1	2.2	2.1	2.3	2.4	2.1	2.3
f#		pedal on E ^b			F#	C# (V of F#)
m. 245	249	253	257	265	269	275
<hr/>						
I-A-C. in f#						

3rd Theme Group (mm. 285-308)

3.1	3.2	(Trans.)
D (VI of F#)	various harmonies	dominant pedal on E: (V of A)
m. 285	295	305
<hr/>		
D-C. in F#		

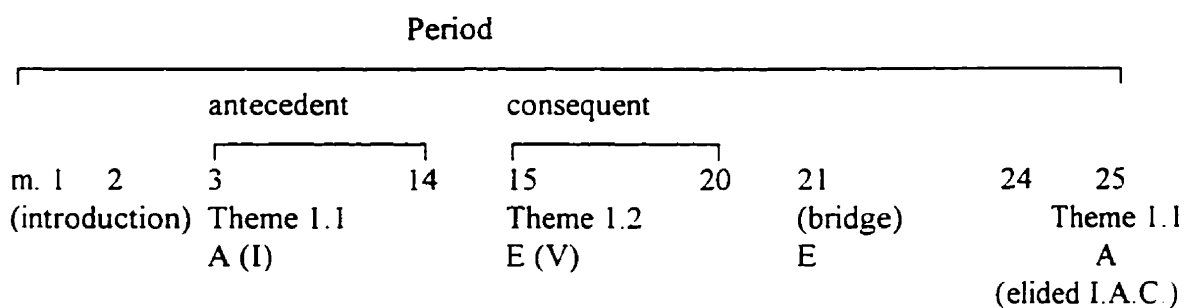
Coda

1.1 (mm. 309-369)

A

four), it is more rhythmically “active,” in that it incorporates more notes of shorter duration than the first phrase. These two themes make up a simple period, shown in figure 2. This period closes with an imperfect authentic cadence (I.A.C.) in the tonic (A-major) but the cadence coincides with the beginning of the parallel period at m. 25 (i.e., it is an elided cadence). This is the first authentic cadence of the movement, and it firmly establishes the key of A major.

Figure 2. First Movement, mm. 1-24



Example 1. First movement, first theme group

a) Theme 1.1, mm. 2-6

The image shows a musical score for Theme 1.1, measures 2-6. It features two staves: Violins I & 2 (top) and Cellos and Basses (bottom). The Violins part consists of six measures of eighth-note patterns, each marked with a '3' indicating a triplet. The Cellos and Basses part provides a harmonic accompaniment with a mix of quarter and eighth notes.

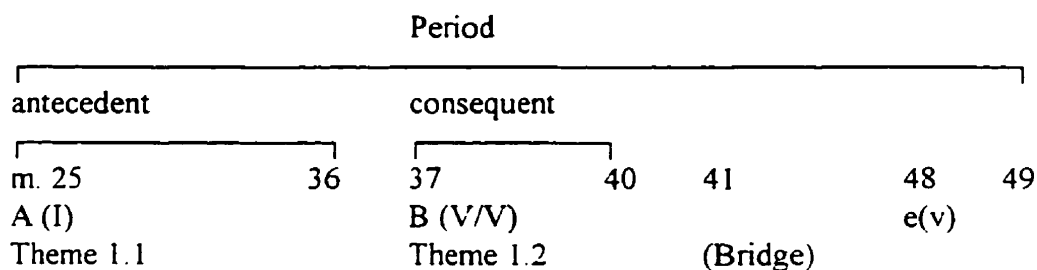
Example 1b) Theme 1.2, mm. 15-16

c) Bridge, mm. 41-43

Measure 25 marks the beginning of a period which parallels the first in length (24 measures) and restates both themes 1.1 and 1.2. In this restatement the key scheme changes to prepare the second theme group (see figure 3). Theme 1.2 begins in B (which is V/V), but moves through a long succession of chords (with a harmonic about once per beat) to B \flat at the beginning of the bridge, C 7 (V of F) at m. 43, finally preparing e minor in mm. 47-48, which is the principal key of the next theme group. Bruckner uses the dotted-eighth-plus-sixteenth-note motive from the second phrase to create the bridge (shown in figure 3) in mm. 41-48 (see example c), which leads to the beginning of the second theme-group at m. 49. Notice that there is no authentic cadence at the end of the first theme-group; instead it occurs in the middle, at m. 25. Although the key of E-minor seems to be introduced, there are no preceding or subsequent chords to indicate a cadence of any kind. Therefore, Bruckner avoids closure at the end of the first theme group by including no definite cadence. The next theme group begins in m. 49 in E-minor, but as

Bruckner also avoids an authentic cadence throughout the second theme group this key is never firmly established.

Figure 3. First Movement, mm. 25-48



Second Theme Group

The second theme group can be divided into two main sections. The first states the four themes of this theme group: 2.1, 2.2, 2.3, and 2.4 and has an ambiguous form and harmonic structure (see figure 4).⁵ Theme 2.1 is in E-minor (at m. 49), and the melody is in the first violins (see example 2a). The first harmonic ambiguity is that the key of E-minor is never clearly established with a strong cadence, although several B-major chords occur in theme 2.2. Theme 2.2 (mm. 53-56) contains a contrasting melody to that of theme 2.1 (see example 2b). There is a Perfect Plagal Cadence on E in m. 57, where theme 2.1 returns. The D \flat chords at m. 61 indicate Bruckner's move away from the E-minor key area when theme 2.3 enters (this theme is shown in example 2c). Theme 2.4 (mm. 69-72; see example 2d) hovers around the D-major scale, and then F-major as it is repeated a third higher in m. 71. Finally, the transition in mm. 73-80 exhibits a pedal on A.

⁵See figure 1. Whereas I have labelled two themes in this group, Langevin has identified three (mm. 49, 53, 69). Doernberg's analysis shows the same two as mine.

When theme 2.1 reenters in m. 81, it is on an imperfect plagal cadence similar to the one at m. 57. Again this is as close as Bruckner comes to firmly establishing E (major *or* minor) as a key area.

Figure 4. First Movement, mm. 49-80

m.49		53		57		61		69		73	
E-min.		B-major		E-min.		(various harmonies)				pedal on A	
2.1		2.2		2.1		2.3		2.4		(Transition)	
┌-----┐											
└-----┘											
(repeated)											

Example 2. First movement, second theme group

a) Theme 2.1, mm. 49-52

b) Theme 2.2, mm. 53-54

c) Theme 2.3, mm. 61-62

Example 2d) Theme 2.4, mm. 69-70

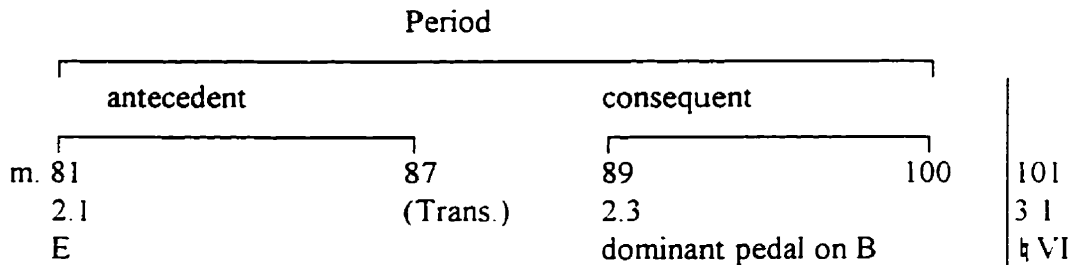
e) Theme 2.1, major key, mm. 81-84

f) Theme 2.3, modified, mm. 89-90

The second section of the second theme group consists of a single period in which theme 2.1 is restated in the parallel major key (E-major), and theme 2.3 is also restated (see figure 5). Theme 2.1 is restated at m. 81 in E-major by flutes, oboes, and first clarinet, as well as violins and viola (see example 2e). There is short transitional passage (the bridge in figure 5) in mm. 87-88 in the violins and violas, and then theme 2.3 re-enters, modified but still characterized by triplet quarter-notes and eighth-notes against duple quarter-notes in the bass (mm. 89-92; see example 2f). This period ends with an elided

cadence that coincides with the beginning of the third theme group. It is not an authentic cadence, but a deceptive cadence (V- \sharp VI in E-major). Thus the second theme group implies the dominant key, beginning in e minor, moving to E major (at m. 81), and ending on the dominant of E (B major).

Figure 5. First Movement, mm. 81-100



Third Theme Group

Theme 3.1 begins with C-major harmony, at m. 101, but moves sequentially up by a step-wise harmonic succession (through bass-notes D, E, F, G, and A) to B-major harmony in m. 107 (see example 3a).⁶ Although theme 3.1 ends in B-major, theme 3.2 begins in C-major. It lasts four measures (mm. 111-114); however, C-major is not firmly established since this theme is also treated sequentially (see example 3b).

In m. 115 a transition begins, whose function is also modulatory (see example 3c). The harmony changes every half beat, ending in m. 120 with a German augmented sixth chord that resolves to a 6/4 chord on D on the downbeat of m. 121. This 6/4 chord signals the end of the third theme group, and we see that again Bruckner has avoided

⁶Doernberg recognizes two themes in this group, as have I. I have also adopted his labelling of m. 121 as a codetta. Langevin identifies only one third theme (beginning at m. 101) and no codetta.

definitive closure here.

Example 3. First movement, third theme group

a) Theme 3.1, mm. 101-102

Musical score for Theme 3.1, measures 101-102. The score is written for Oboes and Basses. The Oboe part is in the upper staff, and the Basses part is in the lower staff. Both parts feature a melodic line with eighth and sixteenth notes, and a bass line with eighth notes. The key signature has one sharp (F#) and the time signature is 3/4.

b) Theme 3.2, mm. 111-112

Musical score for Theme 3.2, measures 111-112. The score is written for Woodwinds and Cellos and Basses. The Woodwinds part is in the upper staff, and the Cellos and Basses part is in the lower staff. Both parts feature a melodic line with eighth and sixteenth notes, and a bass line with eighth notes. The key signature has one sharp (F#) and the time signature is 3/4.

c) Transition, mm. 117-112

Musical score for the Transition, measures 117-112. The score is written for Flute I, Violin I, and Basses. The Flute I and Violin I parts are in the upper staff, and the Basses part is in the lower staff. The Flute I and Violin I parts feature a melodic line with eighth and sixteenth notes, and the Basses part features a bass line with eighth notes. The key signature has one sharp (F#) and the time signature is 3/4. The score includes dynamic markings such as *ff* and *f*.

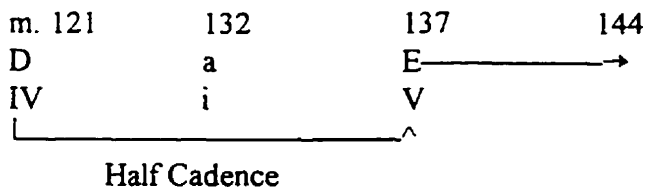
Codetta

A codetta begins in m. 121 on a 6/4 chord on D that resolves to 5/3 in m. 125. It employs the triplet-eighth rhythm that has pervaded the movement thus far, but the lyrical quality of this passage contrasts the staccatos of the previous theme (from example 3c; see example 4). That Bruckner chose D major (the subdominant of A) implies a dominant preparation for V (E-major) in mm. 137-144. D serves as a pedal point for the thematic material from mm. 121-128, at which point it changes to C major for two measures (mm. 129-130), followed by a pedal on A from mm. 131-136. It is true that A-minor is the tonic minor key, but there is no authentic cadence at this point. Rather, there is a half cadence as the harmony moves from A-minor to E-major at m. 137. As figure 6 shows, the whole codetta can be interpreted as an extended half cadence. The exposition ends therefore in the secondary key area, the dominant (E-major). Rather than beginning the development section in the same key, however, Bruckner modulates to the mediant through a transitional passage in mm. 141-144. This is shown below in my discussion of the development section. First, however, I thought it prudent to examine the recapitulation and its parallelisms to the exposition.

Example 4. First movement, beginning of codetta, mm. 121-122

The image shows a musical score for two staves. The top staff is labeled 'Violin I' and the bottom staff is labeled 'Cellos and Basses'. Both staves are in the key of D major (two sharps) and 6/4 time. The Violin I part begins with a triplet of eighth notes (D, E, F#) in measure 121, which continues through measure 122. The Cellos and Basses part provides a harmonic accompaniment with chords and single notes.

Figure 6. First Movement, mm. 121-144



Recapitulation

The recapitulation begins at m. 209, with a restatement of theme 1.1 in the tonic.⁷ Material from theme 1.2 is restated in mm. 219-228, whereupon theme 1.1 reappears in the cellos and basses. Instead of a direct restatement, theme 1.1 is developed by the cellos and basses from mm. 229-240, where it is taken over by the trumpets and transformed into transitional material from mm. 241-244.

The second theme-group is restated in mm. 245-274, virtually unchanged from its first appearance in the exposition. There is a restatement of theme 2.3 in mm. 275-284, which is interrupted in the middle by a grand pause (m. 280). From mm. 285-304 the third theme-group is restated. At m. 305 there begins a four-measure dominant prolongation (based on codetta material) which resolves to the tonic on the downbeat of m. 309.

Table 1 compares the important keys and cadence points above with those of similar regions in the recapitulation. There are several differences in key structure between the exposition and the recapitulation. The second theme group, for instance,

⁷With the exceptions mentioned above in the exposition, I have adopted Doernberg's, and Langevin's analyses of the layout of the Recapitulation and Coda.

which originally implied the dominant key area (E-major), in the recapitulation centres around the submediant key area (F#-minor). Rather than being closer to the tonic key than it was in the beginning, the second theme-group is more distant. Both statements of the third theme group include a chromatic sequence resulting in modulation, but in the exposition it leads to a German augmented sixth resolving to a 6/4 chord on D at the codetta, and in the recapitulation it leads to a dominant prolongation (on E), resolving to the tonic at the coda.

Table 1. Points of Comparison between Exposition and Recapitulation

	Exposition	Recapitulation
1st Theme Group	I.A.C. in I (A) m. 25	begins in I (A) m. 209 I.A.C. in I m. 229
2nd Theme Group	based on dominant key area begins in v (e) m. 49 ends in V/V (B) m. 100	based on submediant key area begins in vi (f#) m. 245 ends in III (C#) m. 284
3rd Theme Group	begins in \sharp III (C) m. 101 ←chromatic modulation through sequence→ ends on Ger. Aug. 6th of D m. 120	begins in IV (D) m. 285 ends in V (E) mm. 305-308
Codetta/Coda	begins with 6/4 chord on D resolving to 5/3 m. 125 ends in V (E) - H.C.	begins in I (A) I.A.C.

Development

There is a four-measure transition at the end of the exposition that leads into the development section (see example 5a).⁸ In these four measures (141-144) the first flute plays a running triplet-eighth figure in the secondary key area (E-major). On the downbeat of m. 145, the first violins take up this figure, transposing it down a minor third, and meanwhile the bassoons enter on an open fifth: C# - G#. Thus although the exposition ends in the dominant, Bruckner effects a quick transition to the mediant (C#-minor), and the development section begins.

Only two themes from the exposition are “developed” in this section: theme 1.1 and theme 1.2. The triplet eighth-note motive from the transitional passage at the end of the exposition is exploited in several voices from the beginning of the development section to m. 159, where an inverted version of theme 1.1 enters (see example 5b). The key is now G-major, and the theme is in the flutes and first violins. This inverted theme passes through A-minor harmony in m. 167 and C-major harmony in m. 175 in moving up sequentially by thirds. Theme 1.2 enters at m. 183 (in the first horn) as D \flat -major becomes a brief tonal centre. This theme is also in an inverted form (see example 5c). At m. 189 a dominant prolongation begins on B \flat (V of E \flat -major). This key is prolonged for six measures, and in m. 195 there is a P.A.C. in E \flat -major as theme 1.1 is restated (see example 5d).

⁸Both Doernberg and Langevin have identified the development section as starting at this point, as well as the false recapitulation at m. 195.

Example 5. First movement, development section

a) Transition from exposition, mm. 143-146

Development

Flute I

Violin I

transposed in violins

b) Theme 1.1, inverted, mm. 159-162

Flutes, Violin I

Cellos and Basses

p

c) Theme 1.2, inverted, mm. 183-184

Horn I in F

Trpt I in F

p

p

d) False recapitulation, mm. 195-198

Fl. Ob., Clar.

Basses

ff

ff

A tutti fortissimo passage, it is similar m. 25 in the exposition, and one might think that this is the beginning of the recapitulation. In fact it is a false recapitulation because the key is E \flat and not the tonic of A major. Bruckner continues theme 1.1 material through to m. 207, whereupon there is a short, two-measure dominant prolongation (on E, but with G \sharp in the bass) which resolves to A-major with an I.A.C. on the downbeat of m. 209, and the “real” recapitulation begins.

Coda

The coda begins in the tonic with a restatement of theme 1.1. The tonic key remains constant throughout; no other keys are introduced. Theme 1.1 provides the only thematic material for this section; none of the other themes from this movement are re-introduced.

Second Movement - *Adagio* (F-minor)

Exposition

Theme 1.1 enters immediately in the first measure, and is a four-bar phrase in the violins (see example 6a).⁹ In m. 5, while the first phrase is restated (in a truncated form) a counter melody in the oboe appears (see example 6b).¹⁰ This obbligato line complements theme 1.1 by its higher register and shorter note-values, which give the impression of a faster rhythm. Although there is a weak harmonic progression from V⁶ to I⁶ (minor) in mm. 12-13, there is no strong cadence in the first theme group. The strongest cadence comes with the elided I.A.C on E at the beginning of the second theme group (m. 25). Even this cadence is weakened by the leading-tone seventh chord in m. 24 that serves as

⁹My analysis differs substantially from Langevin's, as he has identified this movement as having a sonata rondo form, or that of a "sonata without development [sonate sans développement]" (p. 164). The material I call a bridge (mm. 49-52) Doernberg terms a "significant phrase" (p. 178). I have, however, adopted his identification of a third (my "closing") theme, as well as his analysis of the rest of the movement.

¹⁰I call this counter-melody "Theme 1.1 - obbligato."

Figure 7. Second movement, sonata design

Exposition		1st Theme Group (mm. 1-24)		2nd Theme Group (mm. 25-52)		Closing Theme (mm. 53-68)	
1.1	1.1 - obbligato	(Bridge)		2.1	2.2	2.1	
f	various harmonies		d# (vii of E)	E	C	(V of C)	A b various harmonies
m. 1	5	m. 15		25	37	41	m. 53 61
			I.A.C. in E				
Development							
1.1	eb	various harmonies	(single B b note in oboe)				
m. 69	81		92				
Recapitulation							
1st Theme Group (mm. 93-112)		2nd Theme Group (mm. 113-131)		Closing Theme			
1.1/1.1 - obbligato		2.1	2.2	(Trans.)		(Trans.)	
f (f)	(V of F)	F	D b	pedal on G b (IV of D b)	D b	dominant pedal on C	
m. 93	111	113	125	129	m. 132	141-156	
		I.A.C. in F			I.P.C. in D b		
Coda							
1.1	(mm. 157-177)						
F (f)							

the dominant-function chord.

Example 6. Second movement, first theme group

a) Theme 1.1, mm. 1-4

Musical score for Theme 1.1, mm. 1-4. The score is written for Violin I and Basses. The Violin I staff is in treble clef with a key signature of one flat (B-flat major). The Basses staff is in bass clef with the same key signature. The music consists of four measures. The Violin I part features a melodic line with eighth and sixteenth notes, while the Basses part provides a harmonic accompaniment with eighth and sixteenth notes.

b) Theme 1.1 - obbligato, mm. 5-7

Musical score for Theme 1.1 - obbligato, mm. 5-7. The score is written for Oboe I and Basses. The Oboe I staff is in treble clef with a key signature of one flat. The Basses staff is in bass clef with the same key signature. The music consists of seven measures. The Oboe I part features a melodic line with eighth and sixteenth notes, and a circled section in the first measure. The Basses part provides a harmonic accompaniment with eighth and sixteenth notes.

There is an extended transitional passage before the second theme-group begins at m. 25, where theme 2.1 is stated in the violins (mm. 25-28; see example 7a). Theme 2.1 is then repeated and modified, in various instrumentations, until the second theme of this group enters at m. 37 (see example 7b). Theme 2.2 is played by the flutes, second clarinets, and violins amid a *tutti fortissimo* passage, and is comprised of mostly eighth-notes, while much of the exposition follows an ambiguous harmonic scheme, this theme is clearly in the dominant (C major). A second, developmental statement of theme 2.1, over a pedal on G (mm. 41-52), emphasizes this dominant key area. After an initial, four-bar statement in mm. 41-44 (in the first violins), the rising sixteenth-note motive is extracted from this melody and used in an extended transitional passage from mm. 45-52 (see example 8, and Chapter 1, example 12). Augmentation slows down the pacing in preparation for the coming closing theme.

Example 7. Second movement, second theme group

a) Theme 2.1, mm. 25-28

b) Theme 2.2, mm. 37-40

Example 8. Theme 2.1 over pedal on G

The closing theme of the exposition enters in m. 53 with an authentic cadence in $A\flat$ -major (the theme is shown in example 9). Appearing in the first violins, the theme is characterized by a stately, solemn, dotted eighth-note pattern. The key of $A\flat$ -major is not explored for long, however, as the theme is subjected to several transpositions, as well as modifications by the end of the exposition. There is no strong cadence at the end of the exposition. The development clearly begins in $E\flat$ -minor, but if we consider this a temporary tonic, then it is difficult to determine the harmonic function of the $D\flat$ -major

material in the preceding bar. This ambiguous harmony leaves us again without a sense of closure even as the development section begins.

Example 9. Second movement, closing theme, mm. 53-56

Development

The development section begins at m. 69, and develops only material from the first theme group. Theme 1.1 enters in m. 69 in the first horn; a truncated version which includes only the first two measures of the original phrase. From mm. 75-80 it is the last two measures (or second half) of theme 1.1 that are featured. The theme 1.1 - obbligato comprises thematic material in the oboe and clarinet from mm. 85-92. Specifically, it is the appoggiatura figure that originally appeared as G \flat -F (circled in example 6b) that is developed in these measures (see example 10a). This prepares the coming recapitulation in the manner of a retransition. The two-note motive foreshadows the return of the obbligato in m. 93, at the same time as theme 1.1 reenters. Bruckner avoids cadential motion in this section and no single key area is firmly established, although several are alluded to. Theme 1.1 is developed contrapuntally in mm. 77-80; the 'cellos and basses alternate statements of the second half of theme 1.1 with the clarinets. These statements overlap, however, as the clarinets enter on beat four compared with the 'cellos and basses beat-two entry (see example 10b). At m. 81 the counterpoint ends and all parts playing theme 1.1 are in unison.

Example 10. Second movement, development section

a) Appoggiatura figure developed, mm. 85-89

b) Theme 1.1, contrapuntal development, mm. 77-79

A cadence is avoided at the beginning of the recapitulation, although there is clear return of the tonic key (f minor; m. 93). The development ends not with a chord but with a single note--B \flat --in the oboe. While this note could be interpreted as the 7th of V⁷ (C-E-G-B \flat), there is insufficient harmonic support to confirm such a reading.

Recapitulation

The recapitulation begins in m. 93 with the arrival of the theme 1.1 in the tonic. In mm. 97-113 theme 1.2 is restated, also in the horns (originally oboe material). The second theme group reappears in m. 114; theme 2.1 (formerly in the remote key of E major) is now presented in the tonic major (F major). Theme 2.2, however, originally in the closely related key of C (V) is now in D \flat major (\flat VI). Figure 7 shows the prolongation of this key, via a transition in G \flat (subdominant of D \flat --mm. 129-132), through the restatement of closing theme material in mm. 132-140 (in m. 140 D \flat is enharmonically respelled as

C#). Beginning in m. 141 theme 2.1 material is developed and there is a dominant prolongation (on C) for sixteen measures which resolves to the tonic (F *major* now) at the coda (m. 157). Then there is a tonic pedal throughout the coda.

After such avoidance of tonal closure in the rest of this movement Bruckner seems to compensate by placing a very definite P.A.C. at the end of the recapitulation.

Fourth Movement - *Finale* (A-minor, A-Major)

Introduction - Exposition

Unlike the first two movements, this movement begins with an introduction, thus delaying the exposition by 28 measures.¹¹ I have several reasons for identifying this passage as an introduction rather than as part of the exposition. For instance, the movement does not begin in the same key in which it ends: it begins in A-minor and ends in A-major. Theme 1.1, when it enters, is supposed to establish the principal key of the piece. The principal key, A-major, is not established until m. 29. Secondly, there is such a thematic contrast between the opening material and the material that begins at m. 29; the movement begins with a soft, lyrical passage, and becomes loud and marcato at m. 29. In the first movement, the quality of the first two themes is reversed: theme 1.1 is marcato, and theme 2.1 is lyrical. The fact that the thematic material at the beginning of the fourth movement appears in this order is not necessarily unusual, but combined with other

¹¹I deviate from the analyses of Langevin and Doernberg in identifying an introduction to this movement; neither of them have. Langevin has recognized the same layout of themes that I have labelled the first theme group; he just labels them differently.

Figure 8. Fourth movement, sonata design

(Introduction)		Exposition	
1st Theme Group (mm. 29-64)			
a	1.1	1.2	1.1 (developed)
m. 1	29	40	47
	A		dominant pedal on F:
			53
			(single F: note in horn)
			64
2nd Theme Group (mm. 65-124)			
2.1	2.2	2.3	2.4
C	(V of F)	E	A
m. 65	73	81	89
			93
			97
			(Trans)
			pedal on C
			113
3rd Theme Group (mm. 125-144)			
3.1	3.2		
(V of E)	E	F	dominant prolongation on E:
m. 125	129	139	167
		145	
		D.C. in A	
		150	
		various harmonies	
		167	
Codetta (mm. 145-176)			
Development			
intro.	3.2	new mat	1.3
a (over pedal on E):	various harmonies	F	intro
m. 177	186	197	E:b
		203	F:
		211	215
		225	229
			various harmonies

Figure 8. Continued

Recapitulation

1st Theme Group (mm. 245-298)

1.1 A m. 245
1.2 E 285

2nd Theme Group (mm. 299-331)

2.1 A 299
2.2 A^b 307
2.3 various harmonics 315
2.4 323

I.A.C. in A

3rd Theme Group (mm. 332-384)

3.2 pedal on B m. 332
various harmonics 340

dominant prolongation pedal on C 359

3 1 pedal on f 371

I.A.C. in F

Return of 1.1 (mm. 385-406)
A 385

Coda (?)

return of 1 1 (first movement)(mm. 407-415)

A

I.A.C. in A

factors, it is a clue to there being an introduction. Finally, none of the material from mm. 1-28 reappear in the recapitulation; that section begins with the theme from begins m. 29.

The melodic material for the entire introduction is based on the 4-bar opening theme in the violins (see example 11). The introduction is in A-minor, but when the exposition begins at m. 29, A-major is firmly established by several V-I chord successions (mm. 29, 31, 33, 35) embedded in theme 1.1 (see example 12a). These successions occur in place of an authentic cadence in the tonic in the first theme group. When this theme enters (in the brasses), the contrast to the introductory material is marked; not only in the change of mode (from minor to major), but in the rhythm, texture, and dynamics.

Example 11. Fourth movement, introduction, mm. 3-6

The image shows a musical score for two staves. The top staff is labeled 'Violins I and 2' and the bottom staff is labeled 'Cellos and Basses'. The music is in A minor (one flat) and 4/4 time. The top staff begins with a descending quarter-note motion: A4, G4, F4, E4. The bottom staff begins with a rhythmic pattern of eighth notes: A2, G2, F2, E2, D2, C2, B1, A1. A dynamic marking 'p' is placed above the first measure of the bottom staff.

Theme 1.1 consists of two parts: what I term the “call” (mm. 29-30 beat 3 in woodwinds, horns, and strings) and the “response” (mm. 30 beat 3 - 30 beat 1 in brasses). The descending quarter-note motion in the woodwinds becomes the basis for theme 1.2, which begins in m. 40 (see example 12b). A third and final theme of this first theme-group appears in m. 53, in another tutti section marked *fortississimo* (*fff* - see example 12c). Harmonically, it might seem appropriate to regard this theme (in E-major) as beginning the second theme group, as one would expect the secondary key area at that point. Thematically, however, there is a definite “break” *after* this theme (in mm. 63-64), when

all parts exit for nearly two measures save a single horn note (see example 13a). I believe this is a firm indication of the end of the first theme group. Thus, this theme group ends in the secondary key area (E-major; see figure 8).

Example 12. Fourth movement, first theme group

a) Theme 1.1, mm. 29-31

Musical score for Theme 1.1, measures 29-31. The score is arranged in four staves: Flutes, Horns in F, Tpts in F, and Tromb. Tuba. The Flutes part is marked *ff* and labeled "CALL". The Horns in F part is also marked *ff* and circled with an oval. The Tpts in F part is marked *ff* and circled with a circle, labeled "RESPONSE". The Tromb. Tuba part is also marked *ff*. The score is in E major and 2/4 time.

b) Theme 1.2, mm. 40-43

Musical score for Theme 1.2, measures 40-43. The score is arranged in two staves: Flutes, Clannets and Basses. The Flutes, Clannets part is in the upper staff and the Basses part is in the lower staff. The score is in E major and 2/4 time.

c) Theme 1.3, mm. 53-55

Musical score for Theme 1.3, measures 53-55. The score is arranged in two staves: Flutes, Oboes and Cellos and Basses. The Flutes, Oboes part is in the upper staff and the Cellos and Basses part is in the lower staff. The Flutes, Oboes part is marked *fff*. The score is in E major and 2/4 time.

The second theme group (beginning at m. 65) does not begin in the dominant, but in C-major (\sharp III of A-major; see example 13a).¹² Theme 2.1 (in violin 1) is four measures long, and violin 2 has a counter melody that is later doubled by the clarinet (in mm. 69-72). Theme 2.2 is made up of two different two-bar units which alternate. I have called these *x* and *y* respectively and they are shown in example 13b. Theme 2.3, which first appears at m. 81, features chorale-like passages in the French horn which are then imitated by the violin 2, viola, cello and bass (see example 13c). The first violin plays a separate melody over top of the chorale-like material. A very brief theme 2.4 occurs in mm. 89-92 (see example 13d). There is a brief return to the tonic in theme 2.4 but it is short-lived, as $D\flat$ -major material is introduced in m. 93 in a restatement of theme 3.2. Theme 2.1 and then 2.2 are restated (with modifications) in mm. 97-112. Various harmonies are explored in this passage through an extended harmonic succession. This succession of chord ends at m. 113 on a C pedal, and a transitional passage begins. The pedal on C extends to the end of this theme group at m. 124.

Example 13. Fourth movement, second theme group

a) Theme 2.1, mm. 64-68

The image shows a musical score for two instruments: Horn 2 in F and Violin I. The Horn 2 part is written on a single staff with a treble clef and a key signature of one sharp (F#). It begins with a note marked "end of transition". The Violin I part is written on a single staff with a treble clef and a key signature of one sharp. It begins with Theme 2.1 in the second measure, marked "Theme 2.1 begins". The score shows the first four measures of this theme group.

¹²I recognize four themes in this group to Langevin's *one* and Doernberg's *two*. The latter incorporates my themes 2.2, 2.3 and 2.4 into one theme.

Example 13b) Theme 2.2, mm. 73-76

Musical score for Theme 2.2, mm. 73-76. The score is for Violin 1 and Violin 2. The key signature has two sharps (F# and C#), and the time signature is 4/4. The music is marked with a forte (*f*) dynamic. The score shows two measures of music, with a repeat sign at the end. The first measure is marked with an 'X' and the second with a 'Y'.

c) Theme 2.3, mm. 81, 85, 87

Musical score for Theme 2.3, mm. 81, 85, 87. The score is for Horn 1, Violins 1&2, and Horns 2-4, Viola, Cello, Bass. The key signature has two sharps (F# and C#), and the time signature is 4/4. The music is marked with a forte (*f*) dynamic. The score shows three measures of music, with a repeat sign at the end. The first measure is marked with 'm 81', the second with 'm 85', and the third with 'm 87'.

d) Theme 2.4, mm. 89-90

Musical score for Theme 2.4, mm. 89-90. The score is for Flutes, Oboes, and Basses. The key signature has two sharps (F# and C#), and the time signature is 4/4. The music is marked with a forte (*f*) dynamic. The score shows two measures of music, with a repeat sign at the end.

Bruckner again evades cadential motion as theme 3.1 begins at m. 125 in B-major (see example 14a). Theme 3.2 is introduced in m. 130 in the oboes and clarinets (see example 14b). Theme 3.2 appears only briefly for six measures between statements of theme 3.1 (first statement in mm. 125-128, second statement in mm. 135-144). In the middle of theme 3.1, in m. 139, there is a P.A.C. on E, and subsequent dominant pedal (also on E) which resolves deceptively to F-major (i.e., V- \sharp VI) at the codetta (m. 145).

Bruckner used theme 3.2 as the basis for the codetta.¹³ Various harmonies are explored in the codetta (through such bass notes as G \flat , C \flat , G \sharp , E, C \sharp , A) to a three-bar pedal on D (mm. 159-161, followed by a four-bar dominant pedal on B (mm. 163-166) resolving to E at m. 167. Here begins *another* pedal on E (a tonic-function pedal now) which extends to the end to the exposition at m. 176.

Example 14. Fourth movement, third theme group

a) Theme 3.1, mm. 125-128

b) Theme 3.2, mm. 130-133

¹³Neither Doernberg nor Langevin have identified this codetta in their analyses. Both include this section in their third theme groups. I believe the strong cadence, though deceptive, suddenly sparse texture and *pianissimo* marking give the impression of a new section.

Development

The development treats material from the introduction as well as the first and third theme-groups.¹⁴ In addition, there is new thematic material introduced. The development commences with a restatement of the introductory theme in the original key of A-minor. Thus, although the exposition ends in the dominant, the development begins in the tonic. In m. 186 the high woodwinds and violins enter with material from theme 3.2. Bruckner introduces new material at m. 197 which features eighth-note scalar patterns. There are two fortissimo interjections of theme 1.1 material: one at m. 215 and one at m. 225. These are significant because they give the impression of a false recapitulation. However, being only two and four measures long respectively, they do not fool the audience for very long. Although Bruckner explores various harmonies in this development (see figure 8) there is a brief return to the dominant (E-major) in the latter “interjection.” The last passage (mm. 229-244) features theme 1.3 material and another harmonic succession which ends with an A \flat -major chord in m. 244.

Recapitulation

As the recapitulation begins in the next measure in the tonic of A-major, it is clear there is no authentic cadence here; there is no harmonic transition between the very distant A \flat -major chord in m. 244 and the A-major material in m. 245. As in the exposition, the tonic is established by a series of V-I progressions within the restatement of theme 1.1

¹⁴I have adopted both Doernberg’s and Langevin’s analyses of the development and recapitulation sections—they are identical.

(mm. 247, 249, 251). This restatement is greatly expanded, continuing for over fifty measures compared to its initial statement in the exposition, which comprised only ten measures (mm. 29-40).

The second theme-group begins with an I.A.C. in the tonic (A-major--it was formerly in C major) at m. 299, and is only partially restated (theme 2.4 does not reappear in this section). Of the third theme-group, only theme 3.2 appears here, and extends from mm. 352-366. In m. 371 a new section begins in F-minor that further develops material from theme 3.1. There is a pedal on F from mm. 371-384, after which theme 1.1 re-enters in the tonic (at m. 385). There is no tonal closure here: this tonic chord is not part of an authentic cadence, since there is no dominant function chord preceding it. However, A-major continues as the principal key from this point until finally there is an I.A.C. at m. 407, over a tonic pedal. Bruckner has avoided closure in the tonic key in the recapitulation up to this point, and when it does occur it has a very dramatic effect.

Coda

One interpretation, then, is that the coda begins in m. 407, after this dramatic cadence in A major. This measure also marks the return of theme 1.1 from the *first* movement. Since the movement ends at m. 415, the brevity of this coda is remarkable in such a relatively lengthy work.

Paul-Gilbert Langevin postulates that the coda starts at nr. 371.¹ This view would make sense in light of the climax immediately preceding it if there were a strong cadence. However, while technically there is a V-I cadence, the cadence is not in the tonic key of the movement, so there is no real sense of closure.

In this movement, there are two places after the recapitulation where authentic cadences in A Major occur: m. 299 and m. 407. I believe m. 299 to be too early in the piece for the coda to begin. So far in the recapitulation (which only began at m. 245) only the first theme-group has been restated, whereas one would normally expect several of the themes from the exposition to be repeated. At m. 299 material from the second theme-group enters, which suggests this is still part of the recapitulation.

¹Langevin, *Anton Bruckner*, 165. Doernberg does not mention a coda section in his analysis of this movement so I assume he did not believe this movement has a coda, or perhaps he could not decide either.

Summary

One of the characteristic features of the three movements analyzed above is Bruckner's avoidance of cadences at important sectional divisions. He uses several techniques to accomplish this weakening of tonal closure: instead of authentic cadences, theme groups end with deceptive cadences (e.g., first movement, m. 101) or plagal cadences (e.g., second movement, m. 132); an authentic cadence, when presented, occurs in the middle of a theme group, rather than at the end (first movement, m. 25); a new key area appears "suddenly," with no transition from the last key area (second movement, m. 93; fourth movement, m. 245); V-I motion is embedded within a phrase, not at a cadence point, thus weakening the effect of the progression (fourth movement, theme 1.1).

I chose one of the above examples (second movement, recapitulation, m. 93) to analyze in more detail in the third section of the next chapter. This measure marks the beginning of the recapitulation in the second movement, where the absence of an authentic cadence in the tonic weakens the effect of the return of the main theme. Using Kurth's theory I suggest a dynamic structure for this passage that explains the absence of such a cadence.

The issue of cadence structure also affected my analysis of the coda of the fourth movement. In the second section of the next chapter there is a dynamic analysis of all three possible choices for the location of the beginning of the coda that transcends the problem of absent cadences.

Another characteristic of the three movements discussed in this chapter are the grand pauses (silences) that Bruckner employed. There are many such instances: first movement, mm. 280-281; second movement, m. 92, fourth movement, mm. 63-64 (with the exception of horn 2), and mm. 370-371. Kurth mentions such silences, as well as “sudden *pianissimos*” (that interrupt loud passages) as typical Brucknerian features, and claims they serve a specific dynamic function. In the last section of Chapter 3 I test this aspect of Kurth’s theory using passages from all three movements.

In my discussion of the beginning of the fourth movement above, I gave reasons for my analysis of mm. 1-28 as an introduction. I find it interesting that Doernberg and Langevin did not consider this introductory material, but rather part of the exposition. Ernst Kurth did recognize this passage as an introduction in his analysis of this piece. I begin the next chapter with an analysis of mm. 1-28 according to his theory and present further evidence of this being an introduction.

CHAPTER 3

DYNAMIC ANALYSIS

In the last chapter I demonstrated that Bruckner employed the sonata form in movements I, II, and IV of the Sixth Symphony. A number of matters were raised as a result: my identification of an introduction in the fourth movement contradicting two published analyses of the work; the existence of three possible choices for the location of the beginning of the coda in the fourth movement; Bruckner's avoidance of strong cadences at sectional divisions in the work and how they affected my formal analysis; and finally Bruckner's use of pauses throughout the work. Each of these features made formal analysis of the piece difficult, and in this chapter I will test Kurth's theory against each of the above, to show how each of these components contributes to the way the piece ultimately unfolds.

In the first two sections of this chapter I discuss the introduction, and then the coda, of the fourth movement. The third section presents the recapitulation of the second movement whose beginning is non-climactic due, in part, to the lack of an authentic cadence to firmly re-establish the tonic key. In the last section of this chapter I test Kurth's theory that the false climaxes, grand pauses, and sudden *pianissimos* that pervade this symphony play a special role in dynamic formal process.

I. Fourth Movement - Introduction

What structural function does an introduction serve relative to the rest of the piece? It must in some way prepare the listener for the beginning of the exposition. This might be accomplished by introducing some of the thematic material that is to be stated in the exposition, as in an overture to an opera. It might be that the composer wants to create a certain mood with the introductory material that will make the entrance of the exposition that much more remarkable. I believe this is what Bruckner has done here. By writing an introduction that in many ways contrasts the beginning of the exposition, there is a heightened impact when the exposition starts. Ernst Kurth recognized the fact that there is an introduction in the fourth movement in his own analysis of the Sixth Symphony; he referred to such introductions as “developments,” because according to him, that is their function¹:

However gloriously and directly the theme may shine forth in Bruckner's music, the most essential property is its efficacious verve and unfolding. On the other hand, we very often encounter the phenomenon where Bruckner does not begin with the theme at all but rather with a preliminary *development* that builds up to it...(italics mine)²

Here Kurth acknowledges that in this introduction Bruckner “builds up” to the main theme (theme 1.1), which appears in m. 29 with the beginning of the exposition. By “build up” we can assume that Kurth means an intensification of energy, which creates forward

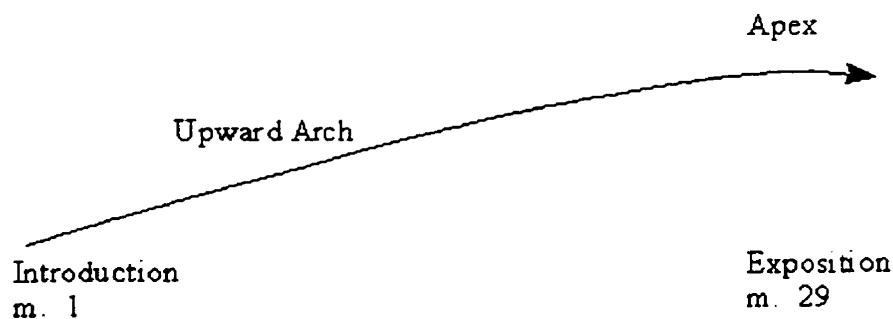
¹The two analyses I mention in Chapter 2, Doernberg (1968) and Langevin (1977) do not identify an introduction in this movement.

²From *Bruckner* (1925), quoted and translated in Rothfarb, *Selected Writings*, 152.

motion toward a climax at the beginning of the exposition. In Chapter 1 I explained how Kurth traced all musical events to energies that exist beyond human perception and are expelled into the phenomenal world where we perceive them as music. These psychic energies then govern how music unfolds; Kurth uses the metaphor of motion to describe this “unfolding.” Therefore, no part of a musical work exists alone--every musical event affects subsequent events and thus the overall design of the piece as a whole. For Kurth, musical form is a *process*, not a state. Using Kurth’s theory we can determine how the introduction effectively prepares the listener for the exposition, and how it ultimately affects the rest of the fourth movement.

If we consider the introductory 28 measures as leading up to the opening of the exposition at m. 29, then it follows that m. 29 must be some sort of arrival point. Using Kurth’s terminology one could describe this passage as the first half of a developmental wave, with its apex at m. 29, and the first 28 measures as its upward arch (see figure 1).

Figure 1. Upward arch of developmental wave, mm. 1-28



I will show the component waves of the introduction, and how these help shape the larger developmental wave. Several elements, both musical and dynamic, contribute to the overall intensification of the introduction through *tiering* (see Chapter 1, example 14). Through Bruckner's use of these effects forward motion prevails despite a seemingly downward-striving melody (see example 1). Since this melody provides all the thematic material for the entire introduction, its forward motion is essential to the overall development toward the exposition.

Before this theme enters in m. 3, however, the violas begin the movement with a pianissimo tremolo. Kurth describes this as "sonic stirrings...more an energetic than a sonic impulse."³ In this part, a *void* is created, and the violins' melody resounds into this void from mm. 3-6 (see Chapter 1 under Important Kurthian Terms and Concepts). At the end of m. 6 when the melody ends, the viola tremolo remains, and in fact remains throughout the entire introduction. The violin part that enters at m. 3 is described by Kurth as "only the onset of a motion faintly drifting downward in gentle spirals, neither a theme nor a 'melody' in the traditional sense..."⁴

³Ibid., 153.

⁴Ibid., 154.

Example 1. Introduction, opening, mm. 1-6

The musical score for Example 1 shows five staves. From top to bottom: Clarinet 2 in A (treble clef), Violin 1 (treble clef), Violin 2 (treble clef), Viola (alto clef), and Cello and Bass (bass clef). The Cello and Bass part has a 'pizz' marking above it. The score spans six measures, with vertical bar lines indicating the measure boundaries.

The bass voice (in the cellos and basses) at this point is also moving downward, in a sequential pattern. There is an additional voice, the second clarinet, that enters on beat 4 of m. 3. It appears as a sort of counter-melody, at first working against the overall downward motion (it moves from f up to c¹ in m. 4), then falling into similar motion with the violins in m. 5 by adopting the same rhythm and direction (see example 2).

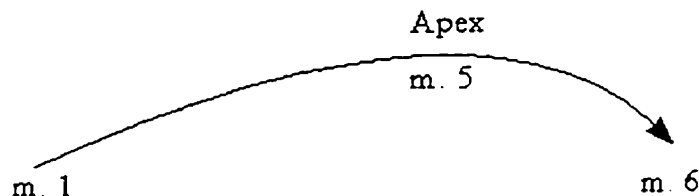
Example 2. Clarinet counter-melody against violin melody, mm. 3-6

The musical score for Example 2 shows two staves: Violin 1 (top, treble clef) and Clarinet 2 in A (bottom, treble clef). The score spans four measures. Arrows point from the Violin 1 staff to the Clarinet 2 staff. The first two arrows are labeled 'Contrary Motion' and the last two are labeled 'Similar Motion'.

From the point of view of dynamism, Kurth claims this clarinet line “represents energetic impulses, churned up from the internal motions, but not lasting beyond the energy of the first volitional gestures...The impulses are absorbed in the more turbulent motion of the upper voice [violin].”⁵ What Kurth means in this rather cryptic statement is not that the clarinet line goes unnoticed by the listener, but rather that it creates a sense of “surging from within”, and contributes to overall “undulatory intensification.”⁶ The fact that the clarinet’s part is set apart registrally, rhythmically, and thematically from the violin line leaves a sense of *unfulfillment*, a sense that is corroborated by the contrasting timbre of the clarinet. This sense of unfulfillment in the inner part contributes to the effect of a *surging from within*, and “[t]his surging is always a chief trait of wave formations...”⁷

These first six measures describe the first component wave of the movement (see figure 2).

Figure 2. Component wave, mm. 1-6



⁵Ibid., 155.

⁶Ibid.

⁷Ibid.

Energy begins to build immediately with the viola tremolo in m. 1. Tension is heightened when the theme and descending bass pattern begin in m. 3, because of the addition of voices (from one to five) and increased registral span (to 39 semitones). More tension is created with the arrival of the second clarinet in m. 3, because of the contrasts described above, and because of the addition of one extra voice. The apex of this wave occurs at the downbeat of m. 5, when the clarinet begins moving in similar motion to the violins. Up to this point tension is still being created from the contrary motion of the clarinet, so the apex cannot occur any earlier. There is a de-intensification to the end of m. 6, caused by the subtraction of the clarinet voice at the end of m. 5, and the general downward tendency of both the melody and bass line at this point. In this way the wave is completed. As a small, component wave, these first six measures serve only as dynamic motion toward the coming main theme.

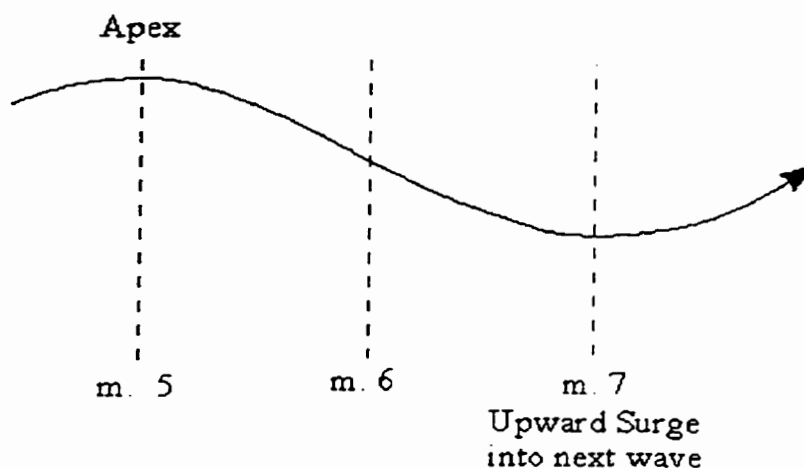
There is a repetition of the first component wave in mm. 7-10. Leading into this second wave, in mm. 5-7, the tiering process comes into play, as there is an upward surge in violin 1 from the last d^1 in the first component wave up to the initial f^2 of the next wave (see example 3 and figure 3). According to Kurth, then, this repetition serves as a forward-pointing tier, not a static or de-intensifying gesture.

Example 3. End of violins' melody - beginning of its repetition, mm. 5-7

Upward Surge

The image shows a musical score for two staves: Violin I (top) and Cellos and Basses (bottom). The Violin I staff features a melodic line that rises in pitch from measure 5 to measure 7, with a vertical dashed line indicating an 'Upward Surge' between measures 5 and 6. The Cellos and Basses staff shows a rhythmic accompaniment with a descending bass line. The key signature has one sharp (F#) and the time signature is 4/4.

Figure 3. End of first component wave - beginning of next wave, mm. 5-7



The following two measures (mm. 11-12; see example 4) constitute the next wave tier, which is also repeated (mm. 13-14). Kurth describes the thematic material in this tier as a “foreshortened and also internally abating fade-out of the beginning.”⁸ There are no upward leaps within this line as there were in the opening material, so there is no sense of intensification. This tier definitely represents a “slackening of tension.” However, as this is taking place in the violins, the clarinet re-enters with an upward surge. “[I]t intercepts the fading final tone of the upper line (violins).”⁹ Therefore this component wave (mm. 11-12), while it does have a “lapsing quality” on a small scale, the upward arch of the clarinet signifies that it is in a sense a beginning which is moving toward the first large-scale developmental wave.

⁸Ibid., 157.

⁹Ibid.

Example 4. mm. 11-12

In mm. 15-17 there is a further slackening of tension as the violins are “reduced” to the small two-note fragment (d^1 - e^1 ; see example 5).

Example 5. mm. 14-17

These two pitches (e^1 - d^1) were the last part of the gesture played in m. 14; however, at this point there has been a directional reversal. The notes are moving upward instead of downward, and so Kurth considers them not mere repetitions, but “*initiatory gestures in the midst of the ebbing away* (emphasis Kurth’s).”¹⁰ At this point (mm. 15-17) the

¹⁰Ibid., 159.

clarinets have a repeated gesture, hovering around a central note “seeking equilibrium”.¹¹ The basses also have a repeated fragment, a fourth leap, described as a “pendular motion swinging to a standstill”.¹² At the end of m. 17, this pendular motion changes to the descending pattern of the beginning, beneath the ever-present viola tremolo. These two voices carry the tension over mm. 17-18, “a rhythm just barely pulsating beneath the surface.”¹³

Mm. 19-28 represent a final upsurge into the main theme at m. 29. In mm. 17-18 the instrumentation is reduced to viola tremolo accompanied by the now-familiar descending bass-line. This combination is reminiscent of the beginning of the movement, and indeed, the violins enter in m. 19 with the introductory theme (see example 6). This repetition of the beginning is not exact (as was mm. 7-10); there has been a transposition up a fourth, the clarinet countermelody has been modified, and is now played by both first and second clarinets, and finally the second violins, which up to now have been doubling the firsts either at the unison or at the octave, deviate from the theme in m. 22 and play their own ending (circled in example 6). These differences will prevent us from applying the same component wave-shapes that were used for the thematic statements at mm. 3 and 7. This new version of the theme is repeated exactly in mm. 23-26, just as the opening theme was repeated in mm. 7-10, although in that case the two waves were connected by the process of tiering (see figure 3).

¹¹Ibid.

¹²Ibid.

¹³Ibid.

Example 6. mm. 19-22

Musical score for Example 6, measures 19-22. The score is in 4/4 time and features five staves: Clarinet 1 & 2 in A, Violin 1, Violin 2, Viola, and Cello and Bass. The key signature has one flat (B-flat). The Violin 2 staff has a circled passage in measure 22, consisting of a quarter note G4, an eighth note A4, a quarter note Bb4, and a quarter note C5.

Example 7. Brass interjection, mm. 22-23

Musical score for Example 7, measures 22-23. The score is in 4/4 time and features five staves: Horns 1-4 in F, Trumpets 1-3 in F, Violin 1, Violin 2, Viola, and Cello and Bass. The key signature has one flat (B-flat). A circled passage in measures 22-23 shows a brass interjection in the Horns and Trumpets staves, marked *ff* (fortissimo) with accents (>). The interjection consists of a half note chord in measure 22 and a half note chord in measure 23. The other instruments play *p* (piano) or *pp* (pianissimo) throughout.

There is another factor that makes these two statements of the theme different from the ones at the beginning of the movement (at mm. 3 and 7), which is a fortissimo interjection by the brasses on the downbeat of m. 23 that will affect the shape of the component waves of this section (see example 7). I will begin at m. 19 where the clarinets enter with their countermelody. Unlike the countermelody of mm. 3-5, which moved first in contrary, then in similar motion with the violins' theme, here the entire countermelody moves in contrary motion (see example 8).

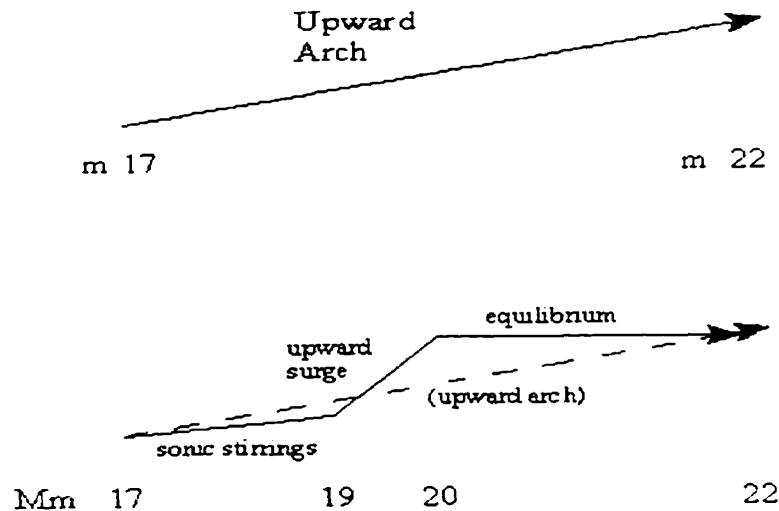
Example 8. Clarinet countermelody against violin melody, mm. 19-22

Contrary Motion

This means that while the violin line is showing a de-intensification in its descent, the clarinets are counteracting with an upward surge. Therefore no energy is lost in mm. 19-21, but rather it is *maintained* through equilibrium between the theme and the countermelody. Then, in m. 22 when the clarinets are no longer playing, the equilibrium persists because of the second violins' small upward surge against the final descent of the theme in the first violins (see the circled pitches in example 6). Measures 17-22, rather than comprising their own component wave, therefore form part of the upward arch of a larger developmental wave (see figure 4). Energy begins to build in the "sonic stirrings" of the viola tremolo in mm. 17-18; then there is an upward surge of energy in m. 19 with

the addition of the violin and clarinet voices, as well as the expanding register that these additions represent. This level of energy is then sustained through equilibrium over mm 20-22.

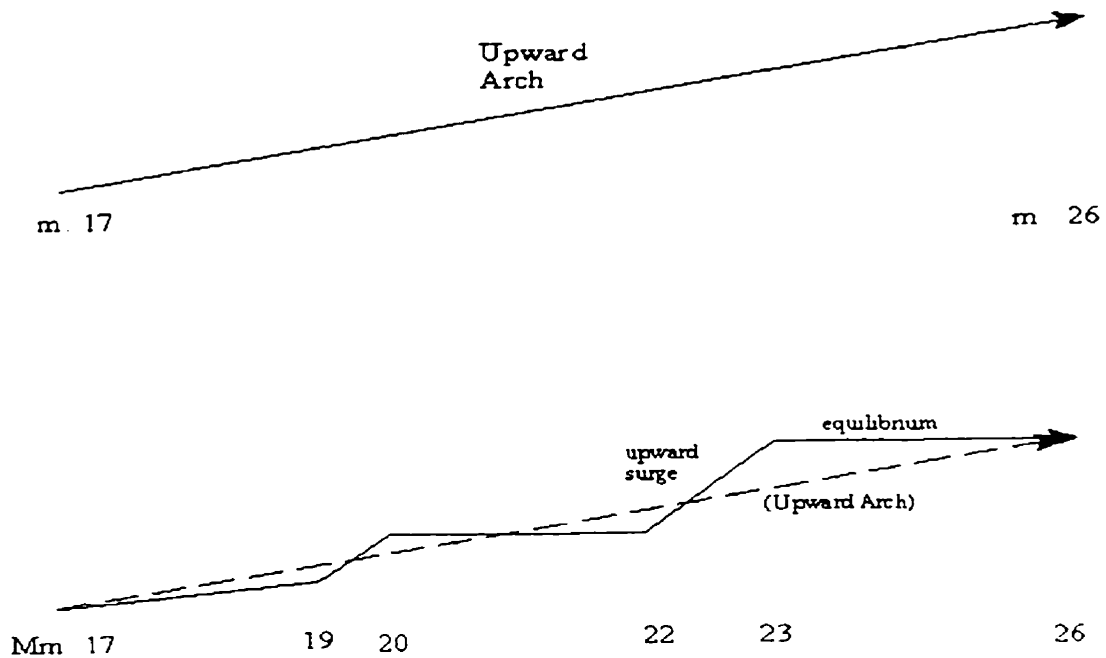
Figure 4. Overall upward arch of mm. 17-22, then breakdown into its components



The brass interjection at mm. 22-23, a fortissimo V-I harmonic progression in A-major, represents another upward surge of energy in this developmental wave. At this point the violins and clarinets have dropped out momentarily, and the brass entries add another seven voices (counting each note in the chord), albeit briefly. Also the sudden entry of the brasses, which have not yet been heard in this movement, adds a new timbre, as well as a contrasting dynamic, since everything was *piano* up to this point. All these factors contribute to the upsurge of energy that occurs during this brief interjection. The repetition of material from mm. 19-22 comes in m. 23, beat 2. Again, equilibrium is reached here, through the contrary motion of the clarinets and violins, but now it is the higher level of energy created by the brass interjection that is being sustained, and the

upward arch of this developmental wave continues (see figure 5).

Figure 5. Continuation of example 13, with mm. 23-26 added



Measures 27-28 provide the final build-up and plateau of energy before the entrance of theme 1.1 at m. 29. The brass reappear with their V-I progression (this time joined by the bassoons on the downbeats), and this alternates with a rising two-note motive in the clarinets throughout these two measures (see example 9).

Example 9. Brass chords alternating with clarinet motive, mm. 26-28

The addition of the brass parts (7 parts) and bassoons (2 parts) bring the total number of sounding parts up to 16, the highest yet in the movement. Added to this is the louder dynamic marking, fortissimo in the brasses. This explains the increase in tension at m. 27. Then over the course of the next two measures, there are undulations in several of the voices which create even more forward motion.

For example, the bass voice (cellos and basses) has an undulating pattern of two alternating notes over these two measures: A to B \flat (see example 10).

Example 10. Bass voice, mm. 27-28

The image shows a musical staff for Cellos and Basses in bass clef. The music consists of two measures. The notes are A (below the staff) and B-flat (below the staff), alternating in a rhythmic pattern. A wavy line below the staff, labeled 'Undulations', highlights the alternating notes. An arrow points to the right at the end of the staff.

The second violins also have an undulating pattern of two notes: E to D (see example 11).

Example 11. Second violins, mm. 27-28

The image shows a musical staff for Violin 2 in treble clef. The music consists of two measures. The notes are E (middle C) and D (below the staff), alternating in a rhythmic pattern. A wavy line below the staff, labeled 'undulations', highlights the alternating notes. An arrow points to the right at the end of the staff.

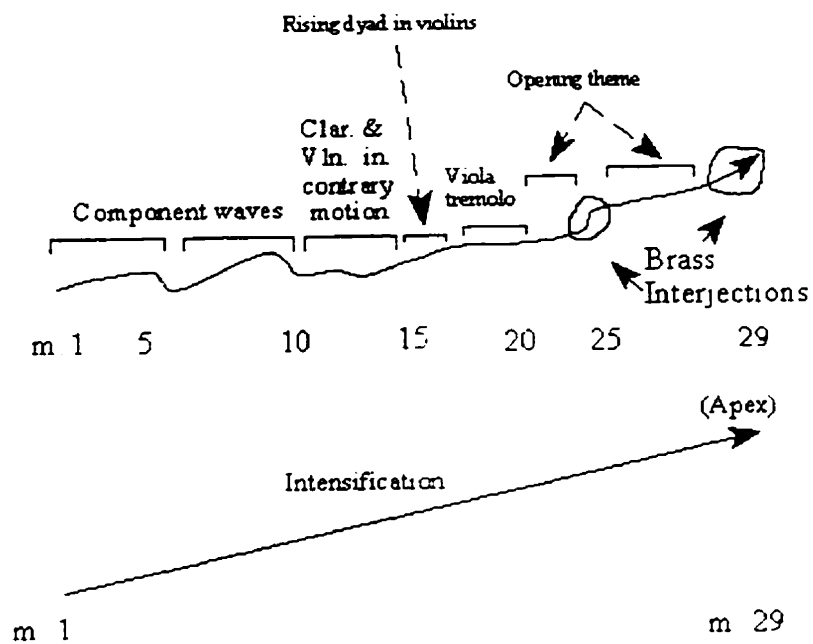
The undulation in the first violins' line is more severe; a pattern of alternating rising and falling octave leaps, broken by sixths (see example 12). Finally there is the undulating pattern created by the brasses' and clarinets' alternating two-note motives described in example 9.

Example 12. First violins, mm. 27-28



If we combine all the component and developmental waves identified in the introduction (mm. 1-28), we can gain a better understanding of Kurth's notion of an introduction being a "preliminary development that builds up to [the main theme]" (see footnote 1). The following example shows how the smaller waves contribute to the overall development of the introduction, creating forward motion toward the beginning of the exposition at m. 29 (see figure 6).

Figure 6. Overall Shape of Introduction, mm. 1-29

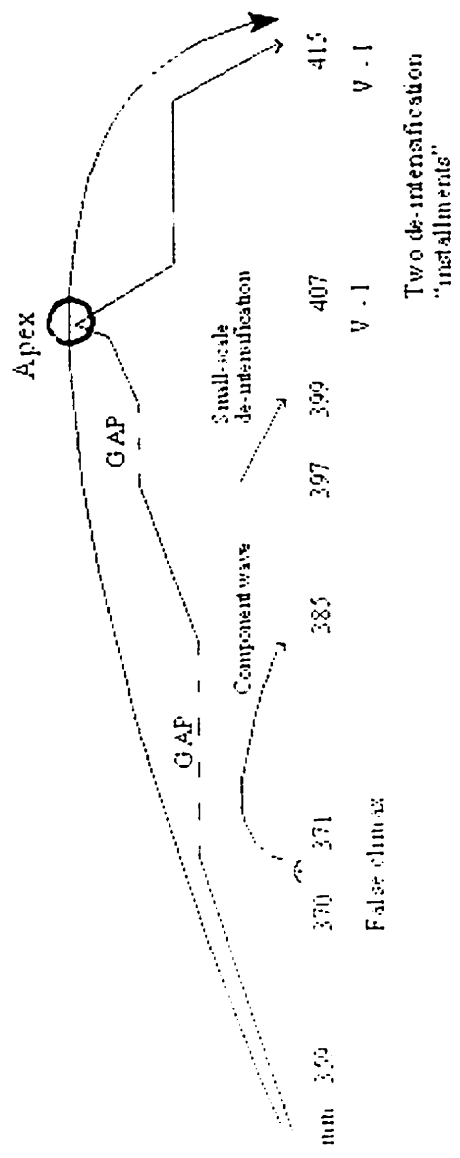


II. Fourth Movement - Coda

In Chapter 2 I explained that the location of the beginning of the coda is ambiguous in the fourth movement, that is, it is difficult to determine exactly *where* the coda begins. I proposed three possibilities for this location: mm. 371 (false climax); 385 (return of theme 1.1); and 407 (return of theme 1.1 from first movement). I identified my preference for m. 407 in Chapter 2; it is the only one of the three choices that follows an authentic cadence in the tonic. Admittedly, this means the coda is very short (only nine measures). In this chapter I have prepared and compared dynamic analyses of each of the three possibilities for locating the coda.

Figure 7 offers an overview of the large passage that is the focus of my discussion. The three choices mentioned above are present therein. It is necessary to place mm. 371, 385, and 407 in context musically in order to determine dynamic structure. Therefore I discuss the passages that precede and follow each of the three possibilities, beginning with m. 359.

Figure 7. Fourth Movement, Dynamic Process of mm. 359-415



Choice 1 - False Climax (m. 371)

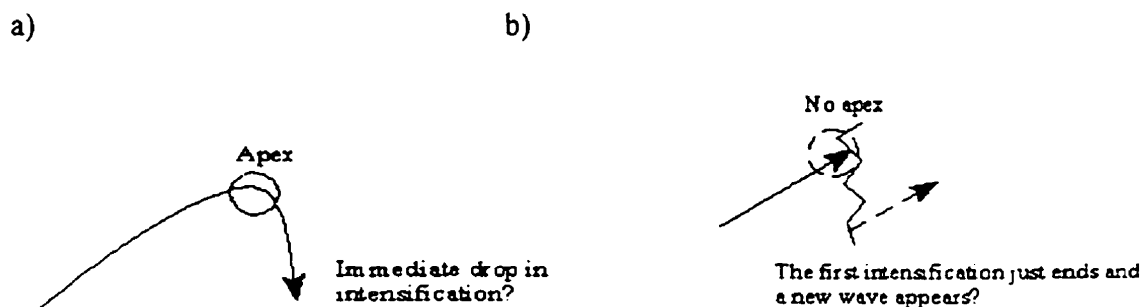
Three elements make up this false climax: a period of intensification including a twelve-measure dominant prolongation; a grand pause, in the form of a fermata over a bar-line, which interrupts the dominant chord before it can resolve; and a new theme that begins after the pause and does not serve to adequately resolve the previous dominant material (see example 13).

Example 13. mm. 367-371

The image shows a musical score for three staves: Flutes/violins, Oboes, and Bass. The Flutes/violins staff is in treble clef with a key signature of one flat and a common time signature. It features a dynamic marking of *ff* and a fermata over the bar line between measures 367 and 368. The Oboes staff is in treble clef and contains a continuous melodic line with slurs and accents. The Bass staff is in bass clef and contains a rhythmic accompaniment with slurs and accents. Vertical dashed lines separate the measures, and a solid vertical line marks the end of the excerpt at measure 371.

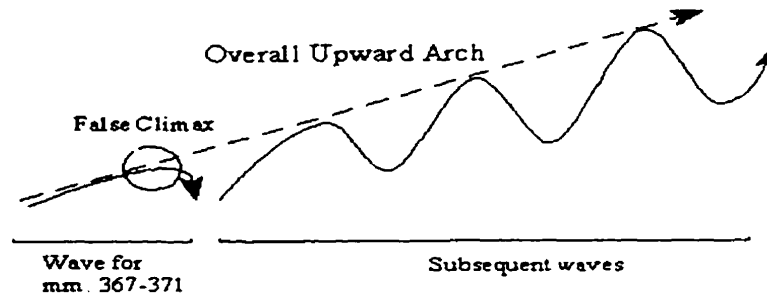
There is a weak sense of resolution created by the authentic cadence because it is not in the tonic key, and the new thematic material also obscures a sense of finality. It is difficult to determine the dynamic structure of the false climax using Kurth's concepts. I give two possibilities in figures 8a and b. Given Kurth's notion of an authentic cadence as a relaxation of tension, he might have considered the weak resolution in m. 371 as a sufficient completion of a component wave (see figure 8a).

Figure 8. Possible dynamic structures for a false climax



However, there are no other de-intensifying gestures before the new material begins at m. 371 (e.g., subtraction of voices, decrease in dynamics) so Kurth's theory seems to fall short of explaining this passage. This leaves the questionable figure 8b, where the false climax constitutes a truncated wave (indicated by a zig-zag line in the figure). The dynamic functions of sudden pauses will be explored in the next section of this chapter, but in any case the quandary between figures 8a and b only exists on this small constituent wave level. According to Kurth's notion of the hierarchy of waves, the drop in intensification after a false climax would not show up at a larger level (see figure 9). To explain this idea further, let us look at the larger context in which the false climax appears, i.e., what comes before and what comes after.

Figure 9. False climax in a Larger Context

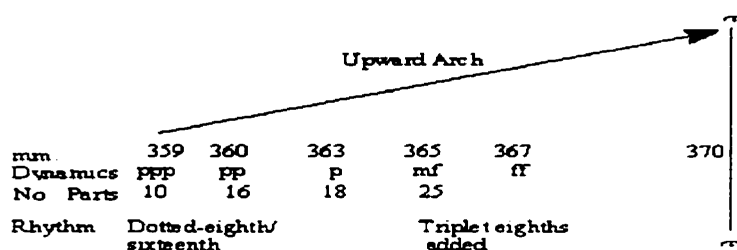


Leading Up to the False Climax

As mentioned, the twelve measures preceding m. 371 consist of an extended dominant pedal (on C). The dominant pedal prepares for the key of F-minor, which is introduced in m. 371. In these twelve measures are several Kurthian contributors to an intensification: increased dynamics, addition of voices, and rhythmic agitation (see figure 10). The energy that accumulates during this passage accounts for the effect of a climax at m. 370. At the beginning of the dominant prolongation, m. 359, there are ten active parts (horns and strings), dynamics are marked *pianississimo*, and the melody is based on theme 3.2 from the exposition. Figure 10 shows the progression through mm. 360-367 from *pianississimo* to *fortississimo*, and from 16 parts to 25 (*tutti*). Notice also that in m. 367 the number of attacks per beat increases with the addition of the triplet to the previous dotted figure--this is increased *agitation*. Then, just when conditions seem perfect for Kurth's notion of an apex--maximum tension has been reached, the listener is expecting a huge release of energy on the downbeat of the next measure--there is an interruption in the

form of a pause and at m. 371 a new theme with a low energy level begins as if from nowhere.

Figure 10. Dominant Prolongation, mm. 359-370



Following the False Climax

After the fermata between mm. 370 and 371 there is a fifteen-measure passage (mm. 371-384) whose component patterns of dynamics, register span, and number of voices (not parts) are evidence of another component wave (see figure 11a). This is followed by the return of theme 1.1 at m. 385. When theme 1.1 returns there is an abrupt increase in dynamics and number of parts (from 8 in m. 384 to 15 in m. 385), as though it is beginning in the middle of a climax. In figure 11b I illustrate one possible interpretation of the fifteen-measure component (from figure 11a) as a bridge between two high-intensity passages (the false climax on one side and the return of theme 1.1 on the other).

Figure 11a. Component wave, mm. 371-384

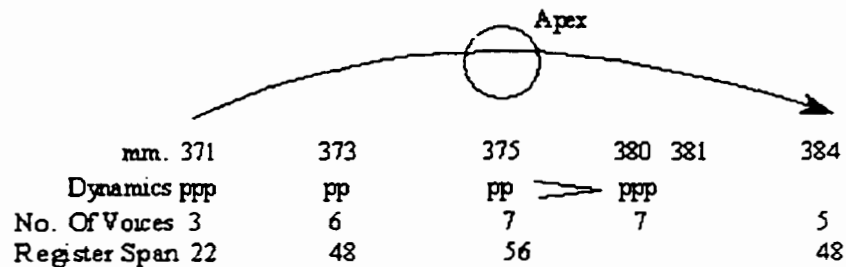
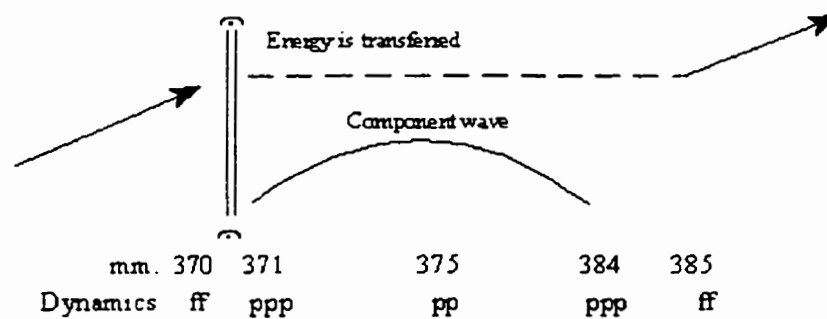


Figure 11b. Component wave as a "Bridge," mm. 370-385



Choice 2 - Return of Theme 1.1 (m. 385)

The codas from the first and second movements both began with a restatement of theme 1.1, so this point seems a reasonable choice for the beginning of *this* coda.

However, the other two codas were also marked with a clear V-I cadence in the tonic (the recapitulation ends on the V, the coda begins on I), but the material at m. 385 exhibits no such cadence. Such a cadence would provide a clear boundary between the recapitulation

and the coda. While the restatement of theme 1.1 *is* in the tonic (A-major), there is no satisfactory V chord preceding it (see example 14).

Example 14. mm. 384-85

mm 384-385

(Return of Theme 1.1)

ppp *fff*

Preceding the Return of Theme 1.1

In the musical events that precede m. 385 (see figure 11a), there is a component wave from mm. 371-384 that I have suggested links the false climax with the return of theme 1.1. When theme 1.1 returns, the fortississimo dynamic marking and tutti instrumentation have not been “prepared” by a so-called intensification. According to Kurth’s theory a high level of psychic energy causes such loud, tutti passages, but the energy must accrete: it does not, or cannot, come from nothing. Clearly the component wave in mm. 371-384 does not explain the apparent increase in energy that manifests itself in m. 385. This apparent discontinuity lends itself to my hypothesis that the energy necessary to produce the return of theme 1.1 comes from the intensification *before* the false climax (see figure 11b).

Following the Return of Theme 1.1

Although the return of theme 1.1 at m. 385 is climactic in that it carries a much higher level of intensity than that which precedes it, it is not an actual climax point, since tension continues to build in this section. In m. 391, theme 1.1 is subjected to rising sequential treatment, and accidentals are introduced (see example 15). I show the rising sequence as progressively higher high points in the melody in figure 12. The rising melody line is necessarily the main contributing factor to any intensification occurring here, since dynamics and register span remain constant throughout.

Example 15. mm. 391-396

Figure 12.

	mm.	385	391	393	395	397	399
Dynamics		ff	ff			pp	fff
High Point		a [♯]	c [♯]	e [♯]	f [♯]	f [♯]	a [♯]
Register Span (semitones)		48	48			36	60

There are two transition measures, 397-98, where there is an abrupt change in dynamics from *fortissimo* to *pianissimo*, and where all voices but strings and flutes exit. The strings continue the quasi-descending pattern that has served as accompaniment for the theme 1.1 material throughout this section, but the actual theme 1.1 material exits for these two measures along with the horns and brass (see example 16). These elements give the Kurthian effect of a de-intensification. However, like the component wave in figure 11b, this local downward arch is not dynamically connected to surrounding material. None of Kurth's requirements for a de-intensification are met in the *approach* to this two-bar passage, nor can a larger-scale intensification be found that leads *out of* it. I use my own "bridge" hypothesis to explain the dynamic function of this passage.

Example 16. mm. 397-98

Quasi-descending Line

The image shows a musical score for two staves: Violins (top) and Cellos and Basses (bottom). The notation consists of eighth and sixteenth notes, with a clear downward melodic contour in both parts. A dotted line is drawn between the two staves, indicating a bridge between two periods of high intensity. The title 'Quasi-descending Line' is centered above the staves.

The tutti resumes in m. 399, with an even higher level of intensity that when it was cut short at m. 397. Figure 12 suggests a bridge (dotted line) between two periods of high intensity similar to the one in figure 11b. However, the tension that resumes in m. 399 has still not reached its climax; there is further intensification after this point.

Choice 3 - Return of Theme 1.1--First Movement (m. 407)

In m. 406 a climax point is reached, and on the downbeat of m. 407 there is finally a definitive authentic cadence in the tonic! Kurth's theory would suggest that several of the musical elements present in m. 407 are manifestations of the energy that was built-up for so long: the five-octave register span (60 semitones), the triple-forte dynamic marking, and the twenty-four-part instrumentation.

The nature of these musical elements make this measure, by Kurth's definition, the highest point of tension in this section (see figure 7). I suggest then, that this is consistent with his notion of an apex point. This apex has more than local importance, however; figure 7 shows how it relates to the large-scale intensification that has occurred from m. 359 up to this point. Because of the forcefulness of this climax, I believe m. 407 is the most likely choice for the location of the beginning of the coda. There is definitive tonal closure, and the thematic material changes slightly (theme 1.1 from the first movement is re-introduced), indicating a new beginning.

If this is the apex, then the remaining nine measures must effect a de-intensification. According to Kurth, the authentic cadence is the most indicative gesture of a relaxation of tension.¹ In addition to the authentic cadence at the apex, there is one in

¹Kurth believed the authentic cadence and the half cadence to be "the primal forms of all harmonic activity." A motion from I-V (half cadence) creates an increase in tension, and therefore forward motion, while a motion from V-I (authentic cadence) has the opposite effect. Kurth included the half cadence in his statement to account for energy in both directions in music. from *Romantische Harmonik* (1920) in Rothfarb, *Theorist and Analyst*, 9.

m. 415, ending the piece. Because this is not only the end of a movement, but also the end of the symphony, perhaps Bruckner placed two authentic cadences in such close proximity in order to release the energy in “installments” rather than having a massive release in the last measure. Between m. 407 and the end there is no intensification; no new material is introduced, and the melodic material and the dynamics remain constant. Kurth might agree, then, that these eight measures function as a sort of plateau that holds the tension at a certain level (lower now that the first authentic cadence has passed) until the final cadence in m. 415 where the last of the tension relaxes and resolution is reached. I marked these plateaux on figure 7, showing how they affect the overall dynamic process of the end of the fourth movement.

III. Second Movement - Recapitulation

Earlier I mentioned that the de-intensifications of the second movement are more pervasive than the intensifications. I suggested that this might be typical of an Adagio, where bombastic effects are rare. In both the first and fourth movements of this symphony, there is a climax point in the first theme-group of the exposition featuring theme 1.1. Then later the recapitulation begins with a climactic return of the main theme in the tonic key.¹ However, in the second movement, there is no climax involving theme 1.1 in the exposition. Because it does constitute a “double return” by restating theme 1.1 in the tonic key the beginning of the recapitulation is therefore not a climax point either. The following analysis shows the dynamic function of such a non-climactic recapitulation section.

¹James Webster, in the *New Grove* article “Sonata Form,” writes that in the Classical period, the ideal function of the recapitulation was to “resolve all the complexities introduced in the development.” One of the reasons the recapitulation was climactic was because it often constituted a “double return;” a return of both the main theme (theme 1.1) and the tonic key. A double return would be more forceful than the return of just *one* of the elements, as in the case of a false recapitulation, for instance.

There is a false recapitulation in the first movement of the Sixth Symphony. In m. 195 the theme 1.1 returns in a grandiose fortissimo passage, but it is not in the tonic (E \flat instead of A). When the true recapitulation begins later in m. 209, it is more climactic because it is in the tonic, and because it is triple-forte.

Webster goes on to write that in the nineteenth century there seemed to be a “general bias against literal repetition,” and this led to a diminished importance of the recapitulation. Composers began omitting one or several of the themes in this section (including the main theme).

First I believe it is necessary to re-examine the original statement of theme 1.1 (from the exposition). In order to help show the difference a climax makes, several comparisons are drawn to the first and fourth movements throughout the following discussion.

Theme 1.1 in the Exposition

Second Movement

There is no introduction to this movement, and theme 1.1 begins immediately in m. 1; it begins *piano* in the first and second violins. A summary of the dynamic shape of the first ten measures was given in Chapter 1 and I will add to that here (see Chapter 1, example 2).

The four-measure theme contains elements that, according to Kurth's theory, comprise a component wave (mm. 1-4). The apex of this wave occurs at the high note (B \flat) on beat 4 of m. 3, where the register span is at its widest (39 semitones--see example 17). This component wave is part of a large-scale intensification toward the climax at m. 13 (see Chapter 1, example 2). The thematic material at the climax is not from theme 1.1, but consists of a descending scalar pattern (see example 18).

Example 17. Second Movement, mm. 1-4

Example 18. Second Movement, mm. 13-14

Flutes and Violins

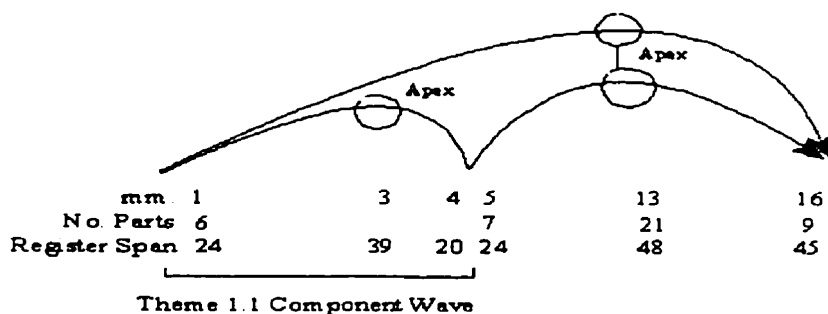
Basses

ff

v

At the climax, however, the dynamic marking has reached fortissimo, the number of parts has increased to twenty-one (from six at the beginning) and the register span is the widest yet at 48 semitones. Kurth's theory would recognize this point of maximum tension as the apex of this developmental wave, corroborated by the fact that a de-intensification takes place over the next three bars (mm. 14-16); the dynamics decrease to piano. the number of parts decreases to ten in m. 15 and then down to timpani only at the beginning of m. 17. Here ends the developmental wave of theme 1.1, and theme 1.2 begins in m. 17. Figure 13 plots this development.

Figure 18. Theme 1.1, Developmental Wave, mm. 1-16



First Movement

In the first movement, the theme is first stated in mm. 3-6 but that statement is only a component of a large-scale intensification toward a grand, climactic restatement of the theme at m. 25. Unlike the second movement, then, the climax of the first theme-group *does* employ theme 1.1 (see Chapter 1, example 6).

Fourth Movement

The beginning of the fourth movement unfolds in still another way. There is an introduction to the exposition (see this chapter, example 1), and theme 1.1 is not presented immediately. Instead, the introduction provides the intensification of the first developmental wave, where in movements 1 and 2 the intensification was accomplished in an initial statement of theme 1.1. The apex of this wave occurs at m. 29, when the exposition begins with a climactic first-statement of theme 1.1.

Theme 1.1 in the Recapitulation of the Second Movement

In Chapter 2 I analyzed the passage leading up to the recapitulation. I showed how the end of the development section constituted the end of a developmental wave, which explained why the beginning of the recapitulation is not a climax point but rather the beginning of a new wave.

The restatement of theme 1.1 here is not exactly as it appeared in m. 1. The main difference is that the theme itself is stated by the horns in the recapitulation, whereas originally it was stated by the violins. Also, the oboe counter-melody begins immediately in the recapitulation, whereas in the exposition it entered (in m. 5) four measures after the initial statement of the theme. Finally, the restatement of theme 1.1 has what Kurth's theory refers to as underlying "agitations" that were not part of the original theme. These agitations appear in the string section (see example 19). Example 19 compares the string sections from the first statement of the theme (mm. 1-4) and from the restatement (mm. 93-96). The cellos and basses play the same pitches in both statements, but in mm. 1-4 they play quarter-notes, and in mm. 93-96 they play three triplet eighth-notes per pitch; i.e., more attacks per measure, but the pitches change with the same frequency. Whereas the violas played a simple counter-melody in the initial statement of the theme, in the recapitulation the melody has changed slightly and every note has a tremolo marking. Again, the number of attacks per beat has increased dramatically. The violins' part has undergone the most decoration, however, where in mm. 1-4 they had the main theme, now the theme has been concealed within sextuplet sixteenth-note ornamentation (hidden theme is circled in example 19). This is another way Bruckner has increased the number of attacks per beat. According to Kurth's theory, the "agitations" added in the recapitulation increase tension, suggesting that there is more energy in this section than there was in the beginning; otherwise the recapitulation would be a literal restatement of theme 1.1.

The image displays a musical score for Example 19, Second Movement, measures 1-4. The score is organized into two systems. The upper system consists of three staves: the top staff is in treble clef and features a melodic line with triplets and slurs; the middle staff is in bass clef and provides a harmonic accompaniment; the bottom staff is also in bass clef and contains a complex, rhythmic accompaniment with many notes. The lower system consists of three staves: the top staff is in treble clef and is labeled 'Cellos and Basses'; the middle staff is in bass clef and is labeled 'Viola 1'; the bottom staff is in treble clef and is labeled 'Violins 1&2'. The music is in 4/4 time and D major.

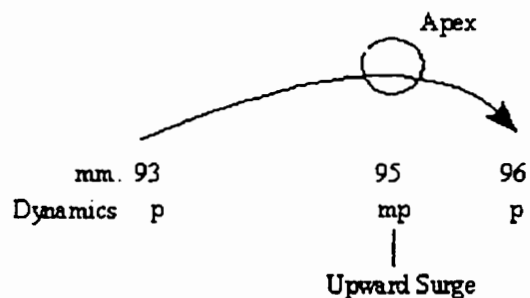
Example 19. Second Movement, mm. 1-4; mm. 93-96

These agitations evoke a “driving will,” an “undercurrent” of “internal tension.”²

Tension builds throughout mm. 93-94 while the oboe plays its counter-melody in contrasting register and timbre to the theme in the horns (see example 20). In Kurthian terms, the energy built up over these two measures causes an “upward surge” in the theme (from c^1 up to b^1) in m. 95. This high point in the melody is the apex, and as tension decreases during the downward arch of the wave the melody descends also (see figure 13).

Example 20. Second Movement, mm. 93-96

Figure 13. Restatement of theme 1.1, component wave, mm. 93-96



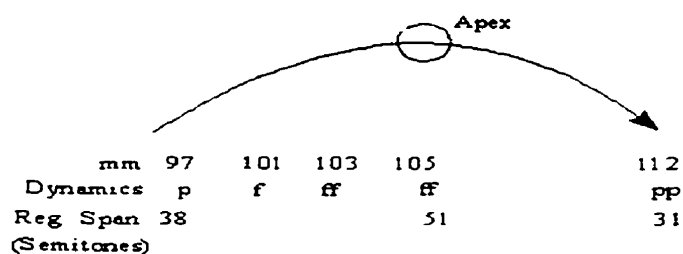
²Rothfarb, *Selected Writings*, 163. Kurth used these terms to describe the agitations at the beginning of the first movement (see Chapter 1, example 11), and I believe the same effect is created here.

The Rest of the Recapitulation -- Developmental Waves

Expansion of Theme 1.1

Another component wave begins as Bruckner expands and develops theme 1.1 more than he did in either the exposition or development sections (see figure 14).

Figure 14. Component Wave, mm. 97-112



Horns 1 and 2, through mm. 97-104, now restate (at first in full, then gradually more truncated forms) the oboe's counter-melody from mm. 5-7 (and mm. 93-95). The flutes, oboes and clarinets restate the first half of theme 1.1 (mm. 1-2 beat 3--see example 19) in rising sequence from mm. 97-100 (see example 21). The rising sequential motion continues from mm. 101-104, but the thematic material is reduced to the opening two-note motive of theme 1.1.

Example 21. Second Movement, mm. 97-104

Sequential progression in
woodwind melody
mm. 97-104

Woodwinds

Basses

Rising Sequence

Meanwhile, dynamics increase from piano in m. 97, to forte in m. 101, finally to fortissimo in m. 103. In m. 105 is the apex of this component wave, as the melodic high point coincides with the widest register span of the passage (beat 3) thus far (51 semitones).³ The downward arch of this wave takes place over the next seven measures (to m. 112). The melody in the high woodwinds changes to descending quarter-note, then half-note scalar motion (reminiscent of similar material in mm. 13-14) from mm. 106-112. There is a diminuendo to piano in m. 108, and then pianissimo in m. 111. Also there is a subtraction of voices in m. 108, as the trumpets, trombones, and tubas drop out (leaving voices) and again in m. 111, as the horns exit (leaving 13 voices; see example 22).

³There is a wider register span two measures later (m. 107--54 semitones), but at this point the melody is descending and there is a general diminuendo. I don't believe Kurth would choose this point for the apex of the wave, because the effect is not as climactic as it is in m. 105.

Example 22. Second Movement, mm. 106-112

Descending melody in
Woodwinds
mm 106-112

Woodwinds

Basses

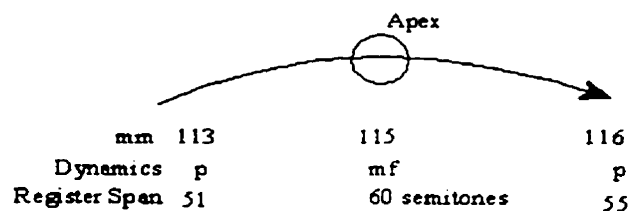
Rhythmic Augmentation

Second Theme-Group

The restatement of the second theme-group in the recapitulation is very similar in dynamic shape to the restatement of the first theme-group. In the chapter I described a four-measure component wave, tracing over sixteen measures the restatement of theme 1.1 (see figure 13), which was followed by another component wave governing an expansion of theme 1.1 over sixteen measures (see figure 14).

In mm. 113-116 there is a restatement of theme 2.1 (from exposition, mm. 25-28). Like the restatement of theme 1.1, this is shaped by a small-scale component wave (see figure 15). The theme (in the first violins) begins piano on a^2 , moves up to f^3 at the apex, then back down to $b\flat^2$ in m. 116. At the melodic high point (m. 115) there is also a register span of 60 semitones (between violin 1 and bass); the widest of this passage. The dynamics increase to mezzo-forte at m. 115, and decrease again to piano by m. 116. This small-scale wave is clearly identifiable since all its constituent musical elements (listed above) have been defined by Kurth as contributors to tension in music.

Figure 15. Restatement of Theme 2.1. Component Wave, mm. 113-116



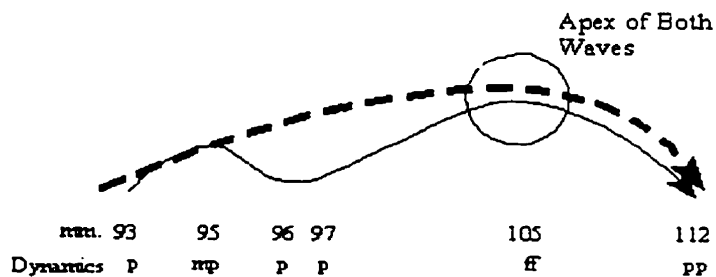
A second component wave forms the next sixteen measures (mm. 117-132). From mm. 117-124 there is an expansion of theme 2.1--two measures longer than its counterpart in the exposition. Mm. 125-128 consist of a restatement of theme 2.2--almost a literal repetition of the original in mm. 37-40. The final four measures are a bridge to the next section. The intensification of this wave can be identified by the increasing dynamics (from piano in m. 117, mezzo-forte in m. 119, forte in m. 123, to fortissimo at m. 125), and addition of parts (from 14 in m. 117, 16 in m. 122, to tutti--22 voices--in m. 125). The apex comes at m. 127, when the built-up energy from the intensification could be said by Kurth to be released at the melodic high-point of the section (the a^3 on beat 3) which is also the point of widest register span (57 semitones). Over the last five measures of this section (mm. 128-132), the descending melodic line in the melody (mm. 128-30), the subtraction of voices (from 19 in m. 128 to 6 in m. 132), and the rhythmic augmentation (from eighth-notes in m. 128 to quarters in m. 131 to half-notes in m. 132), are all evidence of a de-intensification, according to Kurth's theory (see example 23).

Example 23. Second Movement, mm. 128-132

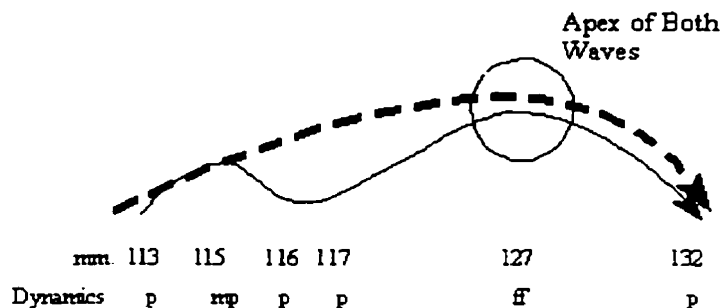
Figure 16a shows the two component waves of the restatement of the second theme-group, and 16b shows the restatement of the first theme group. By this large-scale comparison, one can see the two groups of waves are similar in both dynamic shape and in duration in measures. The dotted-line waves trace the larger-scale developmental waves of each section. Notice that the apexes of the developmental waves coincide with the higher apex of the two component waves.

Figure 16. Developmental Waves

a) Second theme group, restatement



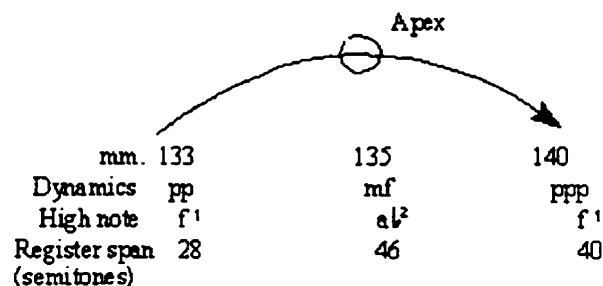
b) First theme group, restatement

**Codetta Material and The End of the Recapitulation**

This last section (mm. 133-156) differs from the previous two in that it contains three component waves instead of two. Thematic material consists of a restatement of the codetta and elements from the third theme-group, and the last eight measures comprise a dominant prolongation that leads into the coda.

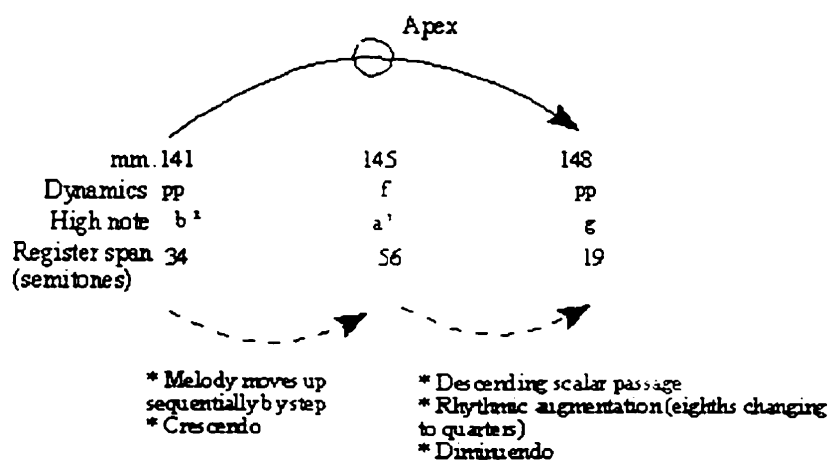
The codetta material is eight measures long (mm. 133-140) and is formed by its own component wave (see figure 17).

Figure 17. Codetta material, mm. 133-140



New thematic material begins at m. 141 that consists of sixteenth-note scalar motion. This might be considered new material or developed from theme 3.1. In any case, these eight measures are governed by the second component wave of this section (see figure 18).

Figure 18. Component wave, mm. 141-148



The final component wave of this section forms the last eight measures of the recapitulation. It begins in m. 149, where a dominant prolongation (on C) also begins (and lasts until the downbeat of the coda, where it resolves to I). The amplitude (height) of this wave is not very high; the intensification and de-intensification are slight (see figure 19). Notice in example 15 that there is a very narrow range of both dynamics and number of voices. Several musical elements actually increase during the downward arch of the wave, such as the melodic high point and register span. However, the slight diminuendo, subtraction of one voice (from 9 to 8 voices), combined with the rhythmic augmentation that takes place in the melody in mm. 155-156, and the authentic cadence at the very end

of the section, are strong indicators of a relaxation of tension. However, Kurth's theory would lead us to believe that there must be some energy left over in order to initiate the coda section, still to come. In fact, Kurth himself might describe the rising melodic line at the end of the downward arch as an "initiatory gesture in the midst of ebbing away."⁴

Figure 19. Dominant Prolongation, component wave, mm. 149-156

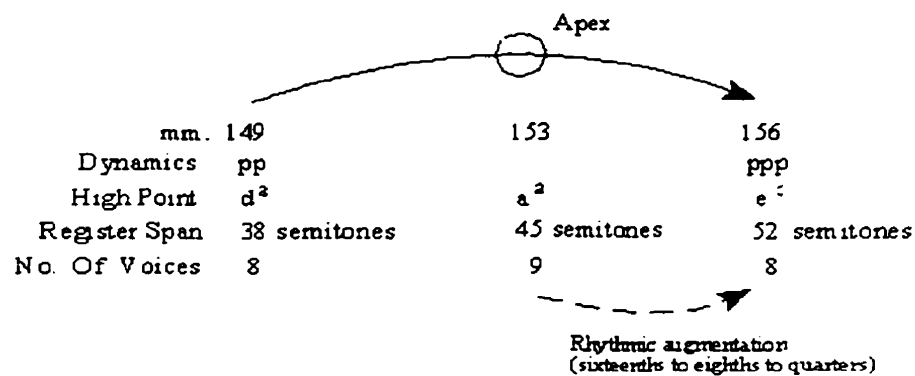
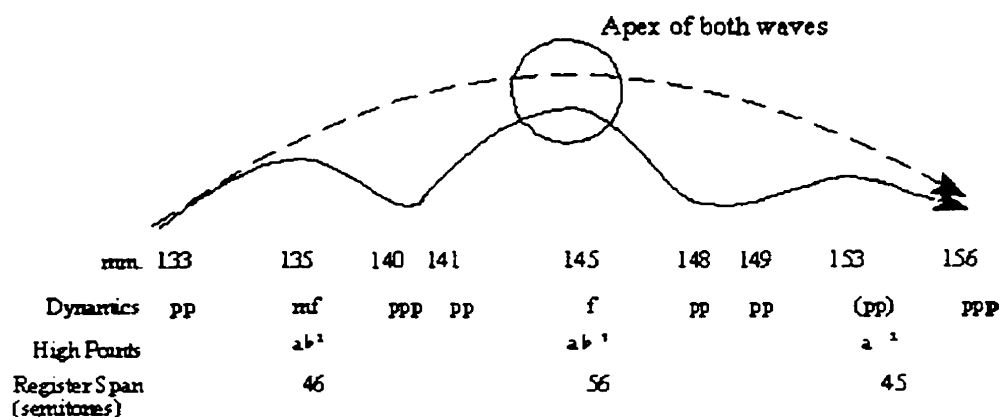


Figure 20 shows the three developmental waves of the recapitulation, along with their component waves.

⁴Rothfarb, *Selected Writings*, 159. Kurth used this phrase to describe the violins' motion in mm. 15-17 of the fourth movement. The violins have a two-note rising motive that seems to create tension although there is a general de-intensification throughout that passage.

Figure 20. Third Developmental Wave, mm. 133-156



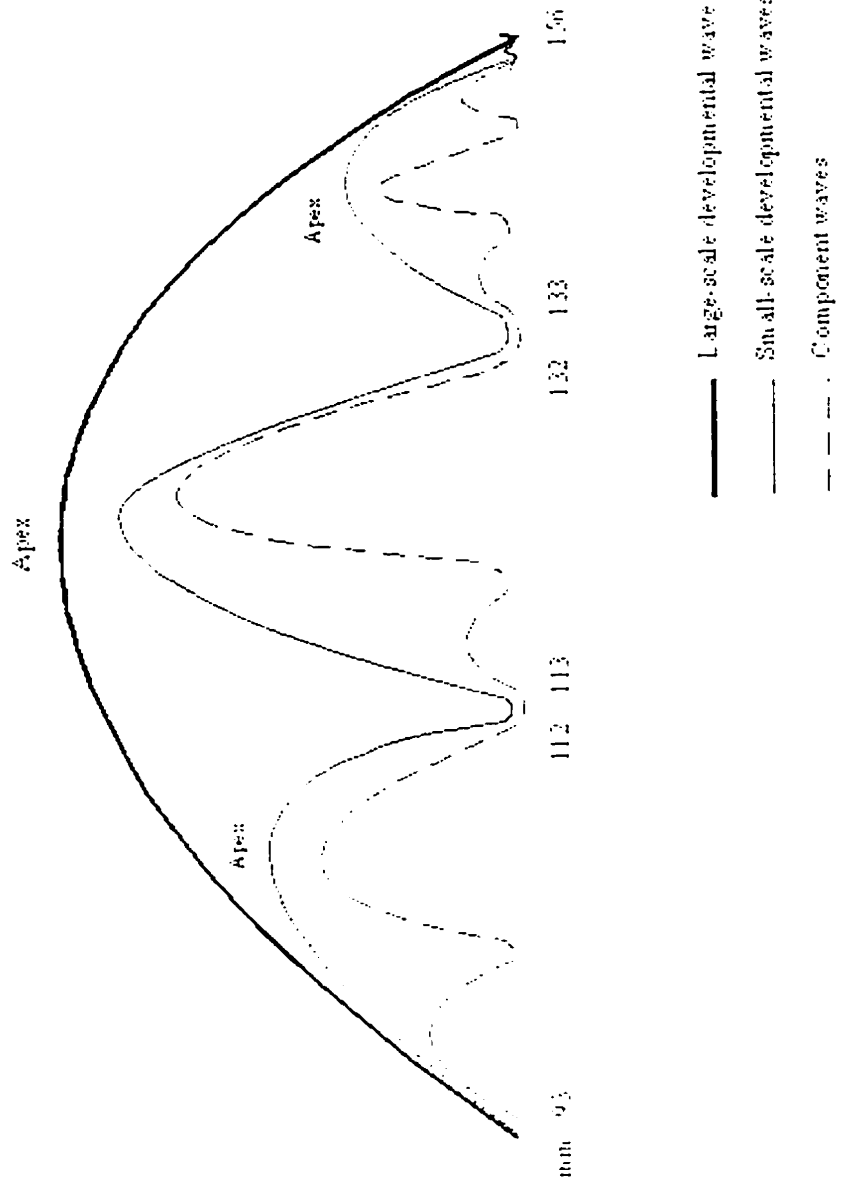
The Whole Recapitulation--Developmental Wave

The purpose of this section was to explore the dynamic process of a recapitulation whose restatement of the main theme is not climactic. I explained that this is the case in the second movement of Bruckner's Sixth Symphony, in contrast to the first and fourth movements where the corresponding moment *is* climactic.

I have diagrammed above the three large-scale developmental waves that shape the dynamic process of this recapitulation section (see figure 20). My final illustration, figure 21, shows how these in turn are component waves of an even larger-scale developmental wave that unites the entire recapitulation. As with figures 16, a-b, and 20, the apex of the developmental wave coincides with the largest apex of the three component waves.

This investigation shows the importance of the “double return” at the beginning of the recapitulation in the second movement, despite its not being a climax point. Subtle differences Bruckner made in the restatement of theme 1.1 (in particular the *agitations*) can make a big difference, if Kurth’s theory is to be believed. The non-climax at the beginning can be seen to contribute on a large-scale to the apex of the developmental wave that shapes the entire recapitulation. This is an excellent illustration of how Kurth’s theory emphasizes the unification of all aspects of a musical work.

Figure 21. Recapitulation, Developmental Wave, mm. 93-156



IV. Melodic “Interruptions” in Dynamic Analysis

Kurth felt that his wave-metaphor allowed “increased sensitivity...to the dynamic role of even ‘apparent trifles’.”¹ By *trifles* Kurth was referring to small-scale waves and “the very tiniest bits of the waves.”² He felt they should be valued because ultimately the large-scale wave-unfoldings reflect what is contained therein. Kurth claimed that “interruptions (Unterbrechung)...[which are] characteristic, unpredictable brief infusions of emptiness increas[e] the tension of...energy lines.”³ These interruptions could be complete silences or sudden *pianos* that interrupt loud passages. In the case of these sudden decreases in dynamic level, Kurth wrote that they “project and maintain the ‘highest tension’ of the climaxes ‘that precede them’.”⁴

Such “interruptions” are present in the Sixth Symphony. Silences occur in the form either of a written out measure(s) of rests, or as a fermata over a bar-line. Sudden *pianos* occur, for example when Bruckner will sometimes abruptly end a fortissimo passage by inserting a soft passage, with no transition between them.

¹Stephen Parkany, *Bruckner and the Vocabulary of Symphonic Formal Process*, (Ph.D. dissertation, University of California (Berkeley), 1989), 118.

²Kurth, *Bruckner*, 279, quoted and translated in Parkany, *Symphonic Formal Process*, 118.

³Parkany, *Symphonic Formal Process*, 119.

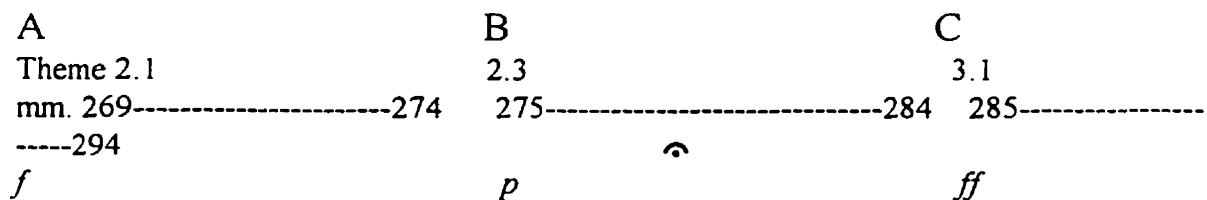
⁴*Ibid.*, 120.

I have said that examples of both these techniques pervade the Sixth Symphony. I chose several of each from the first, second, and fourth movements in order to test Kurth's theory. Interestingly, it seems that Bruckner sometimes used these abrupt pianissimos and/or silences in the music to increase tension, and sometimes to decrease tension. The figures I use show how such "complications" contribute to the dynamic development of each movement.

First Movement

In this movement there is a passage containing both a *pause* (all instruments resting--mm. 280-81) and a sudden *piano* (m. 275). Placing this passage in musical context, it occurs in the midst of the recapitulation (which began at m. 209). The coda begins at m. 309. The pause is in the middle of a restatement of theme 2.3, which is ten measures long (mm. 275-284). These ten measures are in turn situated between a restatement of theme 2.1 (mm. 269-274) and a restatement of theme 3.1 (mm. 285-294). Figure 22 depicts these three passages (which I have named A, B, and C) as they occur in the movement:

Figure 22.



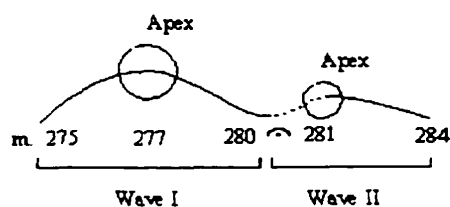
In order to understand better the dynamic function of the fermata, it is necessary to first look at the function of the passage of music that contains it. As can be seen in figure 22, the two bracketing passages are marked forte and fortissimo, respectively, while the middle segment (B) is marked piano. This immediately sets B apart from A and C. Also while both A and C are tutti passages, at B the instrumentation is reduced (see figure 23). The reduction of voices at B also sets it apart from A and C. It is as though the B passage constitutes a “gap” between two similar passages, A and C. Both A and C contain high levels of energy, with their loud dynamic markings and thick instrumental texture (tutti). There is no de-intensification at the end of A, rather the thematic material just ends abruptly in m. 275 when the new material begins. Similarly, at the end of B, there is no intensification into the fortissimo tutti section (C); it just begins abruptly. Since Kurth claims that sudden pianos contribute to intensifications, then somehow the energy at A must be transferred over the “gap” to C.

Figure 23.

m. 275	m. 277	m. 279	m. 281	m. 283
			flute 1	flute 1
	clar.		clar. 1	
	bassn. 1&2			
horn 3&4		violin 1&2		
violin 1&2			viola	viola
	viola		cello	cello
	cello		bass	bass
	bass	bass		

Let us now examine the dynamic components of the gap itself. This ten-measure passage has two sub-sections: the six measures before the fermata and the four measures after the fermata (see figure 24). From the figure it is clear there are two component waves to this *gap*.

Figure 24. Component Waves in the "Gap," mm. 275-284



Wave I

This wave begins with the low level of energy at m. 275 with only the violins and horns 3 & 4. This small amount of tension builds in the next measure, with the rising sequential pattern in the second violins and the rising scalar figure in the firsts. The apex of this component wave comes in the following measure, m. 277, with the addition of parts (from four parts to six--see figure 23 above), change in timbre (see changes in instrumentation in figure 23 above), and increased dynamic marking (*forte*). The de-intensification of this wave takes place over mm. 278-79. The melodic material in the clarinets, violas, and cellos descends over the course of these two bars, and this downward tendency continues in m. 279, along with another change in instrumentation, from 6 voices to 3 (see figure 23).

Wave II

At the end of m. 280 there is the grand pause (fermata over bar-line). However, tension builds during the pause; the sudden silence is unexpected, and the effect is that of something left unresolved. The tension created within the silence of the pause amplifies the amount of energy being transferred from the previous wave, and so when it manifests itself in sound in m. 281, the energy level is higher than just before the fermata. Stephen Parkany, interpreting Kurth, asserts that “‘silences’...promote a more active and ‘heated’ quality of intensification.”⁵ Thus another component wave is created, the upward arch of which occurs in silence (see dotted lines in the figure). After the apex (m. 281), the dynamics decrease from piano to pianissimo (m. 283), and the number of voices decreases from 5 to 4 (also m. 283--see figure 23), completing the downward arch for this small wave.

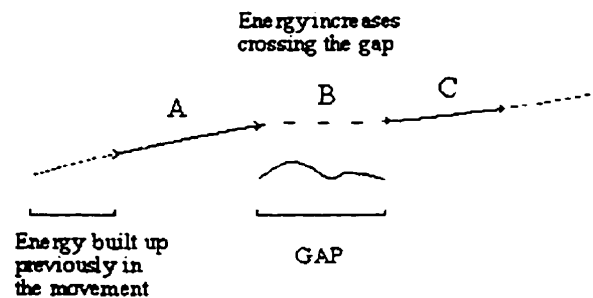
Considering what Kurth has said about elements from the small-scale reflected in the large, we can take what I have deduced about the grand pause and apply it to the entire B section. The entire B section acts as a “pause” between two high-energy sections. The energy from the A section contains enough momentum to reach across the gap into the next high-energy section (C). However, this large-scale pause is unexpected in its abruptness (as was the small-scale pause at m. 280). Tension thus builds on a large scale and increases the amount of energy that is crossing the gap. Therefore, when this energy manifests itself in sound (at C in m. 285) its level is higher than when it left section A (see figure 24a). This can be seen by the louder dynamic (ff) and the wider register

⁵Parkany, *Symphonic Formal Process*, 120.

span at the beginning of section C (see figure 24b).

Figure 10. (a) Dynamic structure of A, B, and C; (b) evidence of dynamic structure

a)



b)

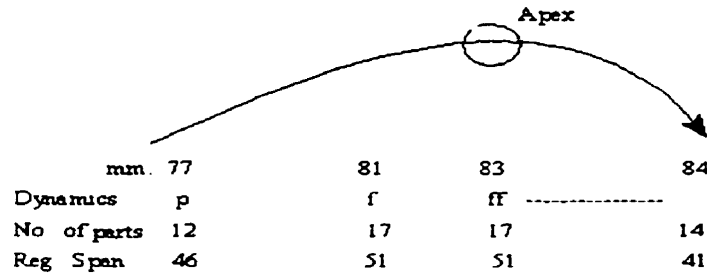
Section	A	C
Dynamics.....	<i>f</i>	<i>ff</i>
Register Span.....	40 semitones	52 semitones
Instrumentation.....	tutti	tutti

Second Movement

In this movement the silences and abrupt pianissimos contribute more to de-intensifications than to intensifications, and thus make the de-intensifications more noticeable than the intensifications. Since the tempo is *Adagio*, possibly the composer used more subtle methods of intensification and more obvious methods of de-intensification in order to create a more solemn effect.

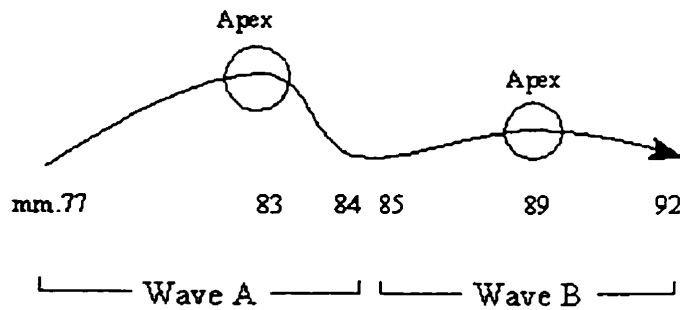
The fortissimo material preceding this section is part of another component wave, also eight bars long (mm. 77-84—see figure 26).

Figure 26. Component Wave, mm. 77-84



Because the first wave (mm. 77-84) is complete, that is, there is a de-intensification after the apex, perhaps the sudden *piano* at the end of m. 84 is not as unexpected as the one discussed in the first movement above. The *piano* comes at the end of a wave (and the start of a new wave) rather than interrupting a wave, as was the case in the first movement (see figure 27).

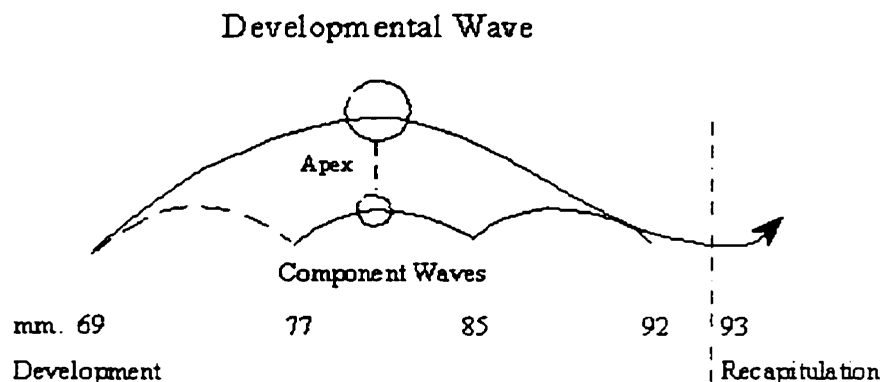
Figure 27.



It must be remembered that these two waves occur at the *end* of the development section. The shape of these waves creates a sense of closure. Although there is a downward arch after the apex of wave A, Kurth would agree probably that a high amount of energy is retained, since several instruments are still playing and the dynamic has not changed from fortissimo. The melody has a descending scalar motion, and three voices are subtracted in m. 84, so Kurth would recognize a downward arch, but one from which not all the energy has abated. Closure is therefore avoided after the first wave, making it a place unfit to begin the recapitulation. Instead Bruckner has added another eight-bar section (and another component wave) to help dissipate the remaining energy from the previous wave.

According to Kurth's theory we can assume that these two component waves are themselves part of a larger-scale *developmental wave* which comprises the entire development section. That being the case, the two component waves at the end of the development section contribute to the downward arch of its developmental wave (see figure 28).

Figure 28. Dynamic structure of development section, mm. 69-92



It would appear, then, that the sudden *piano* in this instance effectuates a de-intensification where, in the first movement, it contributed to an intensification. It is intriguing that one technique can cause two opposite effects, depending on the context.

There is a grand pause (all instruments resting) at the end of the development section just discussed. Rather than a fermata (used in the first movement discussed above), rests are used. The first oboe is the last instrument heard in the development section; it finishes on beat two of m. 92. There are then two beats at the end of the measure where all instruments rest, and the recapitulation begins on the downbeat of the next measure (m. 93).

The last component wave of the development section is diagrammed above (see figure 28) with the de-intensification in mm. 90-92 as described. However, as much as there is a downward arch, there is no definitive cadence in mm. 91 or 92 to resolve the “hanging” oboe note in m. 92 (see example 24). This “unresolved” note, combined with the two-beat pause, amplifies the remaining energy from the development section. This

small-scale intensification connects the return of theme 1.1 smoothly with what came before, and it explains why the recapitulation is not a thundering climax like those of the first and fourth movements. This and other differences between the three movements' recapitulation sections will be discussed below.

Fourth Movement

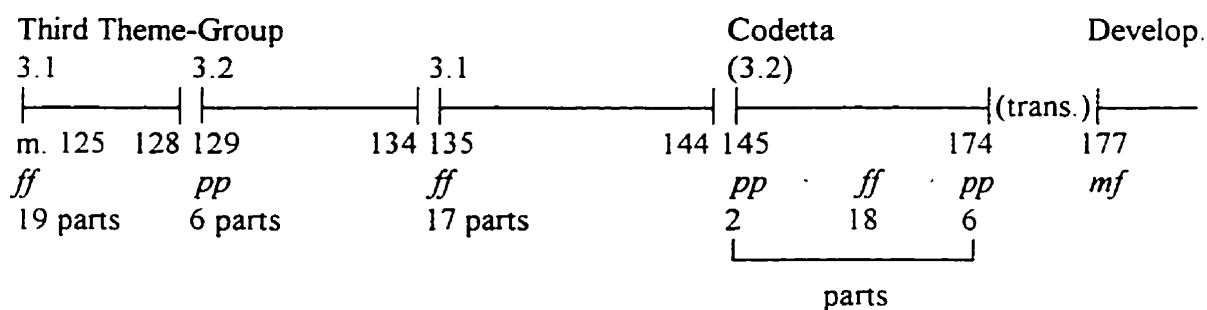
This movement is full of grandiose intensifications and climaxes, and many examples of such “trifles” mentioned above contribute to this grandiosity. Since I examined Kurth’s so-called Brucknerian “interruptions” in a *recapitulation* (first movement) and a *development* (second movement), I chose examples from the *exposition* of the fourth movement to discuss here. However, other passages from the end of the fourth movement have already been discussed (in section I of this chapter): the false climax (fermata pause) at mm. 370-71, and the sudden *pianissimo* in m. 397. It is clear why Stephen Parkany termed these sudden *pianos* and pauses typically “Brucknerian,” since in the Sixth Symphony alone Bruckner used these techniques in several different instances.

As I demonstrated in Chapter 2, the exposition of the fourth movement contains three theme-groups plus a codetta. Within the third theme-group and codetta are two examples of sudden *pianissimos* which I believe are dynamically related: one at m. 129, and the other at m. 145 (the beginning of the codetta).

In the third theme-group are two themes: 3.1 is made up of long notes in a loud, tutti texture, and 3.2 consists of short, dotted notes in a quiet, sparser texture (see Chapter 2, example 14, a-b). The codetta is based on theme 3.2. Immediately one sees the thematic contrast between these two themes, but the fact that Bruckner juxtaposes the fortissimo (3.1) abruptly with the pianissimo (3.2) has dynamic significance as well.

Figure 29 represents the layout of the third theme-group and codetta.

Figure 29. Fourth movement, third theme group, mm. 125-177



As I have shown in the first and second movements above, Bruckner often uses a pianissimo passage as a large-scale pause or *gap* between two fortissimo statements. This is what he has done once again in this section, with the sudden pianissimo at m. 129. The six-measure passage between mm. 129-134, which introduces the dotted figure of theme 3.2 (later used in the codetta), appears to have been inserted almost arbitrarily into theme 3.1, because the latter ends at m. 128 and resumes at m. 135 as though there were no interruption (see example 25). As before, the gap between statements of theme 3.1 serves not only to carry energy from one statement to the next, but also to intensify that energy. As a result, the restatement of theme 3.1 at m. 135 has a higher level of energy than the

original statement at m. 125. This higher level of energy manifests itself by stretching the original four-bar statement (mm. 125-128) to a ten-bar statement (mm. 135-44) with the last six measures in a rising sequence, and theme 3.1 in diminution (see example 26).

Example 25. Fourth movement, mm. 125-138

Theme 3.1
mm. 125-28

Flutes

ff

Basses

Theme 3.2
mm. 129-134
(Theme 3.1 interrupted)

pp

Horns in F

Theme 3.1 resumes
mm. 135-38

ff

Basses

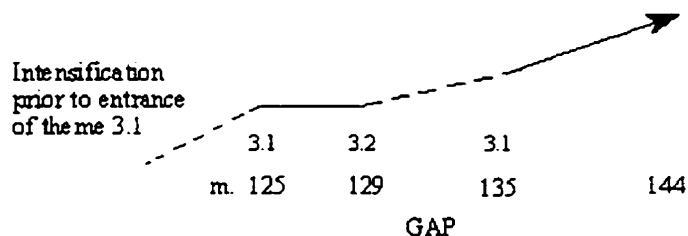
Example 26. Fourth movement, mm. 135-44

Theme 3.1
mm. 135-144

Diminution

Rising Sequence

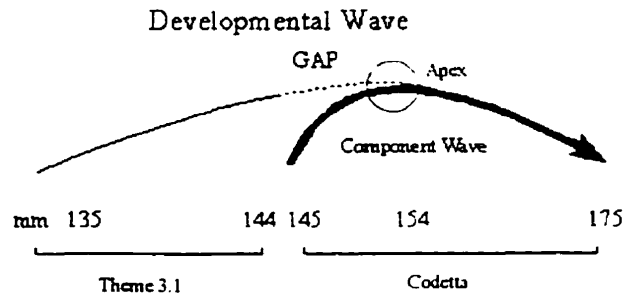
Figure 16. Overall Dynamic Shape of mm. 125-144



The pianissimo-beginning of the codetta at m. 145 is unexpected because it appears to interrupt the end of the third theme-group. However, unlike theme 3.2 above, the codetta is 30 measures long and unfolds in a complete component wave of its own. Its function is different than that of a gap between two high-energy passages. For instance, although the preceding material is fortissimo, the material following the codetta (i.e., the beginning of the development section) is mezzo-forte and sparsely textured. While the entire thirty-bar codetta cannot be likened to a gap the initial sudden pianissimo at the

beginning of the codetta can. In this case the gap links the high energy of the end of the third theme-group with high energy at the the apex of the codetta's component wave (see figure 31). In this way the end of the third theme-group can be seen as part of a larger developmental wave whose apex and downward arch coincide with those of the codetta's component wave.

Figure 17. Dynamic structure, mm. 135-175



The codetta begins with a full measure of cello and bass playing steady quarter-notes, pianissimo. The tension increases in mm. 146-47 as clarinet 1, horns, violins and viola are added, re-introducing the dotted melody from theme 3.2. In mm. 150-51 the dynamic marking increases to piano, at the same time that flutes, oboes and trombones are added (bringing the total number of parts to 17). There is a crescendo through mm. 152-154 to the fortissimo at the end of m. 154. This is the apex of the component wave. There is a diminuendo to piano in mm. 155-158, and in m. 159 the instrumentation is reduced from 17 parts to six; violins 1 and 2, viola divisi, cello and bass. The authentic

cadence in the dominant in mm. 166-167 signals the final relaxation of tension in this wave (there is then a pedal on E through to the beginning of the development at m. 177).

There is a two-measure transition before the beginning of the development but that is part of neither the component wave nor the developmental wave described above. It belongs to the beginning of the next wave.

Summary

Section I

At the beginning of this chapter I demonstrated some dynamic implications of having an introduction to the exposition in a symphonic movement. In the case of this particular introduction, to use Kurth's terms, the introduction serves as a large-scale intensification toward the entrance of theme 1.1, which is an arrival point. According to Kurth's theory, the dynamics, number of parts, register span, and agitation at m. 29, all of which Kurth would recognize as evidence of an apex point, there is a substantial build up of tension during the introduction.

Section II

In the second section of this chapter I attempted to discover, through dynamic analysis, which of three possible choices was the most likely beginning of the coda section of the fourth movement: m. 371, m. 385, and m. 407. I gave the source of the three choices in Chapter 2, the conventional sonata form analysis.

Because the piece ends at m. 415, the dynamic analysis of my three possibilities involved looking at the entire section of music between m. 359 and the end, since I wanted to provide a musical context for each. Rather than examining all three, choosing one as the beginning of the coda, and discarding the others altogether, as I had thought would happen, instead I discovered the important roles all three possibilities play in the dynamic formal process that shapes the end of the fourth movement.

I believe my analysis of mm. 371-415 highlights the hierarchical nature of dynamic waves that Kurth identified. A component wave, like the one that forms mm. 371-384, has large-scale repercussions when it assists in a large-scale intensification. The local apex at m. 407 coincides with the apex of a large-scale, developmental wave for the entire fourth movement.

The fact that the main theme (theme 1.1) from the first movement is restated at this point (m. 407) is also evidence of a hierarchical dynamic process in this piece. It dynamically links the whole symphony together. It suggests that the energy that shaped the beginning of the first movement (specifically its main theme) contributed on a large scale to the upward arch of the symphonic wave that governs the symphony as a whole. For Kurth, therefore, music was not composed of little bits of energy existing, then dying, forming successions of component waves. Rather, music is conceived of as a whole, with the ending dynamically linked to the beginning.

Section III

In the third section of this chapter I investigated how the non-climax at the beginning of the recapitulation in the second movement functions relative to the rest of the recapitulation. I presented several differences between the original statement of theme 1.1 in the second movement and its restatement at the beginning of the recapitulation. For instance, originally it was played by the violins but in the restatement the horns play the theme. I also demonstrated what Kurth would call “agitations” in the restatement that did not exist in the original theme. The oboe counter-melody that originally entered four bars after the theme (in m. 5) is now played at the same time as the theme. All these factors would have suggested to Kurth, that there was more energy shaping this section than shaped the original theme. Therefore there is a higher level of intensification at the beginning of the recapitulation than there was at the beginning of the movement.

I showed in figure 21 how the four-bar restatement of theme 1.1 is shaped by a small-scale component wave that contributes to the upward arches of two developmental waves. The first forms approximately the first third of the recapitulation, and covers the restatement of the first theme-group. The second is the large-scale developmental wave that shapes the entire recapitulation. Figure 21 also demonstrates the hierarchical nature of Kurth’s notion of waves. The recapitulation contains three middle-level developmental waves, each of which has an apex point that coincides with a local-level apex point. Of the three “medium” apexes, the second contained the most tension, so this must serve as the apex of the largest-scale wave.

By connecting apex points of component waves, one can trace the shape of larger waves. Thus, the low points or valleys between component apexes “disappear” at higher levels of analysis. They serve as bridges between points of higher tension, similar to the way the sudden *pianissimos* in Bruckner’s music were seen in to transmit energy across a “gap” in the tension.

Using Kurth’s dynamic theory provides an explanation of why Bruckner made the slight changes that he did in composing the restatement of the main theme at the beginning of the recapitulation. It also suggests the implications of a recapitulation that does not begin climactically. In this case, the climax occurs later in the section, and the restatement of theme 1.1 at the beginning provides the initial intensification towards this goal.

Section IV

Kurth theorized that silences and sudden *pianissimos* contribute to intensifications in music (see footnote 3). I found this statement to contradict his notion of what constitutes an intensification; Kurth identifies a decrease in energy by lessened dynamics, subtraction of parts, and sparser texture; all of which a “silence” exhibits. I tested his theory in the fourth and final section of this chapter by examining numerous examples from movements I, II, and IV, and discovered that these features do often mark increases in tension, but in some circumstances they can also mark decreases in tension.

In the first movement, a pause falls between mm. 280-281 (see figure 22). There are only two voices playing before the pause (violins 1 and 2), in m. 280. The dynamic marking is *pianissimo*, and the widest register span in that measure is seven semitones on the downbeat. Without anything to compare to Kurth's theory suggests this indicates a relatively low amount of tension. In the measure following the fermata, there are five voices (flute 1, clarinet 1, viola, cello, and bass), the dynamic marking is *piano*, and the widest register span is thirty-six semitones, on beat 3 between basses and flute. Compared to m. 280, this measure appears to exhibit a higher degree of tension. Therefore, the intensification from mm. 280-281 must occur during the silence (or "gap") of the fermata.

The sudden *pianissimos* in this work, depending on the circumstance, can denote intensifications *or* de-intensifications. I showed examples of the former in my discussions of the first and fourth movements, and of the latter in my discussion of the second movement. While superficially all three examples might appear to serve the same function--a sudden quiet section seeming to "interrupt" a loud section--a dynamic analysis reveals their individual roles within a larger context. An entire *piano* section interrupting a *forte* section can have local importance in the form of a component dynamic wave, but on a larger scale the component wave disappears and the section is seen as a bridge between two high-energy sections (see figure 10a). Alternatively, a *piano* section interrupting a *forte* section can signal a drastic decrease in tension and does not "disappear" in the context of the larger wave, but rather *contributes* to its downward arch (see figure 27).

CHAPTER 4

CONCLUSIONS

In Chapter 1 I expressed my interest in discovering what Ernst Kurth's theory of dynamic formal process could reveal about a piece of music that conventional formal analysis could not. As is evident in his 1925 work *Bruckner*, Kurth found a vehicle in Anton Bruckner's music through which to express his theory. I therefore chose to examine a symphony by that composer in order to test Kurth's theory. I chose the Sixth Symphony in A major because it lies approximately in the middle of Bruckner's symphonic output and his compositional style had had time to mature. Upon discovering that three of its four movements were written in sonata form (I, II, IV), I decided to focus only on those three movements and not the Scherzo, because they offered the opportunity to compare three ways of treating an important formal paradigm. I could identify each movement's individual idiosyncrasies, and show how Kurth's theory sheds light on the functional relations they evince within an overall dynamic structure.

Chapter 2 is a sonata design analysis of movements I, II, and IV of Symphony No. 6, which I provided in order to familiarize the reader with the thematic, tonal, and cadence structure of the work before delving into the lesser-known realm of dynamic analysis. For the latter I chose four features of the work to study more closely: the introduction to the fourth movement, the coda of the fourth movement, the recapitulation of the second movement, and finally, several silences and sudden *pianos* that occur in all three movements. This investigation comprises Chapter 3.

In the first section of chapter 3 I used Kurth's theory to demonstrate the important function of the introduction to the fourth movement, which serves to prepare the entrance of the first theme group.

In the second section of this chapter I used Kurth's theory to compare three possible locations for the beginning of the coda of the fourth movement: mm. 371, 385, 407. While I did conclude that m. 407 was the best choice, I also discovered the importance of all three moments in the dynamic formal process that shapes the end of the fourth movement.

Thirdly, I examined the recapitulation of the second movement, specifically, the non-climactic beginning and its effect on the rest of the section.

Lastly, I tested Kurth's statement that Bruckner's grand pauses and sudden *pianos* mark increases in tension, which seems to contradict the rest of his theory. Kurth requires *accretions* of musical elements in an intensification; a silence or sudden piano suggests a *decrease* of some kind. Interestingly, the two Brucknerian features do seem to effect intensifications in many circumstances. However, as I also discovered, there are times when a sudden *piano* does create a de-intensification which Kurth does not address.

Musical Unity in Kurth's Theory

In Chapter 1 I discussed philosophical, psychological, and phenomenological aspects of Kurth's theory. Most important is the fact that it is an experience-centred theory; Kurth analyzed music as *heard*. His theory relies on the listener empathizing with the music, sensing the psychic forces at work beneath its surface. Kurth therefore assumes that there is an active interaction between music and the listener.

Conventional formal theory, on the other hand, is an object-centred theory whereby music is treated as a whole object that can be dissected into constituent parts to find patterns amidst complexity. This theory assumes a passive interaction between music and listener. Static musical forms (like sonata form, for instance) are then imposed by the listener onto the music following the experience.

For Kurth, musical form is not a fixed state, but a dynamic process. His concept of music-as-motion is very different from the conventional music-as-object and Kurth, in his theory, attempts to explain both the origin of the dynamic structure of music and the listener's interaction with that structure. In other words, Kurth seeks explanations in the non-observable (psychic energy) for that which is observable (the musical experience; i.e., musical events as he heard them).

Kurth's theory explains the function of music-structural parts to each other and to the whole in a hierarchical system of dynamic waves. Kurth attached equal importance to both small and large musical events, from the tiniest motive, for example, to the main theme, to the entire recapitulation section. He believed every small-scale dynamic event

contributes to a larger-scale one, and elements of the smallest-scale dynamic waves are reflected in larger waves.¹ A three-note ascending developmental motive may seem almost insignificant in the context of a 400-measure piece but, for Kurth that motive signifies an increase (however slight) in the psychic energy that he claims forms all music.² An increase in energy causes tension, or intensification that leads toward the next musical event. Ultimately, a small motivic event contributes to the dynamic shape of the entire movement by adding its small share of tension.

Kurth's Theory in Other Applications

Kurth's theory evolved in scope over time from a narrow focus to one of far wider implications. He began with a study of Baroque counterpoint in *Grundlagen* (1917), and modified his ideas in order to discuss harmonic writing in the nineteenth century (*Romantische Harmonik*, 1920). *Bruckner* (1925) represents the specific application of a comprehensive theory to one composer's symphonic music, with further refinements and modifications of the theory presented therein.

In analyzing the nine numbered symphonies of Bruckner, Kurth probably formulated many of his ideas on the workings of music according to idiosyncratically Brucknerian features (such as the pauses and sudden *pianos* I discussed in Chapter 3). Although he drew on his own experience of music in generating his theory, I believe his

¹See Chapter 1, figure 1; Chapter 3, figures 1, 27.

²See Chapter 1, example 1.

intention was to generalize musical experience through the psychological content of his writings. In my opinion, therefore, Kurth's theory need not be restricted to analyses of Bruckner's symphonic music. Because of its background in harmony and counterpoint, conceivably the theory is applicable to the study of Western art music from any period.

Kurth's theory could also be useful to performers and conductors struggling to capture the essence of a work. Knowing the dynamic structure of the piece could help reveal new insights in interpretation.

The theory may also be applicable to music of non-Western, folk or popular cultures, but several extensions of the theory would be required to include, for instance, non-tonal harmonies or electronic music. It might be difficult to retain the authenticity of Kurth's theory in trying to address these issues. However, as Kurth's ideas grew out of a movement in Germany toward better music education for the common people, perhaps it would not be losing sight of the original purpose of the theory to make these extensions.

Kurth's ideas were strongly influenced by his experiences teaching at Wickersdorf and the University of Bern. Perhaps another application of his theory lies in the field of music education. The notion of experience-based learning is still valid today; such a system of music education makes art music more accessible to those with little musical training than does studying a score, and can instill an appreciation for that music.

A Future for Kurth's Theory: Further Research

In the latter half of this century a movement away from philosophical and psychological musings toward a more scientific, verifiable approach to music theory has left Kurth's theory behind. Tackling Kurth's descriptive, metaphorical prose is a daunting task, although excellent translations and interpretations of selected passages have surfaced in recent years.³ Kurth's own expositions of his theory tend to be general and incomplete. He only hints at definitions and criteria necessary for practical application of his theory. In order to undertake a satisfactory, systematic analysis of Bruckner's symphony, then, I had to formulate many of these definitions and criteria myself, using his texts (in translation) as a point of departure.

Kurth's theory raises important questions in the realm of perception and cognition, both about musical phenomena and about non-observables. I believe several aspects of Kurth's theory could be scientifically tested through a series of psychological perceptual-cognitive studies: Kurth's criteria for intensification, for instance (increased dynamics, addition of voices, and so on). Would the average listener cite the same musical elements as having affected their musical experience? Does the listener really experience the

³Most notable is Lee Rothfarb's *Ernst Kurth: Selected Writings* (1991) which contains passages from *Grundlagen* (1917), *Romantische Harmonik* (1920), and *Bruckner* (1925), as well as annotations and an extensive introduction (see bibliography). Rothfarb's Master's thesis, *Ernst Kurth's The Requirements for a Theory of Harmony: An annotated Translation with an Introductory Essay*, (University of Hartford, 1979), provides a complete translation of *Die Voraussetzungen* (1913). Robert Bailey also translated a significant passage from *Romantische Harmonik* in *Richard Wagner: Prelude and Transfiguration from "Tristan And Isolde"* (1985--see bibliography).

intensification of musical energy across a gap of silence? Do musicians hear music differently from non-musicians, or do they just have different methods of describing what they hear?

Studying Kurth's dynamic theory raises the age-old question: What is music? Is it an object or an experience? Is it in the composer's mind? Is it the written score on a page? Is it sound vibrations in the air? For Kurth, it was invisible, uncontrollable energy which manifested itself as music to human perception.

Much of Kurth's theory is based on non-observables, and cannot be verified scientifically. To admit that psychic energy governs our experience of music requires a leap of faith on the part of modern-day theorists. Could the essence of Kurth's theory be extracted from its esoteric connotations and still retain its validity? The work of Rothfarb and others has re-introduced Kurth's writings to contemporary music scholars, and has gone a long way toward a comprehensive, critical examination of his theory. To support the present study a more extensive test of Kurth's theory needs to be done. Such a study should include analyses of more of Bruckner's music, as well as the music of other repertoires, and would require an extensive reformulation of his theory to supply missing terms, premises, criteria, and definitions for exceptions to the norm that Kurth does not address.

Recent scholarship suggests that Kurth and his theories are receiving more serious attention today than ever before. The field of music theory has grown over the past century, to the point where theorists now look back at their own history to discover the evolution of their ideas. Having established itself as a bonafide discipline, there is more

room in the field of music theory now for cross-disciplinary studies such as music and psychology, and for the presentation of lesser-known theories of the past.

Whether one believes in the existence of “psychic energy” creating music, Kurth’s theory is compelling nonetheless. As much as it makes music more accessible to the amateur through description and metaphor, it offers an alternative, if not a companion, to the analytical scholar.

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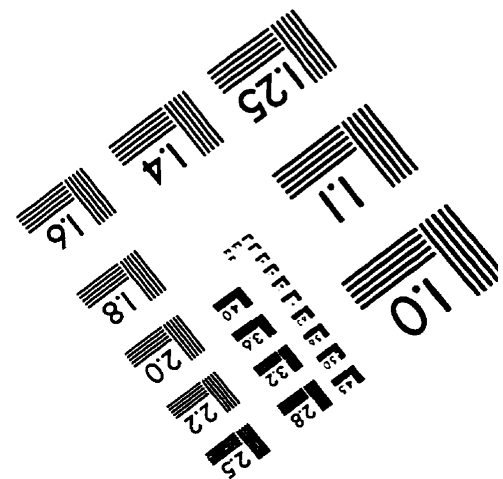
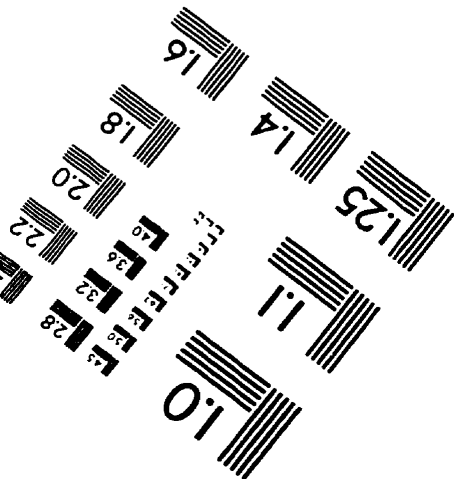
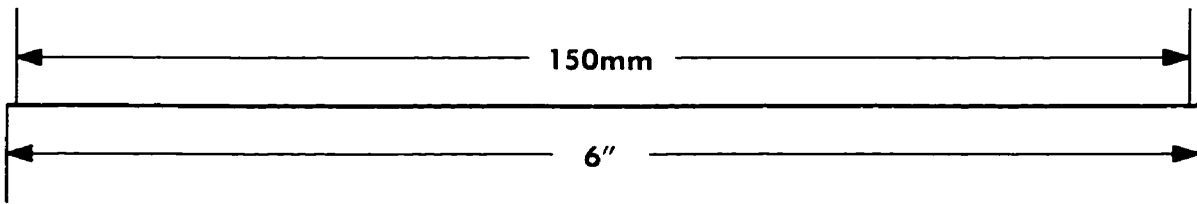
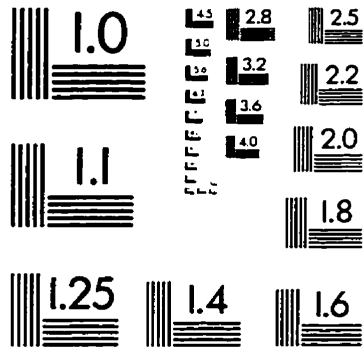
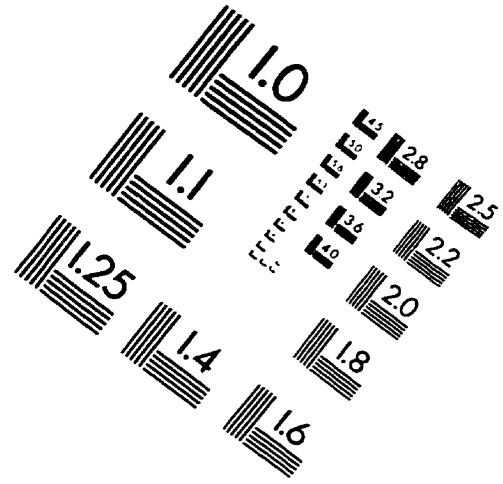
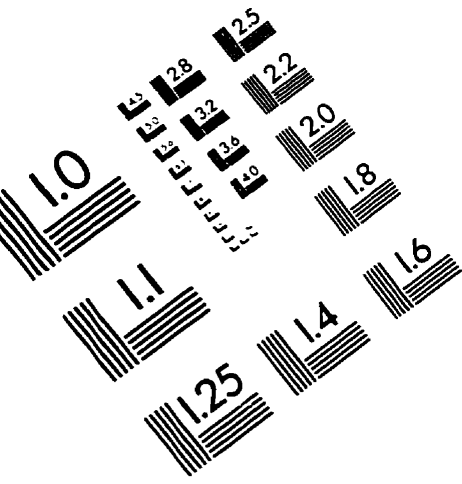
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