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BEETHOVEN'S PIANO AND VIOLIN SONATA NO.10, OPUS.96; Beethoven's Emotional Condition as Reflected in a Style Analysis of the Work

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BEETHOVEN'S PIANO AND VIOLIN SONATA NO.10, OPUS.96;
Beethoven's Emotional Condition as Reflected in a Style Analysis of the Work

by

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Dedication

In special thanks to my mother, for all her love and support.

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Preface

The ten violin and piano sonatas of Ludwig Van Beethoven (1770-1827), which were composed through the end of his middle period, reveal a variety of styles. The first sonata in D major, Op.12 (1797) is in a dynamic and articulate classical style. His Third Sonata in A minor, Op.23 (1800) is in a passionate *sturm und drang* mood. While the next one, Sonata Op.24 in F major (1800), known as the "Spring" Sonata, greatly contrasts with these earlier sonatas in its extreme lyricism, but includes contrasting *sturm und drang* elements. His famous "Kreutzer" Sonata, Op.47 (1802), synthesizes all of these qualities in a context that may be considered the most *sturm und drang* of the sonatas. Through its contrasting minor and major keys, sudden dynamic contrast's, motivic rhythms and sublime lyricism of its slow variation movement. The latter is followed by a playful yet intensively directed Finale in a Scherzo like style.

The Sonata in G major, Opus.96, stands at the end of this cycle of sonatas and may be seen in certain respects as the epitome and perhaps crowning achievement in its pervasively sublime mood. Its form is in four movements, clearly the established classical structure by this time. The first movement is in a full sonata form, the second in a slow, highly expressive sonata form also. The third movement is a Scherzo-Trio-Scherzo and the fourth presented as a set of fast variations.

An analysis of the work reveals more than just the internal structure of this special work. The projection of its opening arch-shaped gesture into increasingly larger arch shapes occurs throughout the entire work. While this reveals the special unifying feature of this particular composition, it also reveals the means by which the various parameters

(melodic, harmonic, textural, phrasal, rhythmic, figural), in a highly idiomatic style for both violin and piano, form an expressive work of great individuality.

At the same time, from Beethoven's individual handling of these parameters and their interactions, we learn much about his other works of contrasting character. The awareness of the particular mood of this work that stems from the quality of the opening gesture is the goal of this treatise and its analysis. The goal itself goes beyond the purely musical expression to tell us something about Beethoven's life around the time of its composition.

The inspiration to understand and write about this Beethoven Sonata came to me as recently as my last recital for my DMA degree. I was so struck by the lyricism and beauty of this work and the depth of its message that I was inevitably drawn to write about it. In particular, I found the opening gesture at once, mysterious and magnetic.

Because of the detailed analytical scrutiny of this work and the decision to present illustrations only in the form of diagrammatic tables rather than individual musical excerpts, it is advisable to keep a copy of the entire score in hand. It was difficult to decide on using one fragment or another of this work as an excerpt, since the work is of such breadth and continuity. Thus it seemed more appropriate to have the entire score in front of the reader at all times.

BEETHOVEN'S PIANO AND VIOLIN SONATA NO.10, OPUS.96
Beethoven's Emotional Condition as Reflected in a Style Analysis of the Work

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The intention of this treatise is to explore meaning (emotional and intellectual) in Beethoven's Violin Sonata No.10. Implications within the historical context, relation to other Beethoven works of the period, and analytical scrutiny will be explored in order to determine the psychological and emotional impact. These findings should serve as a guide to technical issues and interpretations.

The mood of Beethoven's Sonata Op.96 is one of sublime elation, not passion. This is significant given that we know how Beethoven's emotions are reflected in his music in general. As one scholar wrote, instead of urgent dramatic expostulation, here the mood is one of gentle lyricism, with but glimpses of the profound depths of experiences and conquest of pain that had made possible the achievement of this serenity. In 1817, the Leipzig *Allgemeine Musikalische Zeitung* published a review of the first

edition of the Op.96, stating that it almost seems as if this great master has reverted, in his most recent works, more to the melodic and cheerful. This more relaxed stylistic character marked the transition to his late works of 1817. The Op.96 represents a turning point in Beethoven's oeuvre. None of his earlier violin sonatas, not even the String Quartet in F minor, Op.95 ("Serioso"), shows that abstract, philosophical quality which from now on characterizes all of Beethoven's output in his last period. These very telling but somewhat vague and general characterizations of the sonata's style and mood lead us to investigate those technical features of the work that illustrate them. The initial gesture itself sets the mood for the whole work.

The following is a projected chapter outline: 1) Beethoven's life and development in his middle period; 2) Structure and design; 3) Melodic contour/direction and structural use of dynamics; 4) Harmonic tonal conflicts; 5) Contrapuntal techniques within the classical style; and 7) Principles in Contemporary works (e.g. Symphony Nos. 7 and 8). In conclusion, these findings will be generalized in connection with some of Beethoven's other sonatas of the period.

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CHAPTER 1: HISTORICAL BACKGROUND

NAPOLEON'S WAR IN VIENNA

In 1812, at the age of 42, Ludwig van Beethoven composed his tenth and final piano and violin sonata, Op.96. This work was created at a time of great change in Beethoven's life. In the external events around his life, he was just recovering from the invasion and occupation of Vienna by Napoleon. Furthermore, at this time, he was suffering from several personal afflictions. He was becoming deaf and his inability to enter into happy personal relationships-loomed even larger. His deafness was intensifying his isolation and hardening the barriers that hindered social communication. He began to compose in an increasingly individual musical style. Beethoven's private Tagebuch (diary) of 1812-1818 covered the most vivid testimony of his deepening isolation in these years. He was becoming estranged from many of his former close friends and was now confiding his innermost feelings to the pages of this diary. In Beethoven's life around June 1812, Napoleon's invasion of Russia ended in disaster. The miserable French army began to retreat from Moscow from October 1812 to January 1813.

THE EFFECT OF THE WAR ON BEETHOVEN

We also find that since 1809, Beethoven's life changed because of the bombing in that year. Beethoven's suffering had made him a changed man, as witnessed by Bettina Brentano, a friend of Goethe. He became isolated from his male friends and female companions from 1810-1812. His composition proliferation declined somewhat, coming

to a comparative standstill in 1813. Beginning with the occupation in Vienna of 1810, Beethoven's patrons nevertheless returned to give him renewed support (e.g. Archduke Rudolph and Count Razumovsky). The benefit is seen in the production of his two symphony's No.7 and No.8 in 1811 and 1812. This was at about the time when he began the final affair of his life. He referred to her as the 'immortal beloved,' as confirmed by Maynard Solomon's documented study that proved she was Antonie Brentano, the cousin of Bettina Brentano. It is striking that the Op.96 G major sonata came just at this time of political and personal change.

BEETHOVEN'S CLOSEST PATRON DURING 1812

The first performance of Beethoven's Op.96 piano and violin sonata took place in Vienna at the palace of Prince Lobkowitz on December 29, 1812. The famous violinist, Pierre Rode (1774-1830) was thirty-eight years old and performed with the thirty-four year old pianist Archduke Rudolph. Archduke Rudolph (1788-1831) was Beethoven's pupil of composition and piano from 1804.[1] Beethoven dedicated this sonata to Archduke Rudolph, the same to whom he dedicated his Op.81a piano sonata 'Les adieux' and Op.97 Archduke Trio and his. These works were composed two years earlier (i.e. 1809-10 and 1810-11) during the invasion and occupation of Vienna. Archduke Rudolph's role in Beethoven's life, as patron, friend and pupil, was of the highest importance.[2] As Paul Bekker tells us,

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[1] Max Rostal. *Beethoven: The Sonatas for Piano and Violin: Thoughts on their Interpretation.* New York: Da Capo Press, 1985, p.164.
[2] Max Rostal, p.164

> Rudolph appreciated his teacher's greatness of soul to the full and proved a sincere and disinterested friend. He was the only one of Beethoven's acquaintances whose enthusiastic devotion sometimes bordered on flattery. The hearty and unrestrained intercourse between the two men made Beethoven's subordinate position easier to bear; he expressed his sense of gratitude and dependence at times in striking fashion, knowing that the Archduke was incapable of misunderstanding him or of hurting his proper pride. It was probably the Archduke's idea to keep Beethoven in Vienna by the grant of a pension, and he was certainly the only one of the three patrons who continued to pay the full sum guaranteed till Beethoven's death. [3]

Given the depth and delicacy of this sonata, Op.96, it is not surprising that Beethoven would have made this dedication, since Rudolph, like Beethoven, suffered from the invasion of Austria and thus must have had great emotional affinity with him. Evidence for this particular personal attachment is seen in the emotional pain that Beethoven went through at this time, as Napoleon's army forced the entire imperial court to flee from Vienna. Archduke Rudolph was among the court members and fled at that time as well.[4] As a personal reminiscence of this close patron, the movements of the Op.81a piano sonata are titled "farewell", "absence" and "return", hence the subtitle 'Les Adieux, l'absence et le retour'. It must have been a great joy when the court and his

[3] Paul Bekker. Beethoven: Translated and Adapted from the German by M.M. Bozman. New York: Dutton, 1927, p.26-27.

[4] The siege and renewed occupation of Vienna by Napoleon's armies intervened, beginning in May 1809. Those who could, including the entire nobility, their entourages and many public officials-fled the capital.

patron, Rudolph, could return to Vienna when the truce went into effect and it was not long afterwards that this profound sonata for violin and piano was written for Rode and dedicated to Archduke Rudolph.

THE TRUCE AND RETURN OF BEETHOVEN'S PATRONS

Due to the absence of his patrons from Vienna during the war (beginning in May, l809), Beethoven was left without patronage, penniless and starving in the hot cellar where his brother Caspar Carl and his wife lived with their two-year-old son, Karl. Here, he used pillows to cover his ears to protect whatever hearing he had left from the bombings. Beethoven wrote to Breitkopf & Hartel in July 1812.

> We have been suffering misery in a most concentrated form. Let me tell you that since May 4 I have produced very little coherent work, at most a fragment here and there. The whole course of events has in my case affected both body and soul. I cannot yet give myself up to the enjoyment of country life, which is so indispensable to me… What a destructive, disorderly life I see and hear around me, nothing but drums, cannons and human misery in every form. [5]

BEETHOVEN'S IMMORTAL BELOVED

All of these circumstances, especially the end of the war and Archduke Rudolph's return, would lend insight into the sublime significance of the Op.96 sonata. Written in 1812, it suggests multiple associations of an intimate nature. In addition to his feeling of

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Vienna gradually returned to relative normalcy; on October 14 Austria concluded a peace treaty with

friendship for Archduke Rudolph, we know from the recent work of Maynard Solomon that it was precisely at this time that Beethoven had an affair with his immortal beloved, Antonie Brentano (1780-1869). [6] Antonie lived in Vienna from the fall of 1809 to the fall of 1812. It was through her sister-in-law Bettina Brentano, who visited Beethoven in May1810, that Antonie met Beethoven. A close friendship emerged between Antonie and Beethoven during the next two years.

Antonie Brentano was a married woman who's fixed marriage led her to despair. [7] She was quite sheltered in her earlier years under the protection of her father. On July 23, 1798, she was betrothed to a much older man, Franz Brentano. Franz, a Frankfurt merchant, asked her father upon his visit to Vienna in late 1796 if he could court her. Her father consented but left the final decision to Antonie. Latter, she contradicted this freedom of decision by stating that the marriage had been fixed without her consent, though she accommodated her father's wishes. She reluctantly departed from Vienna to move to Frankfurt shortly after the wedding. In her memoirs, Antonie tells us how her "true love" wept "bitter tears" as he (Beethoven) watched from a distance her marriage take place.

During his affair with Antonie, Beethoven continually consoled her through his music. Her reciprocal love for him induced her to offer herself to Beethoven after she would leave her husband. Solomon conveys the circumstances of this relationship very well and provides insight into the emotional context

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France. See Maynard Solomon, *Beethoven*. New York: Schirmer Books, 1977, p.149-150.
[5] Marion Scott. *Beethoven*. London: J.M. Dent & Sons, 1974, p.66.
[6] Solomon, 1977, p.170
[7] Solomon, 1977, pg.177

> He consoled her during her long periods of illness and 'or melancholy, and he was perhaps wont to proclaim to her the hopelessness of their situation. But if our reconstruction is correct, on July 3, 1812, in Prague, or shortly before, Antonie may well have asserted that the conditions of her existence were not an insuperable bar to their union, and advised Beethoven that she was willing to leave here husband and remain in Vienna, rather than return to Frankfurt Beethoven attempted to soothe her by expressing his positive feelings, and by holding out a glimmer of hope that her goal was not an unattainable one. In the first part of the letter he wrote 'Why this deep sorrow when necessity speaks-can our love exist except through sacrifices, through not demanding everything. [8]

The means by which Beethoven often consoled her, as told to us by Solomon, was through his music. He often played for her when she was confined to her bed in depression and this personal contact continued until June 1812.

> Beethoven was a frequent visitor at the Birkenstock mansion in which the Brentano's lived; she and her family, in turn, visited him at his lodgings. He consoled Frau Brentano [and Antonie] with improvisations on the piano when she was ill and bedridden. It is certain that they were in personal contact in Vienna as late as June 26, 1812, when Beethoven wrote out an affectionate dedicatory

[8] Solomon, 1977, p.184-185

message on his easy Piano Trio in B-flat, Wo0 39, to Antonie's ten-year-old daughter Maximiliane, and dated it in his own hand. [9]

There is no evidence that directly links the sonata (Op.96) itself with Beethoven's affair with Antonie Brentano and its happy resolution. However, just the chronology of events of Beethoven's life and that of the composition, which followed these events, can tell us much about Beethoven's mood at this time. The intention of this discussion is to try to correlate by means of speculation, the mood of the sonata with the more relaxed period after the affair. That is to say, the sonata could not have been written in a vacuum. It must somehow serve as a reflection of the outpouring of his psychological and emotional condition of the time. It is not surprising, then, that this relationship would have had some bearing on the tender emotional context that we find in this sonata. We know that following the affair, Beethoven was to have a congenial relationship with both Antonie and Franz. Indeed he must have felt a great relief that he did not take Antonie away from Franz. From this we should progress to some internal aspect of mood that characterizes the sonata.

To reiterate, the sonata Op.96 was composed and performed in December of 1812, either during or shortly after he ended his relationship with Antonie. During July to September, 1812, after the relationship had ended, Beethoven had a reunion with Antonie and her husband Franz in Karlsbad and Franzensbad, and as Solomon points out.

[9] Solomon, 1977, p.170

… the trio managed to pass through the crisis into a new stage of their relationship. Passion had sublimated into being exalted friendship. Beethoven was visibly elated during these months, as evidenced by his correspondence and his productivity. That the close of the affair had a delayed traumatic effect on him will be seen from the events of later 1812 and 1813. [10]

[10] Solomon, 1977, p.182

CHAPTER 2: FIRST MOVEMENT *(Allegro Moderato)*

MOOD OF THE SONATA

The mood of the sonata is definitely not one of passion but of sublime elation. This is significant given that we know how Beethoven's specific emotions always seem to be reflected in his music that he was writing at the time. "As one writer wrote, instead of urgent dramatic expostulation, here the mood is one of gentle lyricism, with but glimpses of the profound depths of experiences and conquest of pain that had made possible the achievement of this serenity."[11] "In 1817, the Leipzig Allgemeine Musikalische Zeitung published a review of the first edition of the Op.96 stated that, it almost seems as if this great master has reverted, in his most recent works, more to the melodic and…cheerful. It is pleasant and never does it scorn the agreeable. This more relaxed stylistic character marked the transition to his 1817 late works."[12] "Op.96 represents a kind of turning point in Beethoven's oeuvre (the works of a composer). None of his earlier violin sonatas and not even the String Quartet in F minor, Op.95 (which preceded it), shows that abstract, philosophical quality which from now on characterizes all of Beethoven's output and is generally called his last period."[13]

These very telling but somewhat vague and general characterizations of the sonata's style and mood lead us to investigate more specifically those technical features

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[11] Solomon 1977, p.214, quotes from Sidney Finkelstein, notes to the Szigeti-Arrau recording, (Vanguard VRS 1109/12)
[12] Staehelin, p.?
[13] Rostal, p.163

of the work which have illustrated them. The initial gesture itself, which sets the mood for the whole work, is very different from let us say the gestures of the famous motives that open the Fifth and Ninth symphonies or for that matter, many of Beethoven's other works, especially those that directly precede the sonata. The concise motive that is so well known in the opening measures of the fifth symphony is in a sense symmetrically opposed to that of the Op.96 sonata. The motive of the symphony is intensely driven or directed. In its abruptness it is open ended due to its ambiguous harmonic implications (is it in C minor or E^b major?). Rhythmically, it is unrelenting and dynamic, and expansive proportionally (two measures followed by three, with a fermata). The motive of the sonata is just the opposite. It is a closed structure, gently rising and falling to the same note with which it began (B-E-D-B). Harmonically, it is entirely stable and unambiguous. This closed structure through its little arch shape turns back on itself and its affective intentions further contribute to its peaceful quality. While this is enough to establish a mood very different from that of the fifth symphony (completed in 1808) or works like the even more dynamic Serioso quartet (1810), both works associated with the period of Napoleons final invasion, the quite different pastoral mood of the Op.96 sonata does not end with the gentle opening gesture. Indeed, that gesture in a sense becomes the work. All of the essential aspects of the motive are projected into the various structural levels of the work. In other words, the arch shape and its closed structure is ever present, given the subsidiary, generally delicate affective markings and embellishing figurations. It is inevitable that the mood of the opening gesture will permeate the entire sonata. It may further be said that in this sonata, there exists an "intimacy of dialogue we have not

yet encountered, and understatement in conveying the message, a certain indecision in formulating answers - these are new aspects of the sonata."[14]

INITIAL PROJECTION OF THE ARCH SHAPE

These general mood qualities are the basis for the following more in-depth analytical discussions while such moods seem to transcend the possibility for explanation in moods, they can nevertheless provide greater insight into this stage of Beethoven's life and thoughts.

Beethoven emerged at the culmination of the classical era or end of the 18th century, an era in which we find a move towards structuralization. In other words, large-scale structures are built from smaller phrases. This differs from the generative process of the Baroque 'fortspinnung'. As part of classical structuralization, there is a tendency in the eighteenth century towards balance and symmetry.

By the early nineteenth century this paradigm was well established. Beethoven would build the classical structure on this inherent balance and symmetry, but would modify it for expressive purposes. Hence we find elongations or abridgements (i.e. shortenings) of phrases and periods that form unique, structured patterns. Thus we find subtle manipulations of the underlying structural concept.

The initial arch shaped four-note gesture of the first period begins in the violin (m.1). The piano repeats the gesture (m.2 with upbeat) this time an octave lower. The violin returns (antecedent 2, m.3 with upbeat) to repeat the gesture, except this time it ends (m.4) on a dominant seventh chord to give us two measures. This establishes the

[14] Thomas Scherman, ed. *The Beethoven Companion*. New York: Doubleday, 1972, p.691

classical antecedent symmetrical four measure phrase structure of one plus one plus two measures (1+1+2). However this suggests a pair of antecedents (mm.1-2 and 3-4) because of the half cadence in measure four. Next, the violin begins to extend the gesture, ending on I^6 (m.6), to provide continuity into the first period, consequent phrase. Balance in terms of segments is not quite established here because of the antecedent (two plus two measure) plus consequent (two measures) altogether. While we have balance on the local phrase level based on three symmetrical two measure units (i.e. 2+2/+2) (mm.1-6), the larger period structure (i.e. 4+4) is not symmetrical. As we will see, Beethoven develops the period structure after this in such a way as to compensate for this lack of period symmetry (Table 1).

IMMINENT DOUBLE PERIOD SYMMETRY

At the beginning of the second period (m.7 with upbeat) Beethoven begins to repeat the first period except this time in reverse instrumental order, that is in invertible counterpoint. This reversal further suggests classical balance on a higher (i.e. period) level. The piano begins the second period, first antecedent (m.7 w. upbeat) by repeating the opening violin gesture. The violin (m.8 with upbeat) repeats the earlier (m.2, with upbeat) piano gesture. The second antecedent (m.9 with upbeat) now begins in the piano and, as before (mm.3-4), continues for two measures. The piano's F-natural (m.9) transposes the second antecedent to the subdominant key of C major (m.10) where it begins the arpeggiated two measure consequent phrase. However, the need for a larger symmetrical balance of eight measures plus eight measures is implicit in the two measure extension (mm.13-14), plus two measure expansion (mm.15-16), plus three measure

closing (mm.17-19), of the arpeggiating second period consequent phrase structure. This extension plus period structure expansion (mm.13-16) is articulated by the entry of the piano left hand (m.13, with upbeat). This is extended now, not to two more measures (mm.13-14), to produce a four measure consequent as might be expected in balancing the period structure symmetrically (mm.11-14), but actually expands the structure all the way to measure sixteen to thwart the symmetry of the second period. Following this is a three-measure closing segment (mm.17-19) that brings the double period to an end. (Table 1)

SYMMETRIC PHRASE AND PERIOD BALANCING

Thus the symmetrical implication on both the phrasal level (i.e. 8 measures instead of actual 6) and double period level (i.e. 8+8 measures instead of actual 6+8) is attempted by the extension of the second period, consequent (mm.15-16). This extension (mm.15-16) symmetrically compensates for the shorter two-measure consequent of the first period. However, this extension continues (mm.17-19) and overshoots its mark beyond a larger sixteen measure double period symmetrical balance. The result is a kind of tension that is already prepared by the initial one plus one plus two antecedent (mm.1-2) based on a short motif (m.1). This suggests a process of expansion from the very beginning. Thus, while the balanced symmetrical classical phrase and period structure is imminent another level of structure appears to be emerging, a structure, which appears to work in connection with the basic gestural idea (i.e. Antecedent: [1+1]+[2]). (Table 1)

In the first movement, second period consequent phrase (m.11, with upbeat), the melodic structure does not come to a closing cadence after a symmetrical, half period,

four measures (i.e. mm.11-14) but instead is extended by five measures to measure nineteen. The mere size of this extension creates instability by disrupting the overall implied symmetry of the double period structure (i.e. 8+8 measures, that is, the actual 6+10). (Table 1)

TEXTURAL BUILD UP

Another level of increasing activity is induced by textural build up. From the opening of the first period antecedent (mm.1-4), two registral levels are apparent in the alternating violin (upper) and piano (lower) gestures. Yet another level at a higher register is suggested in the opening first period consequent arpeggiation of the solo violin (mm.5-6). After the second period antecedent invertible counterpoint, the second period consequent (piano-mm.11-17) is an upward registral expansion of the previous first period consequent (Table 3). This is compounded (mm.10-11) by the simultaneous arpeggiations of piano (an added second layer) and violin, primarily in thirds. Then concomitant with the second period consequent compounded arpeggiations, yet a third layer of arpeggiation is added (piano left, m.13 with upbeat). (Table 1)

The arch shape of the first movement opening motivic gesture (m.1) is projected into the larger structure (i.e. mm.1-6). When the first period antecedent -antecedent-consequent is put together with the second period antecedent-antecedent-consequent, a large melodic arch shape is formed (Table 2). For example, the violins highest pitched note E (m.1) rises up a seventh to D (m.5) and then returns down to E, now in the piano (m.7, second period). This appears to be an interval projection of the basic motivic gesture (m.1) that rises and descends a fourth.

MOTION AGAINST GRAVITY

The ascending melodic motion (mm.10-17, Table 3) of the second period, consequent creates tension in the motion against gravity. The piano's right hand begins (m.10) on E, the anchoring third degree of the C-major arpeggiation. Even though the three different E (mm.10-11, rising two octaves) have an analogous function to the three different D (mm.4-5, rising two octaves), in terms of the apex of each arch gesture in the first period, each tone are at the peak of the two consequent phrases. The D did not create a sense of anchor because its' dominant function pointed to its tonic, G. Also, both notes D and G (m.4) begin the arpeggiated extension. The E, whole-step above D, contributes to the sense of overall extension and expansion in the figuration. From measure 10, the piano figuration rises two octaves to E (m.11), up a tone to $F^{\#}$ (m.15) and (after an appoggiatura) up a semitone to G (m.17). This rise from D through E and $F^{\#}$ to G, (mm.4-17) is an overall extension upwards against gravity. The rising and falling microscopic figuration of the original gesture is now greatly expanded within the classical structure. Measures 17-19, a further cadential extension descends the scale in both instruments to complement the initial rise and, therefore, establish the larger arch shape. This expands the initial gesture. (Table 3)

The first movement opening double period (mm.1-19) shows increasing tension between the respective consequent phrases by means of harmonic change (C major, m.10ff). The complete double period (mm.1-19) is in the key of G major. Harmonically, while the first consequent (m.4, beat three to m.6) is built stably around the tonic plus dominant of G, the second consequent (m.10, beat three to m.16) replaces the G major harmonies with a shift (m.10) to the subdominant key, (i.e. C major). The extension of

the subdominant (i.e. C major, mm.10-14) makes it unstable tonally and figuratively. The main point is that the structure of these harmonic changes contributes to the still larger arch shape. (Table 4)

The opening melodic arch-shape gesture of the violin, (mm.1-3, Table 2) gives emphasis to the repeating major third degree, B. The violin antecedent phrase falls (m.4, Table 3) to the dominant tone of D and in measure five rises two octaves. Harmonic tension between the violin and piano is created in (m.4, Table 4) because the violin's melodic D is the root of the piano's V^2 chord of G while in (m.5) the violin's D (the apex of the arpeggio) is the fifth of the piano's tonic. The outer voices (m.9) of tones C in the violin and A in the piano become passing tones of a $V^{6/5}$ chord that modulates into the subdominant key of C major (m.10). The new key of C (mm.10-14) has now weakened the opening key of G major because the tonic G has been reinterpreted as a dominant of the subdominant. This gives less stability to the tonal structure. The key of G major returns with a vii^6 (mm.15-16), a V^9 (mm.17-18) and I^6 (m.19-Table 4).

What happens at the cadential extension (mm.17-19, Table 4) is the fuller cadential use of the dominant ninth chord (i.e.V^9) over two measures in both the violin and piano. Subtle harmonic change (mm.17-18) from previous measures (mm.15-16), that is, the fuller V^9 (mm.17-18) beyond the previous vii chord (mm.15-16), contributes to the strength of the periodic structure.

The transition begins (mm.20-29) with the use of secondary dominants that lead back several times to the G tonic (i.e. mm.22 and 24, Table 4). Only when we get to measures 33-40 do we get the modulating V of V (I.e. V of D) which prepares for the new key of D

major (m.41, second theme). The preceding measure (m.32) further emphasizes the modulation with the vii^{7}/V of V.

NEW LEVEL OF COMPLEXITY IN RHYTHM

In correspondence with this normal transitional instability, we get a series of overlapping or eliding (slurred over) phrase segments, which introduce a new level of complexity in the rhythm. The piano begins the transition (m.20, Table 5) in three measure phrases unambiguously on one level (i.e. not overlapping) until m.28. The violin coincides with these triple groupings (mm.23-25) until its entry at m.28. At this point (m.27, Table 5) the three measure groupings begin to overlap. For instance the piano's right hand figuration (mm.26-28) is now symmetrically contradicted by the eighth-note figure of the piano left-hand (m.27). This piano left hand figure (m.27) together with the following violin eighth's to dotted (mm.28-29) rhythm form a three measure group (mm.27-29) which begins on the second measure of the previous three measure group (mm.26-28) in the piano right hand. The three measure group (mm.26-28) plus overlapping three measure group (mm.27-29) covers altogether a four-measure double phrase structure. In other words, the overlapping of three plus three implies the presence of a composite two plus two between the piano right hand (mm.26-27) and violin (mm. 28-29,Table 5).

GREATER CONDENSATION OF ENERGY THROUGH PHRASE ELISIONS

These interactions and intersections of overlapping three and four measure phrases create great condensation of energy by the phrasal elisions. This continues in the

piano left-hand (m.29, Table 5) against the dotted figure of the violin. This (m.29) is the same overlapping relationship between eight's and dotted figure that occurred two measures earlier (m.27) and, as at that point, this eighth note figure (m.29) begins a new three-measure group (mm.29-31). This time however (mm.29-31), the duple and triple phrase ambiguity is unambiguously joined by a repeat (m.32) of the dotted figure (m.31) to give us a complete four-measure symmetrical phrase structure (mm.29-32). However, the rhythmic energy is supported by this extra measure (m.32, Table 5), especially in terms of the harmonic modulation, in which we get the vii7/V of D major.

RHYTHMIC GROUPS AND PATTERNS FOR EXPANSION

Once again an expansion occurs (mm.33-40) that takes us to the second theme (m.41) or significant focal point. (Table 7-8). The way this expansion occurs is that the two measure eighth note groupings (mm.31-32, piano left-hand and m.32, doubled by violin, Table 6) against the dotted figures (mm.31-32, piano right-hand, Table 6) seems to be rounded out rhythmically by the short–long figure of the violin (m.33, Table 6). At the same time, newly compounded elisions enter into the picture. Against the short-long rhythm of the violin (m.33, Table 6), the piano's left hand repeating eighth note octave A's (mm.33-36, Table 6) intensifies the motion by lack of resolution to its tonic D for the next several measures. This creates further harmonic expansion. In support of this harmonic expansion (mm.33-36, Table 6), another three-measure rhythmic pattern of triplet-triplet-short/long (mm.33-35, Table 7) is added in the upper layer of the piano and violin. The triplet figure is stated twice (m.33, piano and m.34, violin, Table 7) and the short-long figure ounce (m.35, violin, Table 7). This begins its own pattern of elision

(mm.33-35) for instance, not only does the relationship between triplets and eighths (m.33, piano right and left hand) support the ongoing conflict of duple (mm.33-34) and triple (mm.33-35) phrases but in this case (m.33) symmetrically.

We also have conflict of duple and triple phrase lengths in the measured figurations themselves. At measure 33, Table 7, the triplet figure of the piano begins a three-measure rhythmic group (triplet/piano, triplet/violin, short-long/violin) that is overlapped in its third measure (m.35, piano) by the repeat of the triplet figure. This intern begins an ambiguous succession. If we follow the triplet figure from the piano (m.35) to the violin (mm.36-37), we have a three-measure group (mm.35-37). Immediate duple conflict is created by the extension of the three-measure group last note (m.37, violin) into the next measure (m.38, violin) to give us four instead of three measures. This is analogous to the extension (m.32, Table 5) in the right hand of the piano. Then triplets continue for two measures (mm.39-40) into theme 2.

The previous rhythmic figure eight's against dotted, (mm.20-32, Table 5) now (m.33) continues beyond the three and four measure phrase proportions that we have been dealing with. The whole conflict of three versus four measure groups is now projected into a more complexed set of rhythmic relations (mm.33-37, Table 8). We now get the short/long and triplet rhythms in two alternate measures (piano right, mm.34 and 36, Table 8). Intercalated with these two measures are three alternate measures (mm.33, 35, 37) based on a contrasting figure of short-longs and triplets in counterpoint with eighths. In the latter figure (mm.33, 35, 37, piano right and left, Table 8) we have a complex rhythmic relationship comprised of two eighths (mm.33-37 piano-left) against three

triplet notes. Thus from measures 33-37, we have this alternating scheme of two contrasting figures as shown in Table 8.

Based on two motivic figures (i.e. eighth's and dotted), we get phrase structure that develops in juxtapositions and overlaps of three and two-measure groupings. (e.g. mm.26-28, 29-31 overlap mm.26-27, 28-29). All of these increasing duple versus triple phrase lengths are basic to the emerging intensity. This begins with a simple relationship of the rhythmic figures. From measure 20-25, (Table 5), we have two sets of the three-measure grouping (mm.20-22, 23-25) each based on two measures of eighth note followed by one measure of dotted figure. These are supported and duplicated in all the layers (mm.23-25 - piano, right-hand and violin). After that (mm.26-32, Table 5) we begin to get non-synchronization of phrases that leads to a change of proportion from three to four (mm.26-28, 29-32). This contributes to a heightening activity that supports the basic concept of the very opening gesture.

The latter interpretation based on two plus two measures (mm.33-34, 35-36, Table 7) reveals a radical change in the triple/duple conflict. This change to duple proportion (mm.33-34, 35-36) is stabilized in the last four measures of the transition (mm.37-40, closing transition) by the flow of the rhythmic material exclusively into the triplet figuration. This prepares us for theme 2, (m.41). The sonata form's second theme (m.41, Table 9) generally stabilizes the transition conflict.

PHRASAL SUPER STRUCTURES AND STRUCTURAL ELISIONS

A super structure in relationship to groupings of three measure phrases or three note gestures, can be found as early as the second period (m.7). The first theme, second

period antecedent (m.7 piano -RH, m.8 violin and mm.9-10 piano –RH, Table 1) reflects three statements of the basic gesture over four measures. The first theme, second period consequent (i.e. piano-RH, mm.11-12, 13-14, and 15-16, Table 1) reflects three groups of two measures, each with the violin high note of C. One more group of three measures (i.e. the closing first theme, second period, consequent, mm.17-19, Table 1) follows this. The super structure creates another three groups of three measures at the beginning of the transition (mm.20-22, mm.23-25, and mm. 26-28, Table 5).

As we have seen, the very opening activity up to the second theme increases through changing proportional phrase lengths (i.e. Tables 5, 7, 8). This was part of the projection of the arch-shape (Tables 1, 2, 3) inherent in the opening motive (m.1). The overall movement up to the second theme (mm.1-40) seems to be a large-scale projection of this local arch-shape idea. In a different mood, we find the same process of expanding proportions in Beethoven's fifth symphony. The consequent phrase of the fifth symphony's first period moves upward against gravity as it is expanded in length to break the symmetry and then fall rapidly just before the second period. The classical antecedent and consequent phrase structure is greatly expanded in the second period.

THE SECOND THEME 'S STRUCTURE IN SONATA-ALLEGRO FORM STABILIZES THE TRANSITION CONFLICT USING RHYTHM

The seemingly new dynamic dotted figure (long-short-long) of the second theme (i.e. 8^{th} note, 16^{th} rest, 16^{th} note, 1/2 note, m.41, Table 9) has already been foreshadowed in the dotted rhythm of the transition (mm.22, 25, 27, 29, 31, 32- Table 5). The significance of this reference to the second theme rhythm in the earlier transition is that the dotted

rhythm is now in the stronger metrical position. While this relationship is fairly evident, we can perhaps trace the dotted rhythm figure of the second theme back to the beginning of the work (mm.1-2). The opening gesture (mm.1-2) contains long-short-short-long which of course is much smoother rhythm but nevertheless can be seen as containing the seeds for the development to the second theme (m.41ff, Table 9). In other words, an overall organic process occurs on this rhythmic level as well as others, such as contour arch shape, increasing complexity of phrases and period structures, overlapping of groups three and four and on the normal harmonic instability as we move to the second theme.

The eighth and triplet notes of the transition (mm.33-37, Table 7, 8) are replaced by the triplet figure (mm38-40, closing transition) that leads into the second theme (m.41). Now however (m.41, Table 9), the triplets are exclusively in counterpoint with the dotted figure rather than in alternate linear succession. After the first six measures (mm.41-46), both the triplets and original eighth's, now in counterpoint, linearly extend the theme (mm.47-48, Table 9)

This linear succession (mm.47-48) now extends the first six measures of dotted figure by two measures to produce a symmetrical eight-measure period (mm.41-48, Table 9). This recalls the original play with phrase structure of the first theme (mm.1-16, Table 1) in which the first period was entirely six measures and the implied balance to create eight measures came only with the two-measure extension (mm.15-16).

At the next higher level of structure of the Sonata Allegro form, the second theme plays an important stabilizing role. Not only have we arrived at the new key of D major but also the symmetry of phrases and period structure is well established. The second theme in the piano right hand (m.41, Table 9) joins a series of two measure units to give

us six plus two measures of the first eight measure period. This is repeated in invertible counterpoint (mm.49-56, Table 11) in a parallel structure of an eight-measure extension that elongates this first eight measure statement of the second theme. This structurally added further extension of two measures (mm.57-58), appears even more so as an extension because of the 'ritard' (m.48, Table 10 and mm.57-58, Table 11). The reason for this extension is not readily apparent. This will clarify itself in the analysis of the following phrase and period structures.

Our comparison so far, of the second theme with the first, points to a number of similarities in structure and detail. The basic gesture of the first measure (Table 3) was a small arch shape, which as we saw was projected into the larger structure of the first theme group. We find an analogy to this process in the second theme as well (Table 10). Aside from the more decisive dotted figure articulation the shape of the larger second theme also points to an arch shape ascending and descending element, with precisely the same succession contour of peaks, that is D and E. (Table 10 and 3)

A further structural parallel can be observed in the arch shaped double period of the second theme (mm.1-19, Table 3). The two notes D (m.5) and E (m.11) are the peaks of the corresponding consequent phrases of the first period. They are related by proportional expansion of the consequent phrases (m.5, violin and m.11, piano). However in the extension of the first theme, second consequent (mm.15-17, Table 3), the latter peak (E, m.11) rises further to $F^{\#}$ (m.15) and then G (m17). This ascent of peaks (I.e. D, E, $F^{\#}$, and G) that is initiated by D to E can be traced back to the first two phrases (mm.1-7) where E of the initial gesture (m.1, Table 2) rises a seventh to D in the consequent.

In the second theme, we have a structural reference to the same primary peaks, D and E. The D articulates the first ascent of two measures (mm.41-42, Table 10) and the E articulates the apex of the second ascent (mm.45-46), this entire ascent (mm.43-46) taking place in four measures. This is followed by the descending phase of the arch (mm.47-48, Table 10). Unlike the first theme, in which the extension continues to the higher $F^{\#}$ and G peaks, this second theme is locked in exclusively to only D and the E. This seems to correspond with the perfectly symmetrical period structure of 2+2+4 measures before the theme repeats at measure 49. The extension in the second period of the second theme (mm.57-58, Table 11) is entirely descending so the entire theme structure does not exceed the D and E peaks.

Toward the end of the second theme which cadences in B^{b} major (m.59), Beethoven continues with several figurations. The triplet figuration in the piano right (mm.59-62, Table 13) and the overlapping with the violin (mm.63-65, Table 13) is based on microscopic occurrences of the short arch gesture of measure one. At that point (m.63ff, Table 13), the piano right-hand trill figure already foreshadows the stepwise rise of the beginning of the development (m.96). However, we now get a series of rising half steps from F to $F^{\#}$ (mm.65-66), and more quickly through G, G# and A (mm.66-67) to trill on A (mm.67-71). The trill on A is repeated for a length of time with 'sfz' (mm.68-70, Table 13), then further ascends from $A^{\#}$ to B (mm.71-72) where at the apex (m.72) we get the arch gesture B, D, B followed by descending motivic statements (mm.72-75, Table 13).

To the Beginning of the Development: CONCLUSION

In conclusion, all of Beethoven's fluidity of structure makes this movement more continuous. The classical-style of contrasting elements is now made fluid by expansion of gesture and interplay of duple and triple groupings. Ultimately, this fluidity now transforms Beethoven's classicism into romanticism.

Development: MORE INTACT CONTINUOUS TEXTURE

The development section (m.96ff) creates a more intact continuous texture than the second theme. As we had moved into the second theme, our antiphonal figures between violin and piano-RH (m.33ff, Table 7 and 8) on the one hand break up the texture into contrasting figural segments. At the same time there is certain continuity in the antiphonal figuration, but not in terms of instrumental timbres. For instance the short-long figure (mm.33-37, Table 8) appears in succession without break in the sectional unfolding of alternating instrumental timbres. Some suggestion of continuity even in timbre begins to show itself in the larger cadential passage leading into the second theme (mm.33-40, Table 4).

The second theme itself (m.41ff) shows more figural continuity in each individual timbre (mm.41-47, Table 9). The dotted figure of the second theme (m.41, Table 9) is nothing but a variant of the preceding short-long figure of the transition (m.33, Table 7 and 8) now presented as dotted eight plus sixteenth followed by a half note instead of simply a quarter and half note. Following the second theme's first statement (mm.41-48, Table 10), we get invertible counterpoint (mm.49-58, Table 11). Timbral continuity

asserts itself more prominently in the sequence of old and new figures in the rest of the exposition.

The development section (mm.96ff, Table 14) further expands the length of this figural continuity. The short-long figure of the earlier transition (mm.33ff, Table 7,8) which is reversed to long-short (m.71ff, Table 13) now is transferred from the violin, (mm.96-97, Table 14) to the piano-RH (mm.99-102, Table 14). The triplet figure is incessantly unfolded in the piano-LH with some support in the violin (mm.98-102, Table 14). One thing that supports the piano-LH triplets (m.98ff) is the repeated, on the beat F. This creates a greater harmonic continuity. The development (m.96ff) now joins the long-short figure from the end of the second theme (m.71ff, Table 13) with the modified basic gesture of the work that begins the closing idea (i.e. m.1 is modified at m.85, w/upbeat, Table 15). The significance of this new combination (i.e. long-short m.71, joined with modified basic opening gesture, mm.96-103, Table 14 and 15) is that the basic gesture now functions as a cadential figure (mm.102-103, Table 14). It also becomes an antecedent figure (mm.104-105, Table 14) for the modified repeat of the phrase. In other words it takes on a dual consequent (mm.102-103) and antecedent role (mm.104-105) in the phrase structure of the development (phrase 1, mm.96-103 and phrase 2, mm.104-116, Table 14).

This pair of reversed phrase functions is part of a larger set of reversals in these phrase structures of the development. When the basic gesture is a consequent (mm.102-103, Table 14), it follows the long-short form of the other figure (mm.96-101, Table 14). When it appears, then, as antecedent (m.104ff), the other figure gives the illusion of reversal to short long because of the slurred pairs of notes. This is confirmed by the

separation of the slurred figures by rest in alternation with violin playing the same figures (Table 14). These suggested reinterpretations of reversed functions of the gesture and the other figure is compounded by a reinterpretation of the gesture rhythm itself. The original gesture is a quarter, eighth, eighth, quarter, whereas the gesture in this section (mm.104ff, Table 14) is eighth, eighth, quarter, quarter. Thus the developmental process of the basic material from the exposition is based on rhythmic reinterpretations. Shifting keys reinforce this developmental process.

Following the ending of the exposition in D major the dominant key (m.93ff), the second ending, takes us through a sequence of fifth-related areas (i.e. m.95-G, m.96-c, m.97-F, m.98-b^b, Table 14 and 16). After a change of mode (i.e. B^b minor, mm.98-103 to B^b major, mm.104-109), several distant modulation are suggested. However the F-pedal (mm.98-110, piano-LH, Table 14 and 16) bass note of the dominant and second inversion of the B^b minor tonic maintains the sense of dominant through the whole passage. The E in the bass (m.111, Table 14 and 16) suggests the dominant of A but becomes a tonic by measure 117, (i.e. arrival at the tri-tone of the initial B^b minor that begins the development). With all of these chromatic voice-leading changes, the passage is actually unified into the sustained pedals in the bass, (F -m.98ff, E -mm.111-119, Table 14 and 16). At measure 105, the F dominant of B^b reveals itself as a dominant seventh chord by the addition of E^b in the triplets. However this F dominant seventh chord (m.105) plays, in retrospect of the move to the E pedal (m.111ff, Table 14 and 16), which locally resolves to the A minor tonic in $I^{6/4}$ position (m.112, Table 16), the role of the augmented-6^{th} chord, $FACD^{\#}$, (enharmonic spelling of $FACE^b$ m.105, Table 16) in the new key of a minor. Thus, the entire progression represents a move between two keys a

half step apart (B^b and A) linked by the double function of the augmented sixth chord. This paradoxically unifies a chromatic progression suggested by the inner voice leading (Table 16). Thus the entire opening of the development section is tonally unified by the dual function of the pivotal F-dominant seventh/augmented sixth chord.

What is striking is that in the development's second period (m.105ff, Table 14) the short-long pattern reasserts itself tied over the bar-line, (i.e. in a different metric position, m.105ff, Table 14). Thus we see on all levels, this development attempts to establish a broader, more lyrical center of the movement. One thing that supports this is the repeated F in the triplets (mm.98-110, piano left-hand, Table 14 and 16) to provide greater harmonic continuity. The harmony begins to change (m.111, Table 16) and while the triplet continues now within the bass, the short-long figure is once again broken up (I.e. over the bar-line) in the right-hand of the piano and violin (mm.109ff, Table 14)

The closing section of the exposition (mm.85 w/up beat to 95, Table 17), ends with a half step alternation between A and B^b (mm.92-94, violin, Table 17-18). That A-B^b half step rise moves into the exposition first ending and now goes up another half step to B (m.95, first ending, beat three, Table 18). At this point (m.95) the original motive (m.1) is repeated in the first ending. So the gesture is fulfilled in the first ending and we begin the whole process again as it repeats; that is, the projection of a large arch from the opening of a small arch gesture.

In the second ending (m.95, Table 18), the A-B^b moves again up to the B-natural but instead of completing the short basic gesture, he continues to rise by step for three measures (mm.95-97, Table 18) up to F-natural in the violin at measure 98. First of all this rise not only prolongs the upward gesture to the original E (i.e. m.1) but overshoots it

by going to F (m.98). At this point (mm.98-102, piano right, Table 18), the sequence (of mm.92-94) begins again with the half step but now a minor third higher on C (m.98ff). This time instead of a slow rise (mm.95-98) we have a leap from the C to E (m.102) which now picks up on the E-F of the preceding peak (m.98) and continues to complete the modified arch gesture by extending it upwards into the figure E-F-G-F (mm.102-103, Table 18).

This development first period, slow stepwise rise against gravity from A to G (mm.92-103, Table 18) is followed by a brief cadential fall (mm.103-105, Table 18) that now begins the descending phase of the arch gesture structure. The peak of the arch gesture (i.e. E-F-G-F, m.103) descends from G to F of the piano followed by E^b-D of the violin (m.104) and D-C of the piano (m.105). The modified arch gesture figure of the apex measures (i.e. E-F-G-F, mm.102-103, Table 18) is followed by another modification (mm.104-105) in which the step-wise motion upward from F to G (mm.102-103) is now expanded from B^b to D (I.e. A-B^b-D-C, mm.104-105, Table 18). This repeated figure (m. 104ff) is a perfect fifth lower which counters the tense step-wise upward motion in the initial phase of the arch (mm.92-103, Table 18). These two motivic gestural statements (mm.102-103 and 104-105) suggest the return phase of the arch (Table 17) and this is confirmed by a repeated half step now reversed as a descending figure (mm.105-116, Table 19).

The intensification of the gesture by the greater subdivision into triplets (m.117) is further intensified by the simultaneously stated inversional contour in piano doubled in thirds (m.117). This is anticipated in the piano in the previous measure (m.116) and continues in measure 118 in invertable counterpoint. This idea is extended and

developed as a kind of ostinato pattern (m.116ff) under the wide ranging lyrical line of the violin.

This lyrical line of the violin provides the final arch of the development section. The peaks of the local gestures ascend (m.111ff) from A-B-D-E (peaks at m.123) which now begins to descend (i.e. A-G, mm.127-130), the motivic triplet-figure now taking us into the recapitulation.

Recapitulation and Coda

The principles of the recapitulation are essentially the same, but the coda (m.238) contributes some changes. It begins after an ostinato pattern on D and E^{b} (mm.231-238), that is, fifth and flat-sixth degree of G major, E^{b} moving to the normal sixth, E as the third degree of the subdominant.

This chromatic change serves to introduce the original gesture at a new pitch level (i.e. E) to imply a transposition to the subdominant, C major. The significance of this transposition tends to de-emphasize the G tonic (m.238) by reinterpreting it as the dominant of the subdominant. This propels the work forward by de-stabilizing the G tonic and allowing for further tonal development.

The resolution or the settling down on the G tonic is prolonged by a series of fully diminished seventh chords that primarily descend chromatically (i.e. $C^{\#}$,C,B,B^{b},A, mm.243, 244, 245, 246, 247). The A is then sustained (mm.247-254) as the third degree of the inverted vii^{7} chord of G. It then becomes the root of a tertiary dominant seventh (A,$C^{\#}$,E,G, mm.251-254). This descending progression which begins the coda differs from the usual ascending-descending pattern for each of the preceding sections of the

sonata form. An inverted arch is thereby suggested by entry (piano-LH) of the basic thematic gesture (C-F-E^{b}-C, mm.247-248) in counterpoint with the arpeggiated diminished seventh (A-C-E^{b}-$F^{\#}$-E^{b}-C-A) as it ascends by semitone from C to $C^{\#}$ to D (mm.247, 251, 255).

It would seem that the arrival at the convergence on the tonic harmony (m.255) closes off this pattern, but Beethoven is not quite ready to let down the tension. The function of the cadenza-like sixteenth-note pattern in the piano-RH is precisely to reassert the chromatic prolongation of the second degree A (mm.262ff). This time however, the chromatic motion ascends (rather than descends) from G and A through an octave higher on A (mm.260-262). As the piano again sustains the supertonic note, the violin further intensifies the chromatic ascent (mm.262-263)

The A trill again asserts itself as the third degree of the vii^{7} chord as the $F^{\#}$ trill is now sustained against it (mm.264-267). This time there is no counter motion (i.e. descending chromaticism as the A immediately becomes part of the primary dominant seventh chord (m.269), which then moves directly to the tonic (m.271). Typical of Beethoven is the prominent cadential assertion of the tonic with the strongest basic progression I-IV (m.279ff)-V-I.

CHAPTER 3: SECOND MOVEMENT *(Adagio Espressivo)*

The thematic conception is the same as the first movement in that the second movement is closely built around the same thematic conceptions as the first movement. The second movement opens with an extremely beautiful, arched shaped two-measure gesture. However, aspects of the thematic conception differ from the first movement in that the second movement is less explicit and defined in terms of thematic contour and gestural definition. The second movement opening, (mm.1-4, Table 1) forms an antecedent phrase built with two shorter gradually rising antecedent violin gestures within (i.e. E^b-F mm.1-2, and F-B^b mm.3-4). This immediately creates an upward motion against gravity, which is counterbalanced by a descending arch in the piano-LH (E^b-B^b, mm.1-2 and A^b-F mm.3-4). Furthermore, the rising and falling phrases are reversed in that we have stepwise rise (E^b-F-G-A^b, mm.1-2, violin) and wide leap fall (A^b-F, m.2, violin) versus the perfect fourth leap and stepwise fall of the first movement gesture.

The opening antecedent phrase (mm.1-2, Table 1) begins on the note G (third degree of E^b major) falls to E^b (the tonic) and rises by scale to A^b (the subdominant, m.2) before falling to F (m.2). In measures three to four (Table 1), the new gesture rises from F, the cadential note of the preceding section. This second antecedent phrase (mm.3-4) rises by step to the dominant degree (B^b, m.4). The second antecedent phrase is extended (mm.5-8, Table 2) by a continuously transposing harmonic development (using the cadential figure G-F-E^b). The phrase ends (m.8) with a strong closing cadence on the tonic.

The second movement, second antecedent (mm.3-4, Table 1) expands in length (mm.5-8, Table 2) through the use of the cadential descending figure G-F-E. This descending motion is introduced (piano-RH, m.5, Table 2) after the second antecedent's descending cadence tail end (B^b-A^b, m.4, Table 1). It dissolves any sense of closure (m.4) by the continuing downward motion. The consequent phrase (mm.5-8, Table 2) continues to embellish the descending cadential figure (G-F-E^b) by bringing it in closer proximity with itself in the course of this phrase. For instance, after the initial descent (m.5, Table 2) we find an ascent just beginning two notes latter in a metrically displaced position (mm.6-7, Table 2). While the latter (i.e. m.6) elides with the embellished descending form (m.7), it this time directly elides with its overlapping ascending and descending forms, (mm.7-8, Table 2) to form a local cadential arch based on this figure (E^b-F-G-F-E^b).

PHRASE STRUCTURE, GESTURE AND SHAPE

The entire opening antecedent and consequent phrases of this opening period are built on the ascending and descending three note forms of the basic figure (G, F, E^b) in different relationships. The overall arch contour of this segment E^b-B^b-E^b, (mm.1-4/4-8, Table 1-2) clarifies itself in the tighter cadential phase. Somehow this use of the figure (G, F, E^b) recalls the basic opening gesture (B-E-D-B) of the first movement (i.e. F-g-a^b-B^b-a-B^b-A^b-g-f-e^b-f-d-e^b-F, mm.3-6, piano-RH, Table 3). The overall ascending motion of that initial E^b-F-G through A^b-A-B^b (mm.1-4, Tab le 1) is summarized in the piano-LH

at the cadence (E^b-E-F-G-A^b-A-B^b, mm.7-8, Table 2) and complemented then by a leap down of an octave which comes to rest on the tonic E^b.

The first four-measure phrase of the arch (i.e. the ascending phase) is strengthened by the increasing importance of the supertonic note F. In its first occurrence (m.1) it is the bass note of the second inversion dominant seventh chord, at its second occurrence (m.3) it has the same harmonic function but as part of a incomplete dominant seventh chord (i.e. the B^b root is missing). But at this point, the F in the bass is embellished by its lower neighbor leading note E, which forms an embellishing vii^{o7}/ii. On the downbeat of the next measure (m.4, Table 4), the F (piano-LH) forms a dissonance against its dominant seventh chord on C (piano –RH, downbeat-m.4). The emphasis on F is increasingly pronounced, as F becomes dominant seventh of the B^b dominant (m.4, Table 4). At this point (m.4, beat two) the seventh (A^b) is immediately added to the B^b dominant, which shows that no modulation has taken place. Thus, the peak of the ascending phase of the arch is strengthened by the near modulation to the dominant. Now the descending phase overlaid by the descending G-F-E^b figure (m.5, Table 4) maintains a sense of destabilization in order to prolong the final cadential resolution (m.8) of the G-F-E^b figure. This maintained instability is effected (m.5) by a new interpretation of the second degree F, the F now appearing as the seventh degree of the dominant (I.e. G-B-D-F) of the submediant C (m.5).

ARCH SHAPE AND HARMONIC CHROMATICISM

The closing phase of the arch is based on increased chromaticism, which primarily embellishes the dominant (m.7, Table 4). The upper voice leading (G-A^b,

piano-RH, m.7) suggests the microtonicization of the area of IV (A^b). However the A^b is actually the seventh of the primary dominant seventh (B^b-D- F-A^b) which shows the strong tendency to move home. We arrive on what appears to be the tonic (E^b-G-B^b, m.7) but the addition of D^b (m.7 beat 1), destabilizes that tonic and we get the V^7 of IV. Again the voice-leading, G-A^b, this time in the bass (beat 2, piano-LH, m.7) suggests the microtonicization of the IV, but the F in the upper line of the piano reveals the supertonic. The movement to the cadence is even stronger as the chromatic motion in the bass establishes the supertonic as the dominant seventh of V, which moves to the $I^{6/4}$-V^7-I. The bass motion in and of itself implies the presence of I-IV-V-I (mm.7-8, Table 4), which creates strong motion to the cadence. At the same time, the increased chromaticism of these measures (i.e. mm.7-8) tends to prolong the resolution. This intricate harmonic structure reveals Beethoven's capacity for identifying and strengthening a basic gesture or shape.

When the violin enters (m.9, Table 5) with the descending cadential figure in stretto with the piano, we find yet another means of prolonging the cadential descent of measure 8. While the entry of the violin (m.9, Table 5) sounds like the start of a new period, its contrapuntal interaction with the piano simply shows it to be a further prolongation. This prolongation seems to be necessary because in the cadence just arrived at (i.e. mm.7-8), there was a great deal of chromatic activity. It seems now that we need cadential activity, which is exclusively diatonic (mm.9-11, Table 5). This allows for some time to settle strongly on the E^b tonic. Such an extension, which asymmetrizes the opening period to eleven measures, is common in Beethoven's music. One need only think of the opening period of the second movement of the fifth

symphony. In the present case, the eleventh measure (m.11) gives us three statements of the tonic chord.

All of this first period (mm.1-11) seems to be preparation for the more lyrical second period antecedent theme that enters in the violin (mm.12ff). The original arch shape of this movement (first period, mm.1-8, Tables 1-4 and mm. 9-11, Table 5) was founded primarily on two basic forms of the three-note step-wise motive (ascending/descending E^b-F-G and G-F-E^b) as well as its elaboration's. While the second period antecedent piano echoes the descending form G-F-E^b (mm.12-14, Table 6), the violin outlines in counterpoint an ascending sequence of motivic statements based on the descending form of the motive (i.e. B^b-A^b-G, / C-B^b-A^b).

While the second statement in the sequence (i.e. C-B^b-A^b, m.13, Table 6) is actually extended downward by means of an appoggiatura (i.e. A^b-G, m.14, Table 6), this is actually preparation for still further extension. This second period antecedent phrase with anacrusis (i.e.mm.11-14, Table 6) is repeated to begin the second period consequent phrase (m.15 with upbeat). The A^b-G closure of the antecedent (violin, m.14, Table 7) is now mutated by a leap up to D^b (m.16, violin, Table 7 and 10) to begin a still longer rising extension up to E^b (m.19). This longer rise from D^b-E^b (mm.16-19) is reflected on a more microscopic level in the piano-RH (m.16, Table 7) and is interspersed in the harmony of the next two measures (mm.17 to 18, Table 7). This overall slow rise against gravity (B^b-C-D^b-E^b, mm.12-13, 16 and 19, Table 6 and 7 or Table 10) is released by the rapid flourish at the cadence (mm.19-21, Table 7) which comes to rest on a reversed motion of the original cadence (i.e. A^b-G, m.14 is reversed to G-A^b, mm.20-21). Thus on the highest architectural level of this section (mm.14-21, Table 7 and 10) we have the rise

of a half step in the melodic line (i.e. G-A^b). This leading-tone G, is the third degree of E^b major which is the long prepared dominant for the resolution to A^b (m.21, Table 7).

It is striking that this basic progression (m.12 with upbeat, to m.21, Table 6 and 7) of the two phrases (i.e. dominant-tonic in A^b major, m.12ff with upbeat and m.14ff) entails subsidiary levels of tension in the voice leading. The A^b-G motion (m.14, Table 7) contains the seventh degree of the dominant (B^b-D-F-A^b) moving to the third degree of the E^b tonic. The E^b tonic (m.14) is immediately turned into the V^7/IV (m.15, Table 7). The analogous half step progression of m.14 now entails 'D^b-C' in the piano (m.15). While the relation of the second half step (D^b-C, m.15) to the first one (A^b-G, m.14) reveals rising tension, it is still a downward motion of the half step. However, at this point of mutation, the D^b-C (mm.15 and 16, Table 7) is reversed to C-D^b (m.17, Table 7) as part of a local progression suggesting D^b major. The goal (i.e. peak) of this upward motion (mm.14-19) is not so much the whole-step F-E^b (mm.18-19, Table 7), but rather the continued upward motion in the embellished half-step figure, D-E^b (m.19). This immediately reverses itself in the chromatic downward motion (D^b-C, m.19, Table 7), which is further embellished as part of the rapid cadential flourish (m.19). We find a momentary reversal of the descending D^b-C (m.19) in the inner C-D^b (piano-RH, m.20, Table 7), which is carried back up again in the D-E^b rise of the next measure (piano-RH, m.21). Ultimately, the piano D-E^b neighbor-note embellishment (m.21, Table 7) suggests on a higher architectural level a more general downward motion in the ostinato figuration, D-E^b (m.21) to C-D^b (m.22, Table 8), etc. Thus we have a second arch in this movement (mm.15 with upbeat - 21, Table 7) that takes us to an even higher level of tension than did the first period (mm.1-14, Table 1-6).

At the violin cadence, G-A^{b} (mm.20-21, Table 7), which in itself is a half step higher tonally than the A^{b}-G cadence of the violin antecedent (m.14, Table 6 and 7), the piano-RH configuration (D-E^{b}, m.21, Table 7) echoes the final rise in the preceding embellishing figure (m.19). The attempt to further round out the arch by descent is only suggested in the piano-LH figuration of the following measure (m.22, Table 8) as D^{b} moves to C on the second eighth note. It is striking that in this new passage (m.22ff) Beethoven wants to sustain the idea of upward chromatic motion on yet another level. The shift to A-B^{b} in the ostinato figure (piano, second beat, m.22, Table 8) suggests an upward continuation of the proceeding cadence G-A^{b} (violin, mm.20-21, Table 7).

Although the large arch shape (mm.12 with up beat-21, Table 7 and 10) has been completed, by this time, the figuration does not want to let go of the upward chromatic rise of the two linear levels (G-A^{b}, mm.20-21 / A-B^{b}, m.22)/(C-D^{b}, m.22 / D-E^{b}, m.23) (Table 7-8 and 10-11). This is heightened by the new idea in the violin in which the leap of a G-octave continues upward to A^{b} (m.23, Table 8 and 11)). The peak of this rise (to G-A^{b}) is picked up at the peak of one of the main arches (mm.25-31, F-F, Table 8-9 and 11) but it also is transformed into the beginning and ending nodes of the highest arch (mm.22-29, Table 11). The piano left hand balances the ascending-descending arch of the violin by an inverted contour (i.e. descending/ascending) in the eight notes (B^{b}-a^{b},F-g-a^{b},B^{b}, mm.25-29,Table 8-9). At the same time (m.24ff) as the violin ascends to a still higher peak (B^{b}-C^{b}, mm.26-27) and then begins to descend (B^{b}-A^{b}-G-G^{b}-F, mm.28-31), the entire progression is ascending F-G^{b}-B^{b}-C^{b} and descending B^{b}-A^{b}-G-G^{b}-F (Table 8-9 and 11). The piano-RH reveals a more intensive half step rise in the thirty-second note

figure (mm.25-31, Table 8-9 and 11). As it mirrors the violin arch in a more chromatic continuum (ascending, mm.25-27, B-C / C#-D / D-E^b / F-G^b / G-A^b)--(descending, mm.28-31, G^b-F / F-F^b / F^b-E^b / E^b-D/ D-$C^{\#}$). The G-A^b functions sometimes as the peak of the arch (m.27, piano-RH) or incomplete arch (mm.22-23, violin) and sometimes as the beginning and ending nodes of an arch (mm.14, 20-21, 22-23 and 29).

In the retransition (m.32ff, Table 12) we get a final ascending cadential flourish (mm.32-37) leading us into the recapitulation (m.38). In the small cadential arch (mm.29-31, violin, G-A^b-G-G^b-F, Table 12), the peak note A^b (m.29, violin) points to yet another intensification against gravity. While the A^b (m.29) of the vii^7/e^b chord (D, [ ] , A^b, C) has a strong tendency to pull down to the third degree of the E^b tonic chord (i.e. G, m.30, violin). The rising cadential flourish in the retransition (m.32ff, Table 12) asserts an opposite motion in the initial half step A-B^b (m.32), of which the A seems to serve simply as a neighbor note to the dominant degree (B^b). It actually continues the chromatic rise (mm.32ff, Table 12) beyond the above mentioned A^b (m.29), to A-B^b (m.32), but displaced two octaves lower. It is striking that while the preceding peak, A^b, (m.29) forms an upper neighbor note to G, the A (m.32, Table 12) forms a lower neighbor note to B^b. In various ways, tension is reintroduced as the A-B^b is reiterated in the next three measures (mm.33-35, Table 12).

AMBIGUOUS ASCENDING/DESCENDING MOTIONS

The initial octave leap and half-step (G-G-A^b) that initiates the development section (mm.22-23, violin, Table 13) is mirrored at the end of development, by a downward octave leap and half step, A^b-A^b-G (m.36, violin, Table 13) to articulate the

temporal boundaries of the large arch that forms the development. The culminating point is prepared by the ambiguous up and down motions of the half-step B^{b}-A or A-B^{b} (development-retransition, mm.32-35, Table 12) that articulate important points of the cadential flourish (Table 12).

Tables 7-8 and 9 (mm.14-31) present details of the arch shapes as they begin to unfold. Table 10 (mm.12-21) in contrast to the preceding tables (i.e. Tables 1-7) begins to show overlapping arch-shapes, which anticipate the increasing complexity of the structure in the development section. Table 11 (mm.21-31) illustrates the intensifying overlap of multiple arch shapes. Essentially, the beginning and ending nodes of G-A^{b} encompass the first arch (mm.22-29), which contains the highest peak (C^{b}, m.27), that is, B^{b}-C^{b} (mm.26-27), before the return phase. At the same time a second overlapping arch from beginning and ending nodes on F (mm.25-31, Table 11) rises to the peak on A^{b} (m.29), so the G-A^{b} ending node also serves a double function. This is reflected in yet a third overlapping arch (mm.25-31, Table 11) in the piano-RH. The beginning and ending nodes are $C^{\#}$-D. While its peak is again G-A^{b} (m.27), in this case the G-A^{b} peak occurs simultaneously with the B^{b}-C^{b} peak (violin) of the first and highest arch. The single highest note, D^{b} (m.27, Table 11), is actually displaced an octave lower. This disjunctive treatment is striking because it articulates the peak (D^{b}) which reveals an association with the beginning and ending nodes on $C^{\#}$-D^{b} in the piano -RH (m.25 and m.31). The complexity of this central intensification of overlapping arches identifies the general gesture that structures the whole second movement.

PIVOTAL STRUCTURAL ROLE OF OVERALL ARCH

The second movement, coda (m.54ff, Table 14), plays a special role in fulfilling certain details of the development section. Also, while it brings the slow movement to a close, it also plays a pivotal role in the overall arch concept of the entire work. The coda begins analogous to the development section with a leap up of an octave and a minor second (see G-G-A^b, m.22, Table 11 and 14). The arch of the development section (mm.22-31, Table 9 and 11) rose to the peak at B^b-C^b in the violin (mm.26-27) with an implication of the further upward motion by the displaced D^b (mm.26-27, Table 11). Now, Beethoven pushes beyond that peak to D-E^b (mm.59-60, Table 14). We have thus completed the upward motion to the leading tone (D, m.59) and tonic of the work (E^b, m.60). This interpretation is supported by the descent that follows in the violin (m.60-62) in which the reverse of certain keynotes in the development (see C^b-D^b, mm.26-27, Table 11) is implemented. The D-E^b peak (mm.55-56, Table 14) descends chromatically through D^b-C^b (mm.60-61, Table 14), the C^b at the end of the measure moving down a half step to B^b (m.62, Table 14).

The dominant degree (B^b) is reiterated over the tonic harmony for the next several measures (mm.62-64, Table 15) and the tonic harmony is then repeatedly emphasized through the end of the movement (mm.65-67, Table 15). While it would seem that Beethoven is reinforcing the tonic goal of the upward motion in the coda (violin, mm.59-60, Table 14), there appears to be a deeper reason for this emphasis. At measure 60, the note D^b appears as a local pivot in the piano (then violin), which transforms the E^b tonic chord into the dominant of the subdominant on A^b (in this case in A^b minor, m.61). This

transformation of the E^b tonic chord to emphasize the A^b (mm.60-61, Table 15) harks back to the beginning of this movement, (e.g. m.2 and furthermore mm.17-21, Table 7, end of exposition)

What can this emphasis on the subdominant note represent? The answer appears to lie in the very last chord (E^b,G,[ ],$C^{\#}$) of the slow second movement (m.67, Table 15). The implied seventh degree (D^b) of the V^7/IV chord (E^b,G,B^b,D^b) appears enharmonically as $C^{\#}$ and it is this chord that opens the next movement. The Italian augmented-sixth chord (E^b,G,[ ],$C^{\#}$) specifically articulates the key of G minor and by the end of the antecedent phrase (m.4), we get a resolution to this new tonic tonality.

The transformation of the original E^b tonic chord, first into the dominant of A^b (mm.14-21, Table 15), then into the augmented-sixth chord of G (m.67) points to the significant half-step (A^b-G) that was telescoped at key points of the arch shapes of the slow movement (A^b-G, Tables 10 and 11). It is striking that the functional shift of the E^b pivotal chord from its emphasis on A^b (V^7/IV, second movement) to its functional emphasis on G (bVI/I, third movement) suggests the descending phase of the works overall arch. It is in the third movement that this phase begins to be realized.

CHAPTER 4: THIRD MOVEMENT *(Allegro)*

As in other works of Beethoven, for instance, in the link from the second to third movements of the Op.57 "Appassionata" Piano Sonata, in F minor (1804-1805) and the Op. 95 "Serioso," String Quartet in F minor (1810-1811), we have the same kind of chordal pivot between Movs.II and III of the Op.96 Sonata (Table 15, Mov.II). In the "Appassionata", the final diminished-seventh chord of the second movement ushers in the f minor tonic return to begin the finale. In the Op.95 String Quartet, we have the same kind of chordal pivot. In this case (Op.96), the E^{b} tonic of the second movement (Table 15, Mov.II) is transformed (m.67) into an E^{b} Italian augmented-sixth chord at the cadence (E^{b}-G-$C^{\#}$) and anacrusis to Mov.III. This takes us to a dominant-tonic cadential progression in the key of G minor (Table 1,Mov. III, mm.1-4).

This occurs in a traditional symmetrical phrase/period structure. The 1^{st} period (mm.1-8, 2+2 antecedent, +4 consequent, +4), which establishes a closed perfect cadence (V^{7}-I) at the end of the antecedent (m.4, Table 1), suggests a repeat at first in the consequent (mm.4-5). But here, in contrast to the motion from the augmented-sixth chord to dominant/tonic (upbeat to m.1 to m.4), the consequent moves from tonic-dominant alternations (mm.4-5) to an unexpected shift to the minor dominant D (m.7-8, Table 1). This seemingly unstable harmonic succession is actually unified by the initial augmented-sixth chord (E^{b}-G-$C^{\#}$). Originally the augmented-sixth interval (E^{b}-$C^{\#}$, upbeat to m.1) resolved to the dominant octave D (m.1, Table 1). This is actually an anticipation of the shift to D as a tonic (mm.7-8, Table 1). Thus the $C^{\#}$ as a chromatic embellishing tone in the augmented-sixth chord, is transformed (m.7, Table 1) into the

third degree of the new dominant in D minor. The strengthening of the minor dominant of G (i.e. D minor) is produced not only by the sudden cadential shift (mm.7-8), but by the increased reiteration of the this tone (i.e. D octave, in the piano) in the repeat of this period (mm.9-16). This transforms the surprise element of the first period (mm.7-8) into a more stable, expected tonality at the end of the second period (mm.14-15).

In Section B of the scherzo (mm.17-32), the D minor tonality now initiates the antecedent period (mm.17-24, Table 2) with strong embellishment by its leading tone $C^{\#}$. In contrast to the antecedent phrase of the A-section (mm.1-4), we now have a more continuous sequential rise in both piano and violin, the peak of which is note C (m.22, Table 2). The rise contains two overlapping chromatic threads (E-F-$F^{\#}$-G in the piano "tenor" and A-B^{b}-B-C in the piano "soprano" line two measures latter in stretto). The C resolves to the subdominant harmony of G minor at m.22. The consequent period of section B (mm.24-32) essentially repeats the antecedent period but now, in invertible counterpoint, in the violin.

LONG RANGE REFERENCE TO THE VERY OPENING GESTURE OF MOV.1

What is so striking about the entire Scherzo section (to m.32), aside from the fact that there is no rounded return thematically (to section A, mm.1-16), only tonally (to G minor, mm.23-24), is the long-range reference to the very opening gesture of the work (B-E-D-B). In this case (Table 3), the G minor tonic chord moves to a D minor cadence in the A section (mm.7-8, Table 3 and 1). In the B section, (mm.16-32, Table 3 and 2), the harmonic change of its leading tone $C^{\#}$ (mm.17-18, 25-26) to C at the sequential peak (m.22 and m.30) brings us back by way of this subdominant harmony to the G minor

tonic at the end of this cadence (mm.23-24). Thus the overall arch shape of the scherzo section is G-D-C-G (Table 3), which is a slightly mutated, intervallically expanded transposition of the original gesture, B-E-D-B. There are several other differences that mark the present version of the gesture. One is the expansion of the perfect fourth (B-E) to the perfect fifth (G-D), which creates a large-scale sense of expansion (Table 3). This process comes as no surprise, since various means of expansion have been observed in the passages that followed the opening gesture. In the scherzo, the modified gesture is initiated by the tonic degree (R.H.), then leaps up to the dominant degree, D, (Table 3). This modified gesture (G-D-C-G) implies a motion towards its home key of G minor and therefore it weakens the fifth degree, D, by strengthening the subdominant degree, C. That is, the $C^{\#}$ leading-tone to D, is lowered in this context to C (Table 3).

FULFILLMENT OF RETURN PHASE OF ARCH

Even more striking, the "expected" rounded return of section A (mm.1-16) in the scherzo is only fulfilled, that is, as a return, in the large scherzo following the trio (m.116-129, Coda). It is now in the key of G major, dominant of C (rounded-return, A-B-A, mm.1-16, mm.17-32, mm.116-129, Table 1, 2 and 4). In other words, the original leading-tone function of the $C^{\#}$ at the beginning of the scherzo (i.e. moving to d minor, mm.7-8, 15-18, Table 1 and 2), has now shifted to the raised third degree, B, of the G major tonality (mm.117-129, Table 4). This was already evident in the scherzo, (B section), where the sequence rose from B-C (mm.21-22, Table 2). At this point of the sequence (m.21), the note B is part of the G dominant-seventh harmony of C.

The third movement scherzo theme itself (mm.1-16) appears to be a highly modified reference to the original gesture of the first movement (B-E-D-B, mm.1-2, Mov.I), the scherzo's larger antecedent phrase shape (mm.1-4, Table 1) implying the presence of a more literal form (G-C-B^b-G) of the original gesture (B-E-D-B). The Coda (mm.115ff) echoes that gesture but now emphasizes its peak, note C, by the major-third degree, B (i.e. G-C-B-G, mm.115-119, Table 4). This emphasis on C-B is further echoed in the cadential trill on B (mm.127-128, Table 4), which of course contains the peak-tone C in the upper note of the trill.

TRIO

The rising violin line of the trio (mm.32-36, Table 5) emphasizes B^b(m.33) to E^b(m.34), a half step transposition below the first two notes, B-E, of the original gesture (m.1, Mov.I). The melodic line (mm.32-39) continues upward, then down, to create multiple overlapping arches as shown in Table 5, mm.32-39. In this passage (mm.32-40), D-E^b is prominent linearly (mm.33-34, 35-36, 37). The initial perfect fourth (B-E) of the original gesture is, in contrast, completed by a motion downward to D-B (m.1, Mov.I). While the downward phase of the gesture does not occur in any explicit way in the trio (mm.32-84), a short interpolated passage (mm.48-51, Table 7) already provides a hint of both the D^b (violin, m.49) and E^b (piano harmony, m.52), but in ascending order. The E^b represents a landmark in the next phrase (m.54), where it rises to the cadence on E^b (m.56).

VAST TEMPORAL EXPANSION OF ARCH SHAPE

Once again Beethoven reveals his agility in creating a sense of vast temporal expansion of the arch shape. The trio begins with the violin statement (mm.32-40, Table 5) which ascends in its initial phase through two octaves (mm.32-36), the descending phase occurring rapidly in eighth notes (mm.37-40). This antecedent period (mm.32-40, Table 5) is answered by a repeat in the piano (mm.40-48, Table 6) to produce a consequent period. The difference between the two otherwise identical passages is the greater harmonic complexity in the descending phase of the piano (mm.45-48). Two short segments based on the ascending phase material (mm.49-50, 51-52,Table 7) appear, in retrospect, to serve as an interruption before a canon begins. The canonic subject (mm.52-64, Table 8) occurs in the violin. This statement of the trio theme differs from the preceding statements (mm.32-40, 40-48, Table 5 and 6) in that the descending phase (mm.56-64) is in augmented duration's, the quarter-note descent expanding the original eighth-note descent. This temporal expansion of the basic arch shape allows a canonic answer in the right-hand of the piano to overlap with the violin (m.56ff, Table 8). We get another answer in the left-hand of the piano in the same overlapping relationship (m.60, Table 8). Another canon begins in the violin (m.64), and the piano gives us two overlapping answers again. For one thing, the canonic entries (mm. 56, 60, 64, 68, 72, Table 8) articulate the peak of the arch (B^b) in each case. The significance of these two canons, each with three entries (i.e. violin subject and two piano answers for each canon) produces a general temporal expansion but it allows for an enormous emphasis and extension of the rising phase. In other words, when each linear arch begins to descend

(mm.56, 60, 64, 68, 72), the canonic entry simultaneously continues the previous ascent. Only at the end of the second canonic entry of the violin (m.76), which ends the trio, do violin and piano-R.H. descend together. The idea of ascending counteraction occurs in the left-hand of the piano (mm.76-78, 78-80) in the quicker, reiterated ascending eighth-note figures. This constitutes a return of the original eighth note figure (mm.37-40) but ascending rather than descending.

In the long run, the eight notes of the descending phase (mm.37-40, 45-48) replace the ascending head of the canon (mm.52-56, 56-60, 60-64, 64-68, 68-72). Thus, after a long temporal expansion of the arch by means of canon (mm.52-75), we have a sense of contraction (mm.76-83) to round out the general arch of the whole trio.

CHAPTER 5: FOURTH MOVEMENT *(Poco Allegretto)*

MAIN THEME

The fourth movement contains even more prominent reminiscences of the basic gesture, B-E-D-B, (Mov.I, m1). Furthermore, the movement serves as a convergent point for numerous manifestations of the gesture in overlap, intersection, and expansion. These gestures are varied in their transpositional levels, intervalic mutations, and placement in the overall structure. Together, they converge to create a peak of intensity in the working out of the various forms that have unfolded in the previous movements. They prepare for the overall breakthrough in rounding out the overall arch shape. The nucleus of this convergence is the re-emergent original form (B-E-D-B) of the gesture, which is now imbedded throughout the sections of this movement.

The piano-RH opening short phrase (mm.1-2) contains a variant of the gesture (G-C-[B-A]-G). The piano-LH alberti figuration supports the gestural implication in the principal notes (D-G-$F^{\#}$-D). On the larger phrase-period level, we find a more elaborate modification of the basic gesture. Here (RH), we have an expanded gesture, G-A (mm.1-2) and A-D (m.2). This gives us an expanded perfect-fifth range from G-D (mm.1-2, piano-RH). The second antecedent segment (mm.3-4) intersects in a special way with the first antecedent segment (mm.1-2) by means of a superimposed form of the basic gesture. The cadential figure, A-D of the first segment descends essentially to C as an upper neighbor of the beginning of the second antecedent (m.3, Table 1). The latter then descends to the cadential A (m.3). This outline gives us A-D-C-A. At the cadence

(mm.3-4), we have further elaboration in the piano-RH with the appoggiatura G-B-A. The overall structure of the pair of antecedents (mm.1-4, see Table 1) seems to be, therefore, G-A-D-C-B-A-G-B-A. This is an embellished variant of the original motive A-D-C-A. The initial G (m.1) and the G-B that turns around the A at the cadence (mm.3-4) are appoggiatura embellishments.

It is striking that the rising interval of the gesture in the scherzo was G-D (Mov.III, mm.1-5) while the G-D is picked up in the opening segment of the fourth movement as the boundary (mm.1-2, Table 1). What actually occurs is the contraction of the G-D boundary to, the original interval of the perfect fourth, in this case A-D (m.2). Even the traditional alberti bass suggests this interval contraction from fifth to fourth as the initial G-D is inverted to D-G in the figure. The seemingly arbitrary association to the original perfect fourth (B-E) of the first movement is actually supported as such, not only by the initial rising fourth in the piano-RH (G-C), but by the descending phase of the arch as represented by the $F^{\#}$ in the bass (m.2). Thus, D-G-$F^{\#}$-D, which parallels G-C-B-G in the piano RH, is close to the original form, with its otherwise lowered third note.

These transposed manifestations or echoes of the original gestural shape are even more significant in view of special assertions of the exact form and pitch level of the original gesture (B-E-D-B, Mov.I, m.1) embedded within the entire theme of this movement itself (mm.1-32, Table 2). Although not placed on the primary metric points, we never the less find its outline. The second antecedent (mm.3-4,piano-RH) is initiated by B and reiterated as a cadential appogiatura (m.4). The second measure of the consequent (m.6) articulates E on the downbeat. This leads obviously to D in the next measure and the downbeat of the last measure is B. The second statement of the theme

analogously outlines B-E-D-B, as do the remaining passages of the theme through the note B (m.32, on the down-beat). It is no surprise, then, that when Beethoven actually triples the third degree (B) of the G tonic chord; he is telling us how important this boundary note of the gesture is.

VARIATION 1

The variation procedure of this movement lends itself to the principles of identity and distinction. For instance, a comparison of variation one with the main theme (mm.1-8) reveals the concept of thematic variations. The basic tune in the piano-RH in the first antecedent segment (m.1, Table 1) unfolds G-C-B-A-G-A-D-D. In the first variation (m.33ff. Table 3), we find essentially the same melodic structure embedded within the otherwise new figuration. The initial G of the violin and piano (m.33, Table 3), is followed by the violin neighbor-note C (m.33). The figure descends not to G, as it did in the theme, but to the supertonic note, A. The leap up from the violin A to the piano D (m.34) in the variation has important additional structural implications in terms of the intervals of the basic gesture. The main theme has two cadential D eighth notes and the variation has the same D reiteration, but with the $C^{\#}$ embellishing neighbor note (m.34, piano-RH). With regard to the basic gestural frame of this passage, namely G-C-[B-A]-G, the following is revealing. The A of the latter structure (m.34) does not resolve itself at this point to complete the gesture. However, the figure of m.33 in both the violin and upper line of piano is repeated in m.35, in the upper two lines of the piano. The cadential A this time (mm.36-37), is, after being prolonged in the upper line of the piano by a

repeat of the descending figure C-B-A, resolved to G (m.37) on the first eighth note to complete this variation of the main theme (m.37).

One finds the melodic structure of the theme's second antecedent segment (mm.3-4, Table 1) similarly embedded in the second antecedent of the variation (mm.36-40, Table 3) For instance the B-A (m.36, piano-RH) echoes the B-A of the main theme (m.4). While the melodic structure is sufficiently varied to create a sense of real distinction, what seems to be the ultimate unifying factor, is a process that yields hidden, modified unfolding of the basic gesture. For instance, the original gesture (B-E-D-B, 1st movement) is plainly outlined as the principal notes of the three note appoggiatura (upper neighbor) figures, B-C-B (violin, m.45, Table 4), E-F-E (piano, m.46), D-C#-D (violin, m.47) and the cadential B (m.48). Given the complexity of these modifications, we need not trace every detail but rather the salient moments that contribute to the clarification and fulfillment of the gestural meaning. This fulfillment of the gesture ultimately lends itself to the identity and establishment of the thematic concept itself.

The original gestural idea (B-E-D-B) is clearly manifested in most variations, in juxtaposition with other forms of the gesture. Most significantly, the basic gesture emerges increasingly into the foreground. Let us trace some of these manifestations. As mentioned above, we already have the B-E-D-B distributed in the theme (Table 2) and in the second half of variation one (mm.45-47, Table 4). It is also prominently distributed throughout the continuing variations. Some of the prominent points are, either far apart, expanded, or closer together, and begin with the notes in adjacency, but are not completed.

VARIATION II (MM.49-80)

In variation II, while certain local configurations such as the violin line D-G-F#-[] (mm.53-55, Table 5) refers back to the alberti figuration that appears in the piano-LH at the beginning of this movement, other more literal manifestations (of the gesture B-E-D-B) also permeate the score. What gives the gesture (B-E-D-B) strength in its four occurrences in this variation (mm.51-56/piano-RH, mm.59-64/violin, mm.68-72/piano-RH and mm.72-80/violin Table 6) is that its components are underpinned by the tonic-subdominant-dominant-tonic harmony.

VARIATION III (MM.80-112)

In variation III (mm.98-112, Table 7), we find prominent foreground occurrences of the gesture (B-E-D-B) in overlap or elision, as at m.101, where mm.98-101 of the piano-LH overlaps mm.101-104, of the piano-RH. This is repeated but re-orchestrated again in overlap at m.109, where the piano-LH (mm.106-109) overlaps the violin (mm.109-112). The cadential B of the piano-LH (m.101) overlapping with B in the piano-RH, begins a more foreground statement in the upper notes of the piano-RH (mm.101-104). (See Table 7)

VARIATION IV (MM.114-144)

In variation IV (mm.114-144), if we have any suggestion of it (B-E-D-B), it is nevertheless highly obscured. Toward the end of this variation, a somewhat tenuous but nevertheless outlined occurrence of the main gesture (B-E-D-B) anticipates its

subsequent emergence (B, [m.141, violin], E [m.142, violin], E-D [m.143, violin]) and then the scale circles around the B (m.144, violin) that begins the adagio of variation V (mm.145).

VARIATION V (MM.145-173)

Variation V (mm.145-173), begins with a freely elaborated melodic structure whose peak notes form the gesture B (m.145, piano-RH), E-D (m.146) and B (m.147). This original gesture (B-E-D-B) is repeated (m.149-152, violin), this time becoming even more prominent with one gesture note dominating every measure, B (m.149), E (m.150), D(m.151), B (m.152). From mm.154-156, only the contour of the gesture is suggested in the rapid figuration of the piano-RH. This begins, with B and rises to $F^{\#}$ (m.154) which descends in the next measure to the high note E (m.155), coming to a cadence over the trilled B (m.156). That is, B-$F^{\#}$-E-B. This is preceded at mm.152-154, piano-RH by a slightly varied form of the original gesture (B-E-[$D^{\#}$]-[$C^{\#}$]-B). In any case, we do not get any clear statements of the gesture.

This modified, expanded form begins to contract in the descending scalier figures of the cadenza (m.156). For instance, the $F^{\#}$(m.154), is replaced by F (m.156) as the high note and B (m.156) as the low note. In the next violin figuration (m.157), which now begins to emphasize B and D in the outlining of the tonic triad. Beginning with the end of variation V (mm.164-173), we have a tonal deviation, to E^{b} major, where only the contour of the theme suggests the gesture (E^{b}-A^{b}-G-E^{b}).

VARIATION VI (MM.174-216)

While we return to G major in variation VI, we do not get any literal reference to the original gesture. A highly embellished and extenuated suggestion of the gesture (B-E-D-B) is found beginning with the B (m.176, piano-RH), which moves at the cadential point to the high note E and D (m.180) that resolves to B (m.181). This is significant in that three notes (E-D-B) of four-note gesture (B-E-D-B) are now together as a local foreground event. This is reiterated in the violin repeat of this (mm.188-189) and again in the piano-RH, this time, an octave lower (mm.196-197).

In the penultimate variation (mm.217-244) based on fugal treatment, we do not get any suggestion of the original gesture until after the return of the main theme (m.245). Starting in the third measure of the theme (m.247), through to m.252, the right hand of the piano outlines B-E-D-B and then the violin (mm.256-259) outlines B-E-D-[ ]. From the coda through to the end (mm.275-295), the notes of the original gesture (B-E-D-B) come into closer proximity, as for example in the violin (mm.280-285).

Epilogue

Various scholars have discussed the sonata Op.96 in terms of its style characteristics and its role in Beethoven's development. They also point to its position in connection with the larger historical context of the early nineteenth century. Some views of various scholars will elucidate the significance of the stylistic and technical features discussed in this treatise.

There is varied notion as to the stylistic period of Beethoven to which the Op.96 belongs. According to J.Burk, "A. Eaglefield Hull, who considers this 'the most intimate of all the violin sonatas,' calls it 'not really characteristic of the master's latest style which does not commence until Opus 106 (piano sonata of 1817)'. This seems like a case of cutting the man to the cloth of theory".[15] Much of Beethoven's later works seem to foreshadow Schumann. Beethoven used motives and melodies that induce changing, wandering emotions of an open-ended expression. This can be seen in the first movements of the Piano Sonatas opp.101 and 109 (1816 and 1820), in the Violin Sonata op.96, and especially in the last Quartets (1824-1826). [16]

The Op.96 Violin sonata also represents a peak in Beethoven's creativity. Of Beethoven's Ten Violin Sonatas, the seventh, ninth and tenth are quite striking. "The seventh is the most emotional and has the best 'swing' the ninth is richest in superficial effects, the tenth is the most imaginative and the most musically perfect". [17]

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[15] John Burk. *The Life and Works of Beethoven*. New York: Random House, 1943, p.390.
[16] Walter Riezler. *Beethoven*. New York: E.P. Dutton & Company, 1938, p.108.
[17] P.Bekker, p.300

The B flat Piano Trio, Wo0 39 approaches very closely to the domain of the symphony; the Violin Sonata in G, op.96, on the other hand, which was composed at the same time is music of the most intimate (personal) kind. The first movement is one of Beethoven's most delicate structures, elaborated with the utmost skill from the short opening motive; it seems almost like a free improvisation, but in reality it has strict organic unity. The Adagio and Scherzo are played without a break, but are in the sharpest possible contrast. The Finale consists of variations on a popular tune so common in interest for Beethoven, especially in his later period. It is cheerful and humorous, but has more serious passages as well. The work is close to the mystical quality that is found in Beethoven's late style.[18]

Beethoven's last Violin Sonata creates an intimacy of dialogue not found earlier, subtler in its message and perhaps even less decisive in its final statement. In the first movement, m.10 and m.98, the motion of the three voices almost seems static or "suspended in mid-air." [19] In the introduction to book two of The Art of Violin Playing, Carl Flesch discusses some important things about this work, such as: Rostal states that the connoisseur regards Op.96 as the most perfect work of all the violin sonatas. Its first movement in particular seems to represents a high-point of Beethoven's creativity.

> Its significance, however, is not on the surface, for it is impressionistically delicate colors in which it is dipped into acoustic phenomena. The composition is not 'grateful'; it offers no opportunity for the deployment of typical violin cantilene, it is

[18] W.Riezler, p.177-178

the most delicate filigree (fine wire) work, dream-wrought mood-music, with intentionally circumscribed, on occasion merely indicated means. In short, it hastens on in advance of its time in the same degree, as do certain parts of the last quartets or piano sonatas. The reproduction of this movement not only calls for two players who in their ensemble stand technically as well as tonally on the highest level, but for more: the interpreters must also be able to dream, to enthuse; the blue flower must blossom in their souls. Only he who possesses this poetic empathy will be able to transmute into perfected sound the precious pith hidden in a seemingly rude wrapping. [20]

This G major sonata [Op.96] belongs as much to the late style as does the Piano Sonata, Op.78 (1809). The 'Archduke' Trio [Op.97] is not characteristic on the other hand, of his late style. [21] G major is a key that Beethoven often associated with "lightness and grace", like the Piano Sonatas Opus 14 No.2 (1799) and Op.79 (1809), the Quartet Opus 18 No.2 (1800), and the Violin Sonata Opus 31 No.3 (1802). As Lockwood points out, Beethoven never used the key of G for a symphony, any of the quartets after Op.18 or the later piano sonatas. The only important later work in G major is the peaceful Violin Sonata Opus 96 of 1812. [22]

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[19] Joseph Szigeti. *The Ten Beethoven Sonatas for Piano and Violin.* Urbana, III: American String Teachers Association, 1965, p.34.
[20] Rostal, p.168
[21] J. Burk, p390
[22] Lewis Lockwood. *Beethoven, the Music and the Life*. New York: Norton, 2003, p.214.

The first piece in Op.119 (Allegretto, 3/4, G minor) resembles so closely the Scherzo of the violin sonata Op.96 that some relationship must exist. Despite the date of 1822 (November) in the manuscript of Op.119, the music still belongs to the eighteenth century, and its simple elegance, light staccato, transparent harmony (only warming to a rather thicker texture in the E flat major trio section) recalls the works that Mozart's Paris works. [23] The romantic spirit imbues the beginning of the Op.96 sonata, with its peaceful interactions of a short motif between violin and piano that builds up into a more extended period (^{X}W 37). [24] That Schubert heard this work with admiration is well known. We sense Schubert already in the relation of the violin and keyboard. Certain musical ideas in the first movement even seem to foreshadow Schubert's E-flat-major Trio (1827). [25] In its style feeling, the humor of this 2/4 [fourth] movement borrows from many an early Beethoven finale, such as the charming last movement of the Quartet Opus 18 No.2, in the same key. As Lockwood states:

> It also conveys those more complex, ironic forms of humor that Beethoven later cultivates in finales, in piano movements, and in certain scherzi right into his last period. Its nearest relatives include the finale of the C Major Cello Sonata Opus 102 No.1, a few of the rapid tempo Bagatelles, such as Opus 119 No.10 and Opus126 No.2, and the diminutive Scherzo of Opus 130. [26]

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[23] Martin Cooper. *Beethoven, The Last Decade, 1817-1827; With a Medical Appendix by Edward Larkin.* Oxford; Oxford University Press, 1985, p.214.
[24] Lockwood, p.310
[25] L.Lockwood, p.3.10
[26] L.Lockwood, p.311

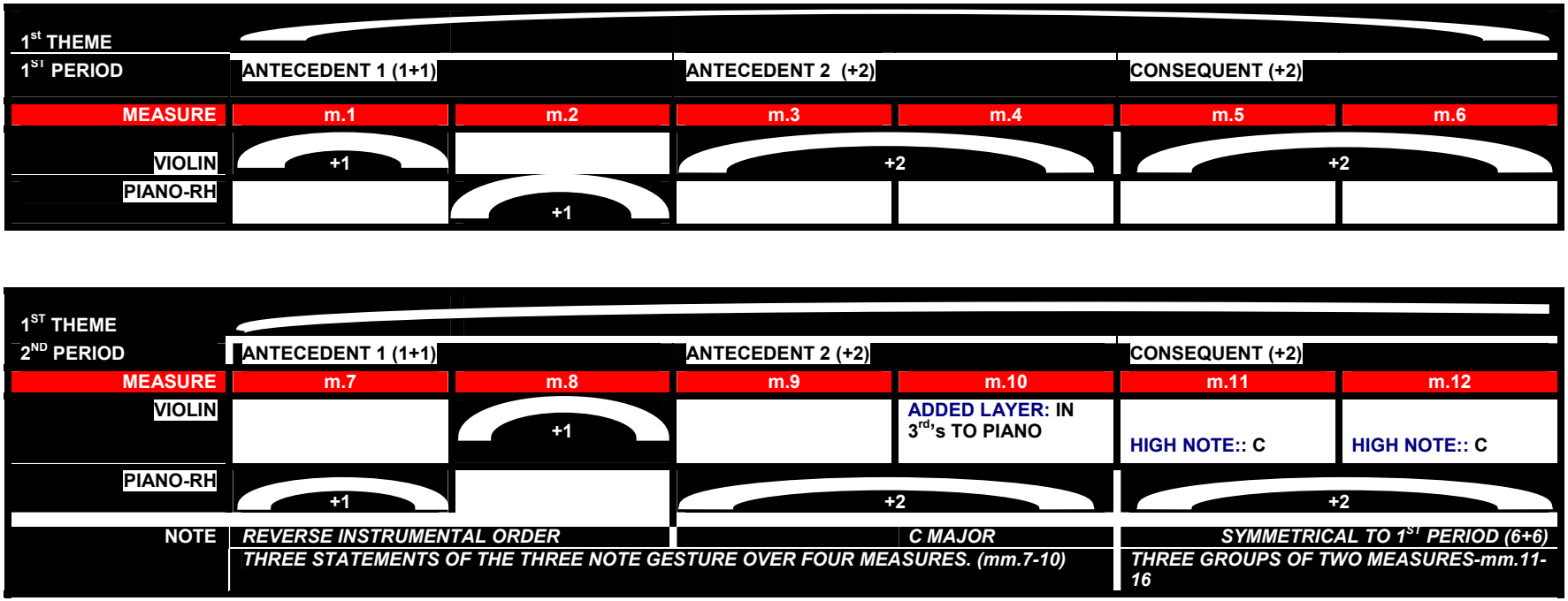
The German scholar, Arnold Schering developed prominent symbolic notions regarding Beethoven's works. Each of Schering's interpretations is drawn from Beethoven's own comments, though occasionally of questionable authenticity. Schering suggested a parallel between Beethoven's Op. 96 Violin and piano sonata and Goethe's, 'Triumph der Empfindsamkeit (Triumph of the ultra-sensitive styles).[27] This is quite notable in Beethoven's middle-period works, where we find sweeping linear motions at concluding portions of certain movements, as for instance in the first movements of the Quartet in C major, Op.59, No.3, and the present Violin Sonata in G major. [28]

[27] William Newman. *The Sonata in the Classic Era*. New York: W.W. Norton, 1983, p.504-506.
[28] A Tyson, ed. *Beethoven Studies*. New York, Cambridge University Press, 1982, p.151.

1ST MOVEMENT

Table 1:

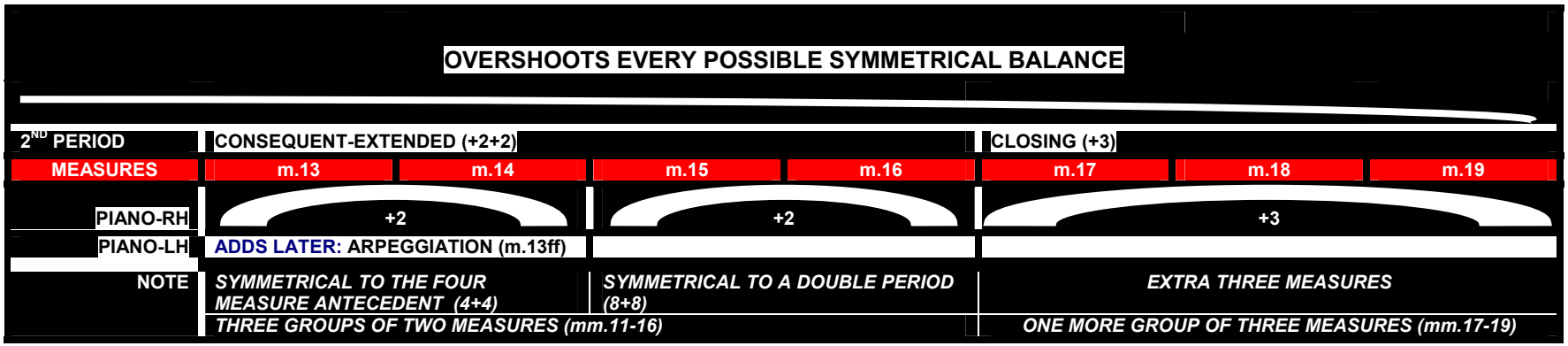
NONSYMMETRICAL DOUBLE PERIOD



1ST MOVEMENT

Table 1- (Continued)

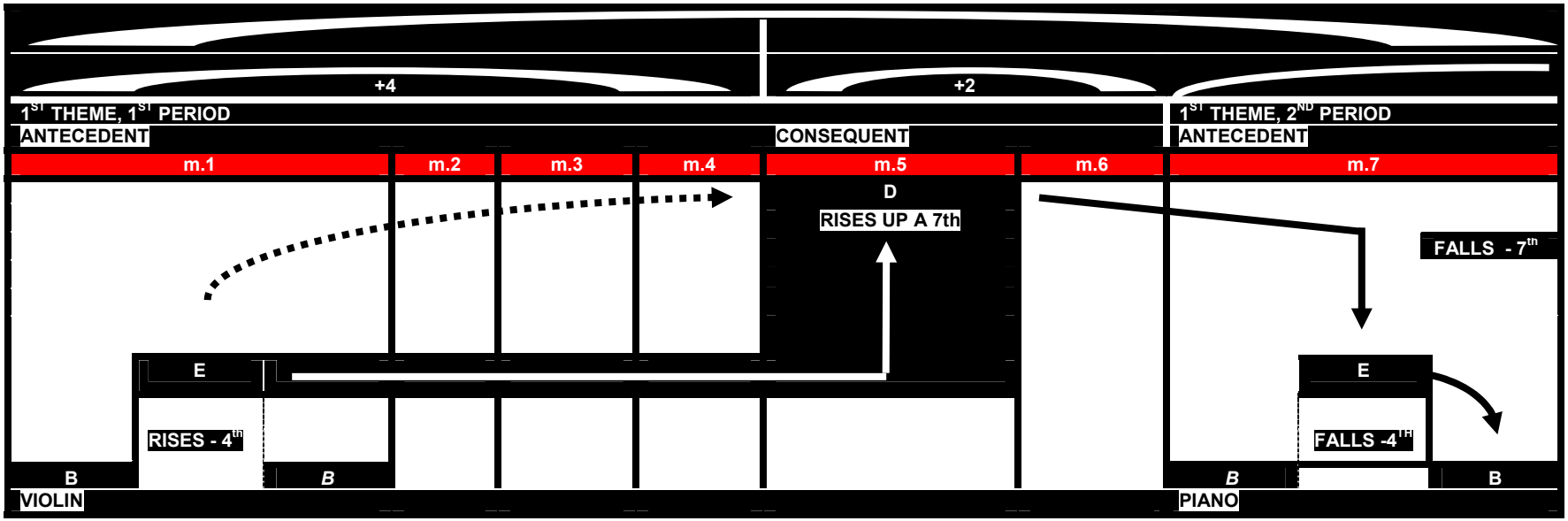
NONSYMMETRICAL DOUBLE PERIOD



1ST MOVEMENT

Table 2

ARCH SHAPE GESTURES PROJECTED FROM ON MEASURE INTO SEVEN // THE PEAK IS EXPANDED UPWARD

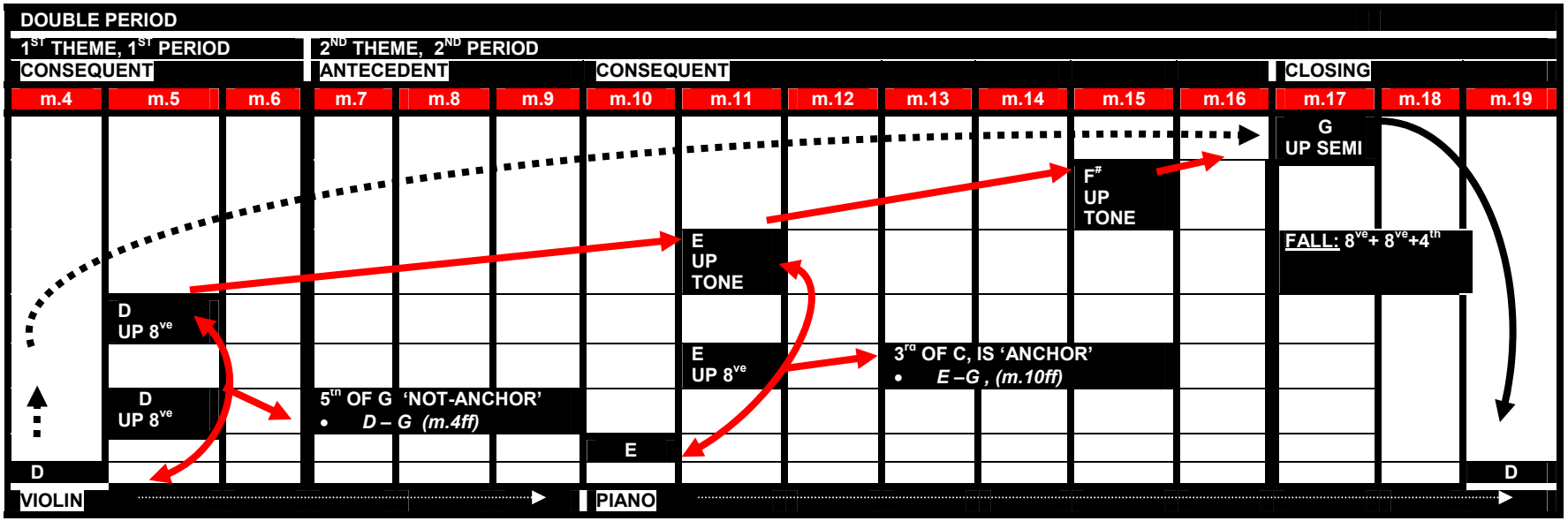


1ST MOVEMENT

Table 3

ARCH SHAPE-MELODIC MOTION

EXTENDS UPWARDS AGAINST GRAVITY THEN DESCENDS TWO OCTAVES PLUS A FOURTH



1ST MOVEMENT

Table 4

HARMONIC TENSION

1ST THEME, 1ST PERIOD							
ANTECEDENT					CONSEQUENT		
m.1		m.2	m.3	m.4 (m.10)		m.5	m.6
G	I	I	I – $V^{4/3}$ – I^{6}	$V^{4/2}$ -I^{6} CHANGING HAMONY=AVOIDS ANCHORING		I	I^{6}
		VIOLIN		D - 5th OF G MAJOR	G - 4th ABOVE D	D - 5th OF THE TONIC MOVES UP AN OCTAVE TO APEX	
				D - MOVES UP A 4TH TO G		G - D BEGIN ARPEGGIATED CONSEQUENT	

1ST THEME, 2ND PERIOD							
ANTECEDENT					CONSEQUENT		
m.7	m.8	m.9		m.10 (m.4)		m.11	m.12
G I	I	C	$V^{6/5}$	I NOW IN ROOT POSITION NOT CHANGING = NOW THE ANCHORING CHORD		I	I
PIANO-RH				E - 3rd OF C MAJOR	G - 3rd ABOVE E	E (THE 'ANCHOR'-3rd)	
				E - WHOLE STEP ABOVE D (TABLE: 2,3,10,11)			
		F		E (Up a 3rd)	G (Up a 6th)	E	
		PASSING TONES: • *OUTER VOICES 'C' AND 'A' BECOME PASSING TONES OF $V^{6/5}$ CHORD*		HARMONIC FUNCTIONS: (mm.10-14) • *NEW KEY OF C MAJOR WEAKENS THE OPENING KEYS OF G MAJOR BECAUSE THE TONIC 'G' IS NOW REINTERPRETED AS A DOMINANT OF THE SUB-DOMINANT. (I.e. V of C)* • *EXTENSION OF THE SUBDOMINANT OF G MAJOR (mm.10-14) MAKES IT UNSTABLE TONALLY*			

1ST MOVEMENT

Table 4 (Continued)

HARMONIC TENSION

1ST THEME, 2ND PERIOD							
CONSEQUENT EXTENDED					CLOSING		
m.13	m.14	m.15	m.16		m.17	m.18	m.19
C vi	vi	G vii^{6}	vii^{6}		V^{9}	V^{9}	I
					CADENCE (mm.17-19) • *FULLER TWO MEASURE CADENTIAL USE OF V^{9} CONTRIBUTES TO THE STRENGTH OF THE PERIODIC STRUCTURE*		

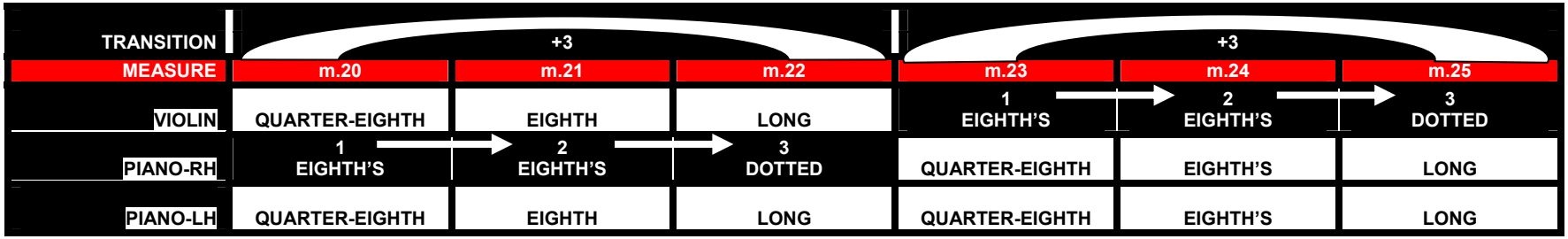
TRANSITION											
m.20	m.21	m.22	m.23	m.24	m.25	m.26	m.27	m.28	m.29	m.30	
G V^{7}/V	V$^{6/5}$/V–V$^{4/2}$/I	I^{6}/I	V$^{6/5}$/V	V$^{4/2}$/I	I^{6}	V^{7}	I	V$^{4/2}$	I	V^{7}	
HARMONIC FUNCTION: (mm.20-24) • *SECONDARY DOMINANTS THAT LEAD BACK SEVERAL TIMES TO THE TONIC (mm.22 &25)*											

TRANSITION										
m.31	m.32	m.33	m.34	m.35	m.36	m.37	m.38	m.39	m.40	
G I	vii^{7}/V of V	V/V	V^{7}/V	V^{7}/V	V^{7}/V	V^{7}/V	V^{7}/V	V^{7}/V	V^{7}/V	
	MODULATION: (m.32) • *FURTHER EMPHASIZES MODULATION TO D (mm.33-40)*	MODULATION: (m.33-40) • *V OF V - PREPARES FOR THE NEW KEY OF D MAJOR*								

1ST MOVEMENT

Table 5

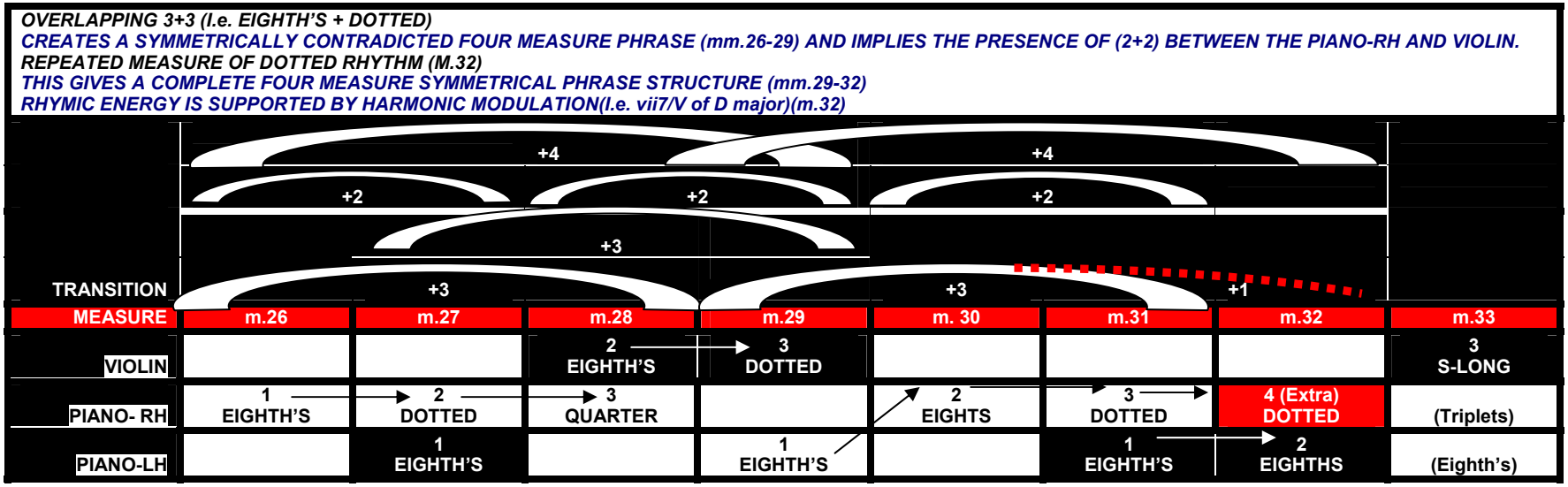
STABLE RHYTHM - NOT OVERLAPPING OR ELIDING PHRASE SEGMENTS (3+3)



1ST MOVEMENT

Table 5 (Continued)

INSTABILITY FROM NEW LEVEL OF COMPLEXITY IN RHYTHM-OVERLAPPING AND ELIDING PHRASE SEGMENTS



1ST MOVEMENT

Table 6

RHYTHMIC EXPANSION - DOTTED RHYTHM IS ROUNDED OUT TO SHORT-LONG

TRANSITION						
MEASURES	m.31	m.32	m.33	m.34	m.35	m.36
VIOLIN		*EIGHTH'S*	SHORT-LONG		SHORT-LONG	
PIANO-RH	DOTTED	DOTTED = ROUNDED OUT TO		SHORT-LONG		SHORT-LONG
PIANO-LH	*EIGHTH'S (OCTAVE A'S)*					
HARMONY: *LACK OF RESOLUTION*		vii7/V in D	V /D	V /D	V /D	V /D

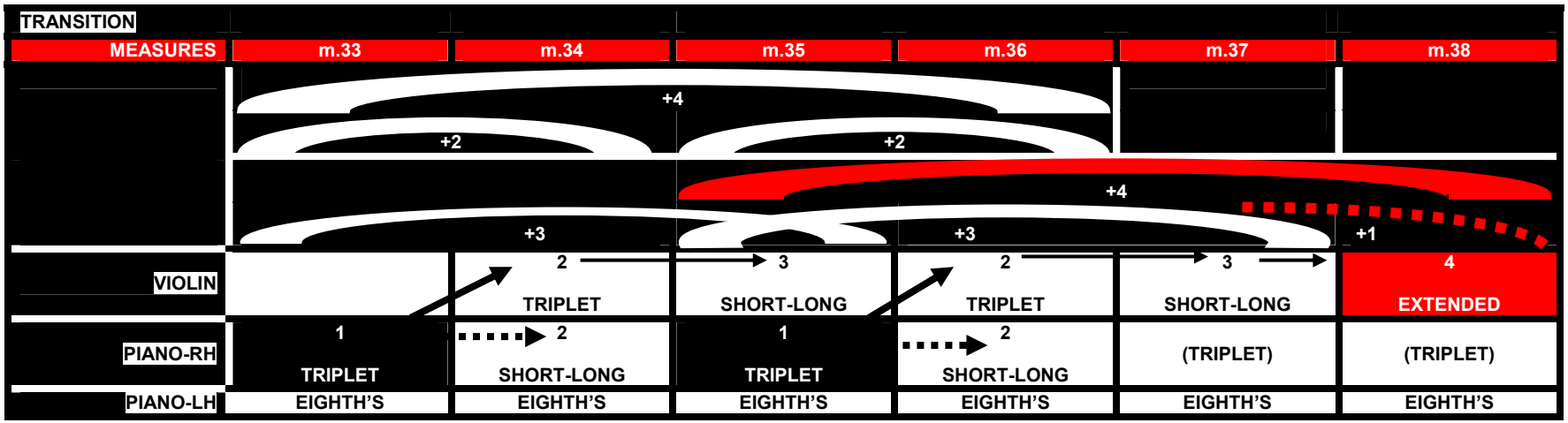
1ST MOVEMENT

Table 7

OVERLAPPING AND CONFLICTING RHYTHMIC GROUP PHRASES

3 OVER 3 CONFLICTING WITH 2 PLUS 2 OVER 4

(Analogous to mm.26-32, see Table 5)

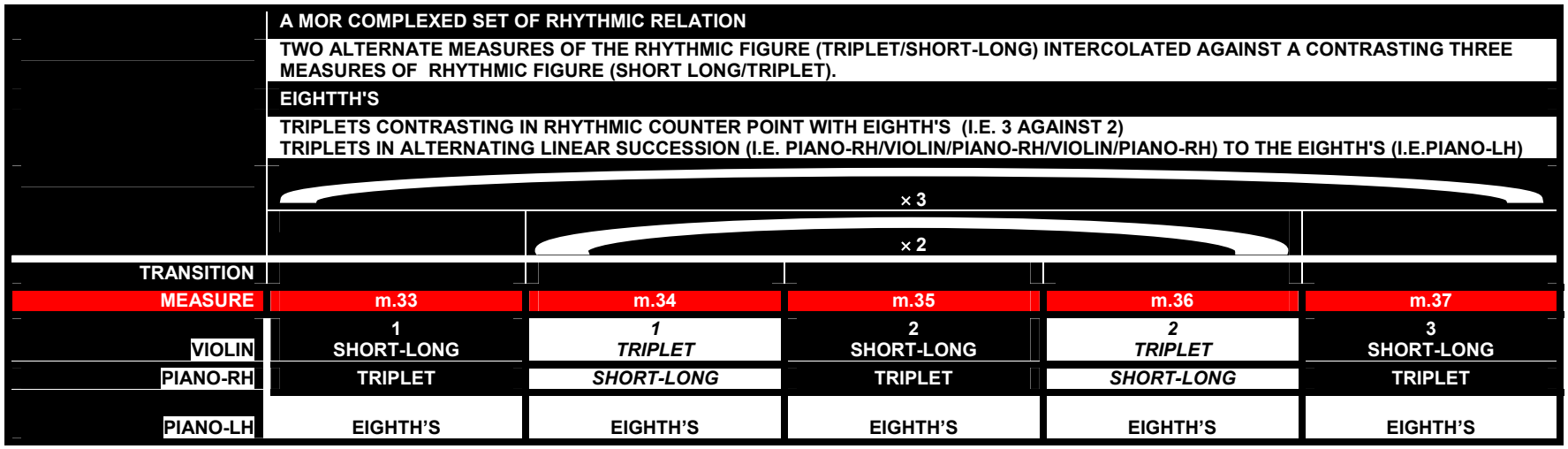


1ST MOVEMENT

Table 8

TWO CONTRASTING RHYTHMIC FIGURES

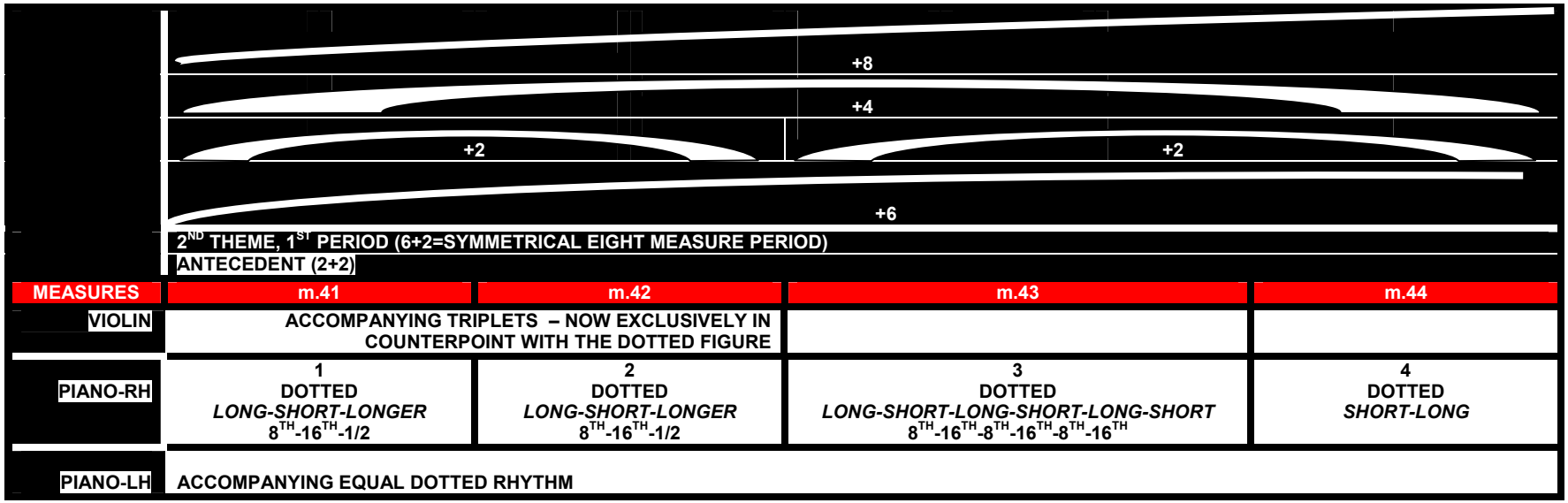
2 AGAINST 3



1ST MOVEMENT

Table 9

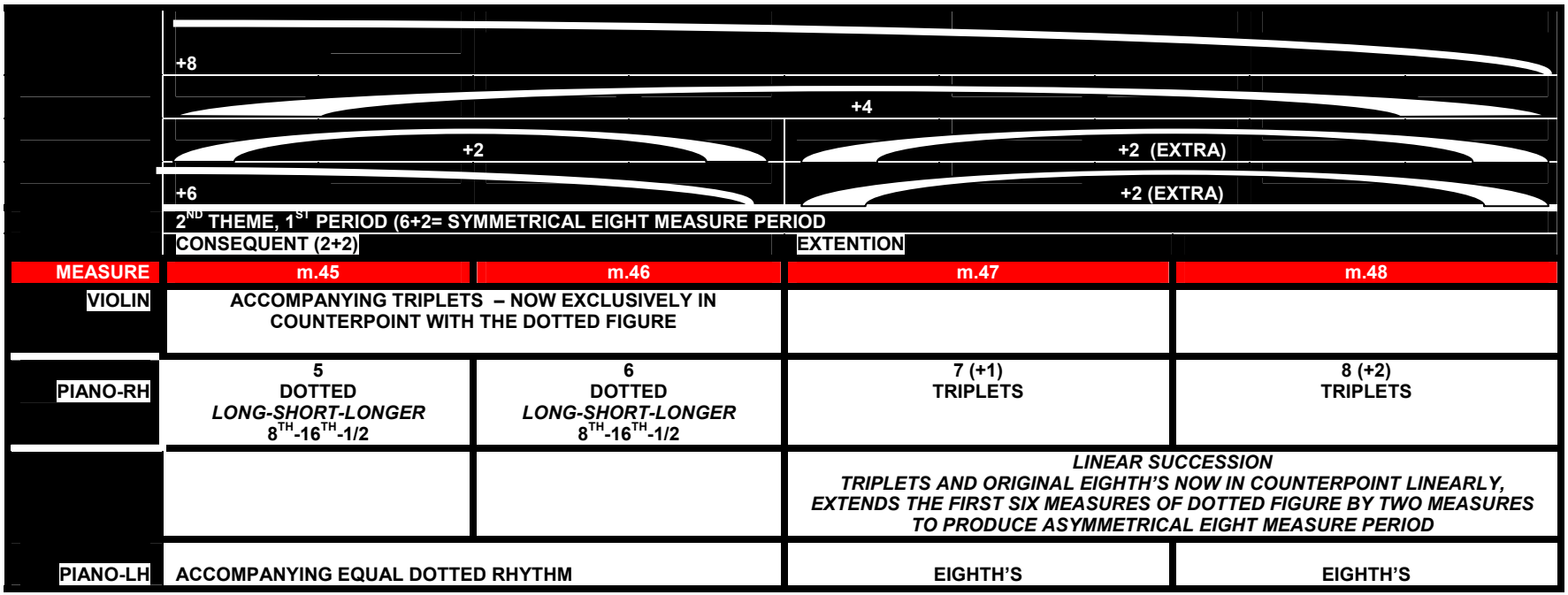
STRUCTURE OF THE SONATA ALLEGRO FORM 2ND THEME -STABILIZES THE TRANSITION CONFLICT



MEASURES	m.41	m.42	m.43	m.44
VIOLIN	ACCOMPANYING TRIPLETS – NOW EXCLUSIVELY IN COUNTERPOINT WITH THE DOTTED FIGURE			
PIANO-RH	1 DOTTED *LONG-SHORT-LONGER* 8TH-16TH-1/2	2 DOTTED *LONG-SHORT-LONGER* 8TH-16TH-1/2	3 DOTTED *LONG-SHORT-LONG-SHORT-LONG-SHORT* 8TH-16TH-8TH-16TH-8TH-16TH	4 DOTTED *SHORT-LONG*
PIANO-LH	ACCOMPANYING EQUAL DOTTED RHYTHM			

1ST MOVEMENT

Table 9 (Continued)

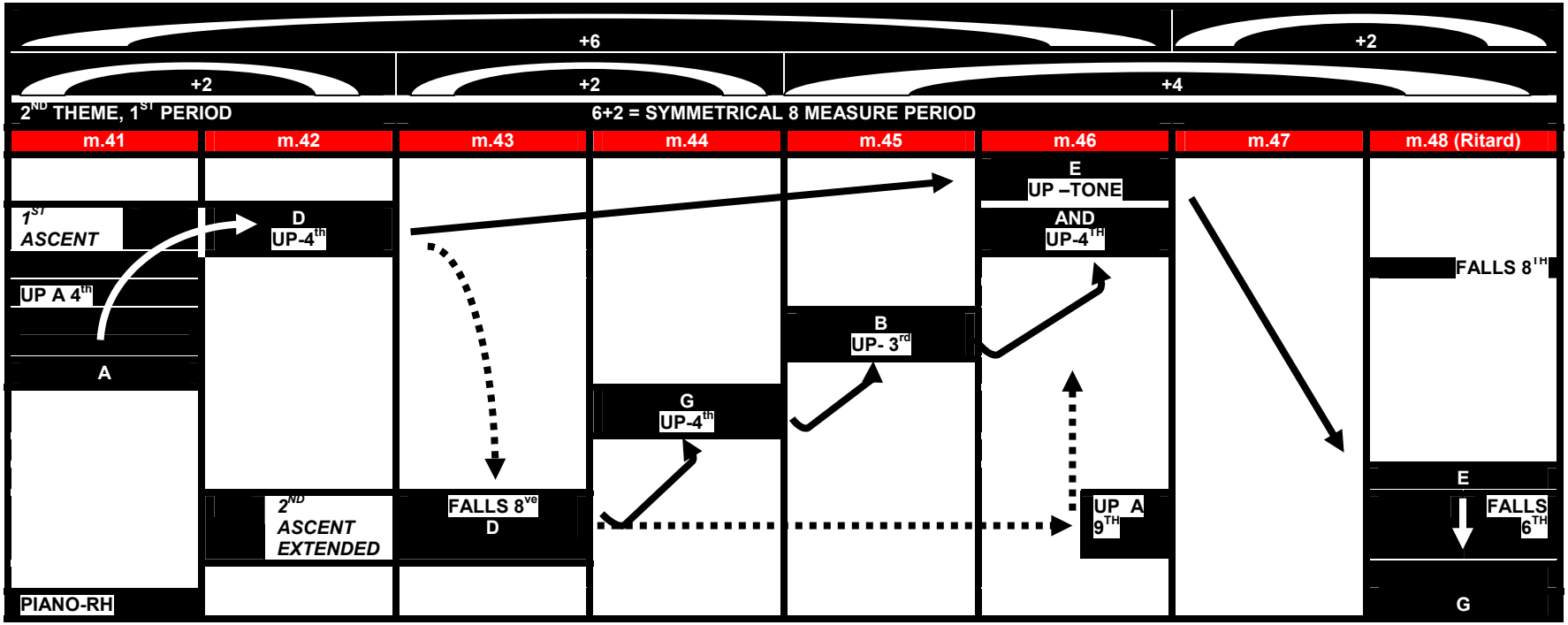


MEASURE	m.45	m.46	m.47	m.48
VIOLIN	ACCOMPANYING TRIPLETS – NOW EXCLUSIVELY IN COUNTERPOINT WITH THE DOTTED FIGURE			
PIANO-RH	5 DOTTED *LONG-SHORT-LONGER* 8^{TH}-16^{TH}-1/2	6 DOTTED *LONG-SHORT-LONGER* 8^{TH}-16^{TH}-1/2	7 (+1) TRIPLETS	8 (+2) TRIPLETS
			LINEAR SUCCESSION ***TRIPLETS AND ORIGINAL EIGHTH'S NOW IN COUNTERPOINT LINEARLY, EXTENDS THE FIRST SIX MEASURES OF DOTTED FIGURE BY TWO MEASURES TO PRODUCE ASYMMETRICAL EIGHT MEASURE PERIOD***	
PIANO-LH	ACCOMPANYING EQUAL DOTTED RHYTHM		EIGHTH'S	EIGHTH'S

1ST MOVEMENT

Table 10

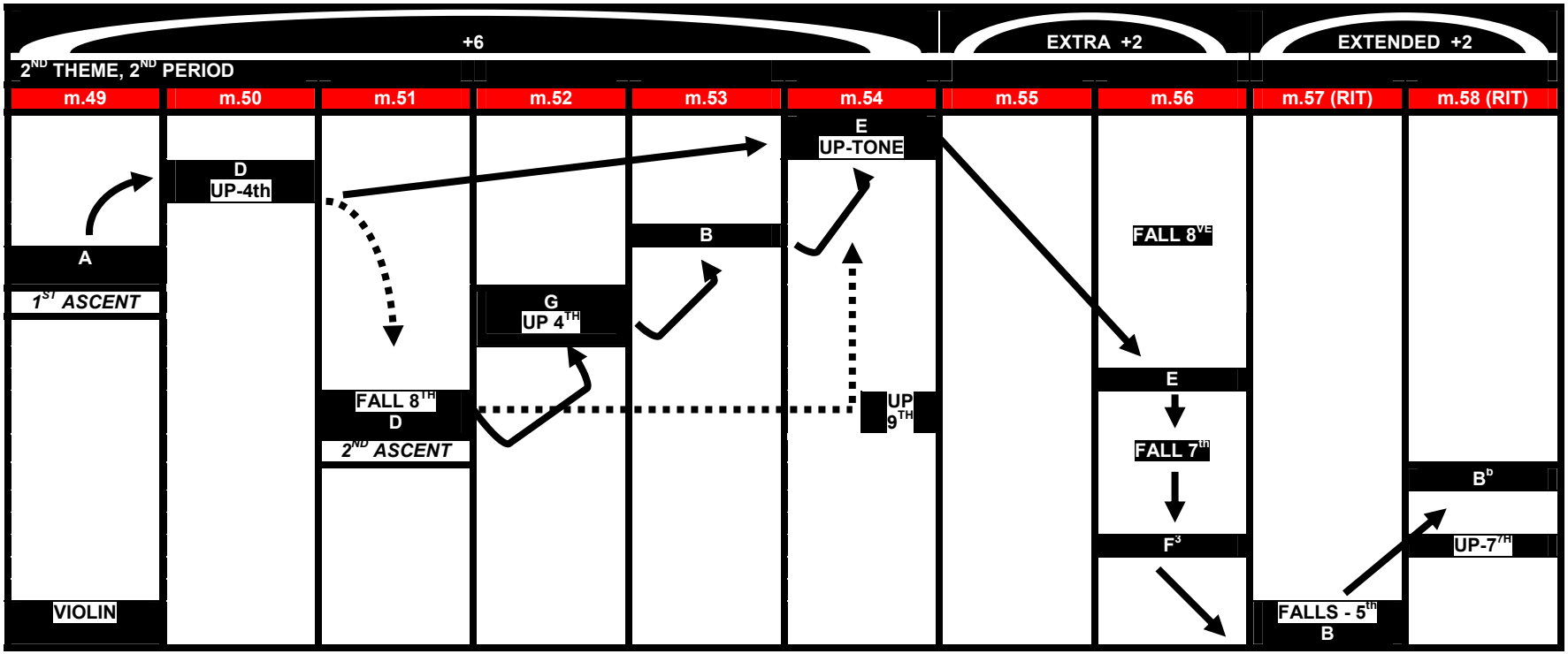
SIMILARITIES IN STRUCTURE AND DETAIL OF THE ARCH SHAPE - THEME 1



1ST MOVEMENT

Table 11

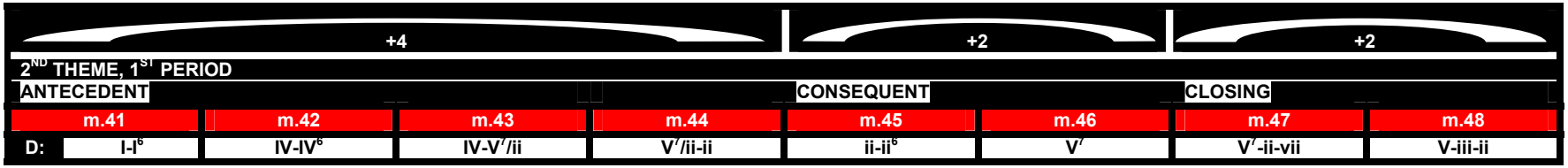
REPEAT IN PARALLEL STRUCTURE OF THE 2ND THEME, 1ST PERIOD - (PLUS EXTENDED)

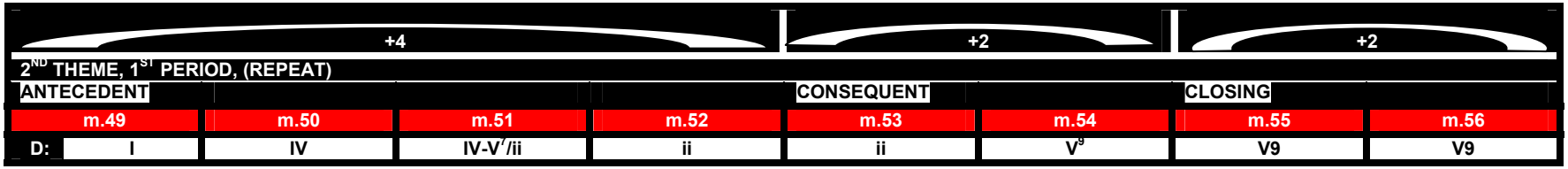


1ST MOVEMENT

Table 12

HARMONY





1ST MOVEMENT

Table 13

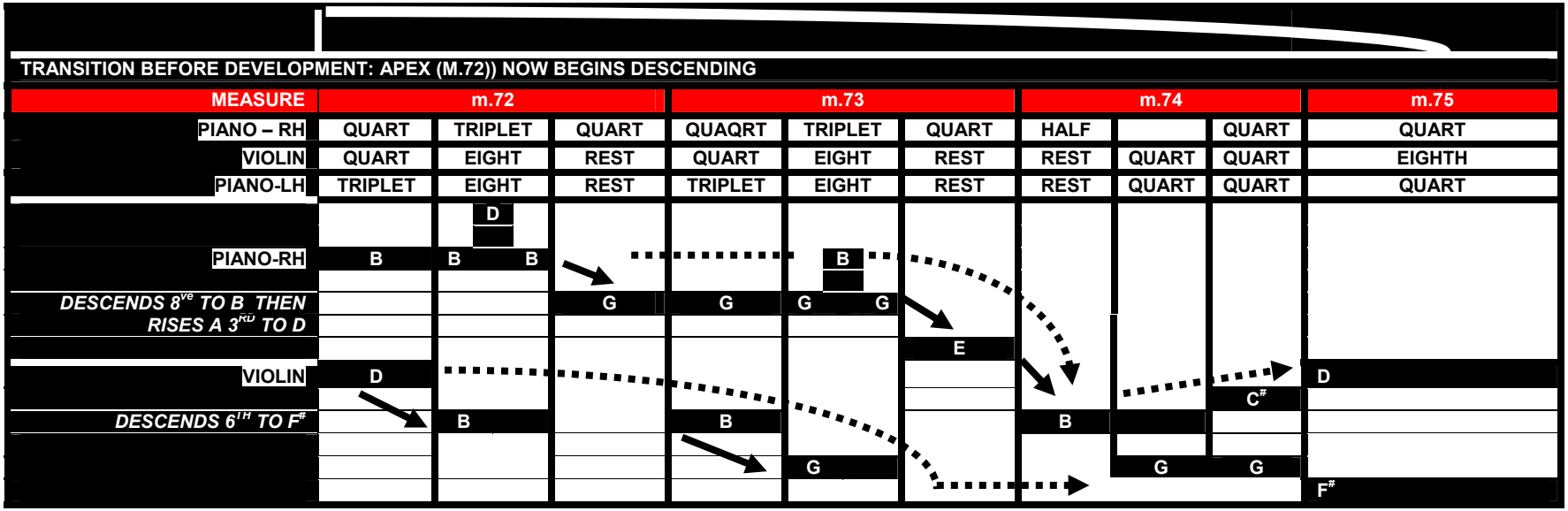
MELODY AND RHYTHM

	+4				+3		
TRANSITION BEFORE DEVELOPMENT							
MEASURES	m.59	m.60	m.61	m.62	m.63	m.64	m.65
VIOLIN	LONG	LONG	LONG	LONG	TRIPLET	TRIPLET	TRIPLET
PIANO-RH	TRIPLET	TRIPLET	TRIPLET	TRIPLET			
	TRIPLET OVERLAPPING BETWEEN THE PIANO-RH AND VIOLIN TRIPLET BASED ON MICROSCOPIC OCCURENCES OF THE M.1 SHORT ARCH GESTURE				PIANO-RH: TRILL FIGURE- ON F FORESHADOWS STEPWISE MOTION OF DEVELOPOMENT(M.96)		
PIANO-LH	LONG	LONG	LONG	LONG		TRIPLET	TRIPLET

	+2		+3			
TRANSITION BEFORE DEVELOPMENT						
MEASURES	m.66	m.67	m.68 (SFZ)	m.69 (SFZ)	m.70 (SFZ)	m.71 (SFZ)
VIOLIN	LONG	QUARTERS	QUARTERS	QUARTERS	QUARTERS	QUARTERS
PIANO-RH	SHORT – LONG	SHORT – LONG	QUARTERS	QUARTERS	QUARTERS	LONG – SHORT
RISING - TRILL (STEPWISE)	$F^{\#}$-G *(FORESHADOWS M.96FF)*	$G^{\#}$-A	A	A	A	A-$A^{\#}$ *(APEX)*
PIANO-LH	EIGHTHS	EIGHTHS	EIGHTHS	EIGHTHS	EIGHTHS	EIGHTHS

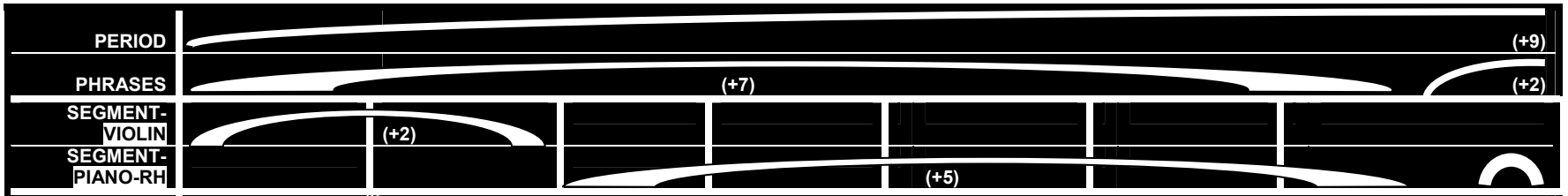
1ST MOVEMENT

Table 13 (Continued)



1ST MOVEMENT

Table 14 - Rhythmic Growth



	DEVELOPMENT – 1ST PERIOD ANTECEDENT						CONSEQUENT
MEASURE	**m.96**	**m.97**	**m.98**	**m.99**	**m.100**	**m.101**	**m.102**
VIOLIN	LONG -SHORT HALF-QUARTER	LONG-SHORT HALF-QUARTER	TRIPLET	TRIPLETS	TRIPLETS	TRIPLETS	TRIPLET
PIANO-RH	TRIPLETS	TRIPLETS	QUARTERS	LONG -SHORT HALF-QUARTER	LONG -SHORT HALF-QUARTER	LONG –SHORT HALF-QUARTER	LONG HALF / SHORT- $8^{TH}+8^{TH}$
PIANO-LH	TRIPLETS	TRIPLETS	TRIPLETS	TRIPLETS	TRIPLETS	TRIPLETS	TRIPLETS
HARMONY			F- PEDAL • *SUPPORT'S THE PIANO-LH TRIPLETS WITH GREATER HARMONIC CONTINUITY THAT IS CREATED WITH THE REPEATED, ON THE BEAT 'F' PEDAL (mm.98-110, PIANO-LH).* F - DOUBLE FUNCTION • *'F' IS BASS NOTE OF THE DOMINANT AND SECOND INVERSION OF THE TONIC B^b MINOR)*				
RHYTHM			• *TRANSFERS LONG-SHORT FROM VIOLIN TO PIANO (mm.96ff, VIOLIN TO mm.99ff, PIANO)*				
GESTURE			• *MODIFIED GESTURE NOW FUNCTIONS AS A CADENTIAL FIGURE (m.102-103).* • *THEREFORE, IT TAKES ON A DUAL ROLE OF CONSEQUENT (m.102ff) AND ANTECEDENT (m.104ff).*				
SEQUENCE	C MINOR →	F MINOR →	B^b MINOR				

1ST MOVEMENT

Table 14 (Continued) -Rhythmic Growth

PERIOD	(+9)						(+13)
PHRASES	(+2)			(+1)			(+12)
SEGMENTS- VIOLIN							
SEGMENTS- PIANO-RH						SLUR	SLUR
	DEVELOPMENT - 2ND PERIOD CONSEQUENT (CONT'D)			ANTECEDENT		CONSEQUENT	
MEASURE	m.103			m.104		m.105	m.106
VIOLIN		SHORT- 8TH + 8TH		LONG QUART+QUART			
PIANO-RH	-LONG QUART+QUART				SHORT- 8TH + 8TH	LONG QUART+QUART SHORT- QUART	LONG HALF SHORT- QUART
PIANO-LH	TRIPLETS			TRIPLETS		TRIPLETS	TRIPLETS
DEVELOPMENT ATTEMPTS :	*TO ESTABLISH A BROADER, MORE LYRICAL CENTER OF THE MOVEMENT.*						
PHRASE REPEAT					*MODIFIED REPEAT OF PHRASE 1*		
RHYTHM					*LONG-SHORT (M.96FF) IS NOW SLURRED OVER THE BAR LINE GIVING THE ILLUSION OF REVERSAL TO 'SHORT-LONG-REST'. (I.E. IN A DIFFERENT METRIC POSITION).*		
HARMONY	F - REPETITION • *F-PEDAL (mm.98-110*			KEY: • *CHANE IN MODE FROM MINOR TO MAJOR*		F - DOUBLE FUNCTION (M.105) • *THE 'F ' DOMINANT OF 'B^{b} ' REVEALS ITSELF AS A DOMINANT SEVENTH-CHORD BY THE ADDITION OF 'E^{b} ' IN THE TRIPLETS* F –DOUBLE FUNCTION (M..105) • *AUGMENTED 6th CHORD, FACD$^{\#}$, (ENHARMONIC SPELLING OF FACE^{b} , m.105, IN THE NEW KEY OF 'A' MINOR , m.112).*	

1ST MOVEMENT

Table 14, (Continued): RHYTHMIC GROWTH

SEGMENT- VIOLIN				SLUR +REST	
SEGMENT- PIANO-RH	SLUR	SLUR	SLUR + REST		SLUR+REST
	DEVELOPMENT: 2ND PERIOD CONSEQUENT - CONT'D				
MEASURE	m.107	m.108	m.109	m.110	m.111
VIOLIN			SHORT-	LONG REST	REST SHORT-
PIANO-RH	LONG SHORT-	LONG SHORT-	LONG REST	REST SHORT-	LONG REST
PIANO-LH	TRIPLETS	TRIPLET	TRIPELTS	TRIPLETS	TRIPLETS
RHYTHM			SEPERATION OF SLURRED FIGURES BY REST • *SEPARATION OF SLURRED FIGURES BY REST IN ALTERNATION BETWEEN VIOLIN AND PIANO (mm.109-116* SHORT-LONG BROKEN UP BETWEEN PIANO AND VIOLIN • *THE SHORT-LONG FIGURE IS ONCE AGAIN BROKEN UP (I.e. OVER THE BAR LINE) IN THE PIANO-RH AND VIOLIN (mm.108ff,).*		
HARMONY	'F' PEDAL • *F-PEDAL (mm.98-110)* • *VOICE LEADING UNIFIED INTO THE SUSTAINED PEDALS*				E PEDAL • *E IN BASS (V/A) (mm.111-117)* HARMONY • *CHANGING HARMONY*

1ST MOVEMENT

Table 14 (Continued)

RHYTHMIC EXPANSION

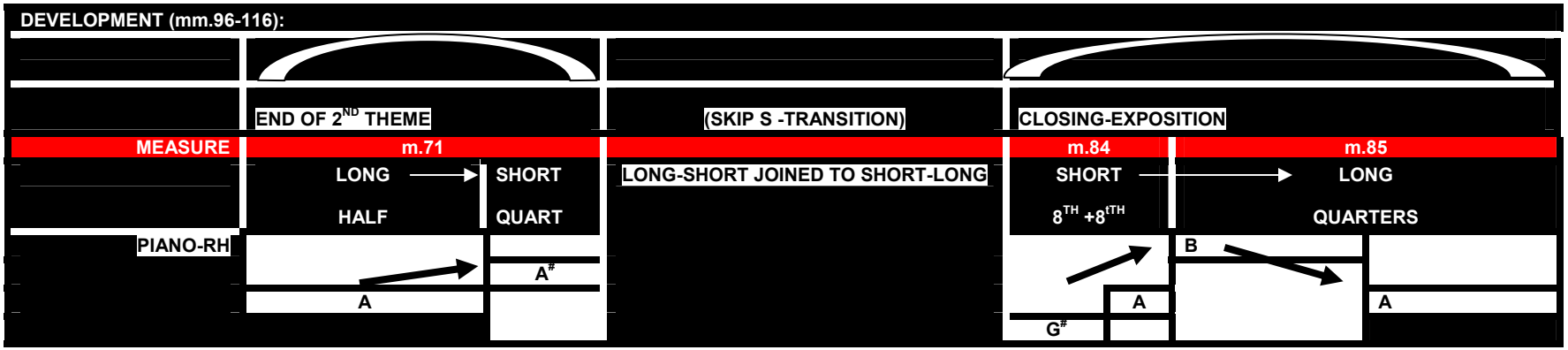
SEGMENTS- VIOLIN	SLUR				SLUR+REST				SLUR+REST		
SEGMENTS- PIANO-RH			SLUR+REST				SLUR+REST				
	DEVELOPMENT:2ND PERIOD CONSEQUENT: CONT'D										
MEASURE	m.112		m.113		m.114		m.115		mm.116-117		
VIOLIN	-LONG	REST	REST	SHORT-	LONG	REST	REST	SHORT-	LONGER		
PIANO-RH	REST	SHORT-	LONG	REST	REST	SHORT-	LONG	REST	REST		
PIANO-LH	TRIPLETS		TRIPLETS		TRIPLETS		TRIPLETS		TRIPLETS+QUARTER		
HARMONY	E - PEDAL • *E IN THE BASS (MM.111-117)* ARRIVAL AT THE TRITONE OF THE INITIAL B^b MINOR THAT BEGINS THE DEVELOPMENT • *E - SUGGEST $I^{6/4}$/a (m.112) GOING TO V/a (m.113)*								KEY • *E - IN THE BASS (mm.111-117) NOW BECOMES A TONIC OF E MA.JOR.*		

1ST MOVEMENT

Table 15

THE DEVELOPMENT JOINS THE LONG-SHORT FIGURE WITH THE MODIFIED GESTURE OF THE WORK

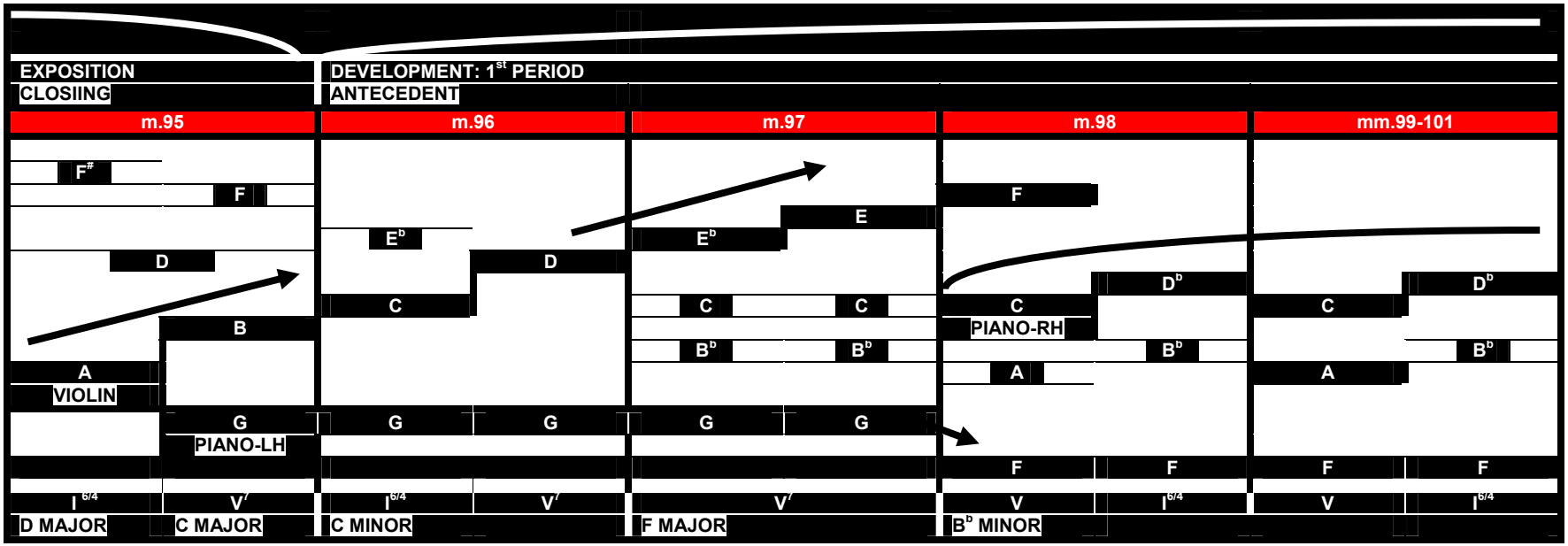
(I.E. SHORT-LONG)



1ST MOVEMENT

Table 16

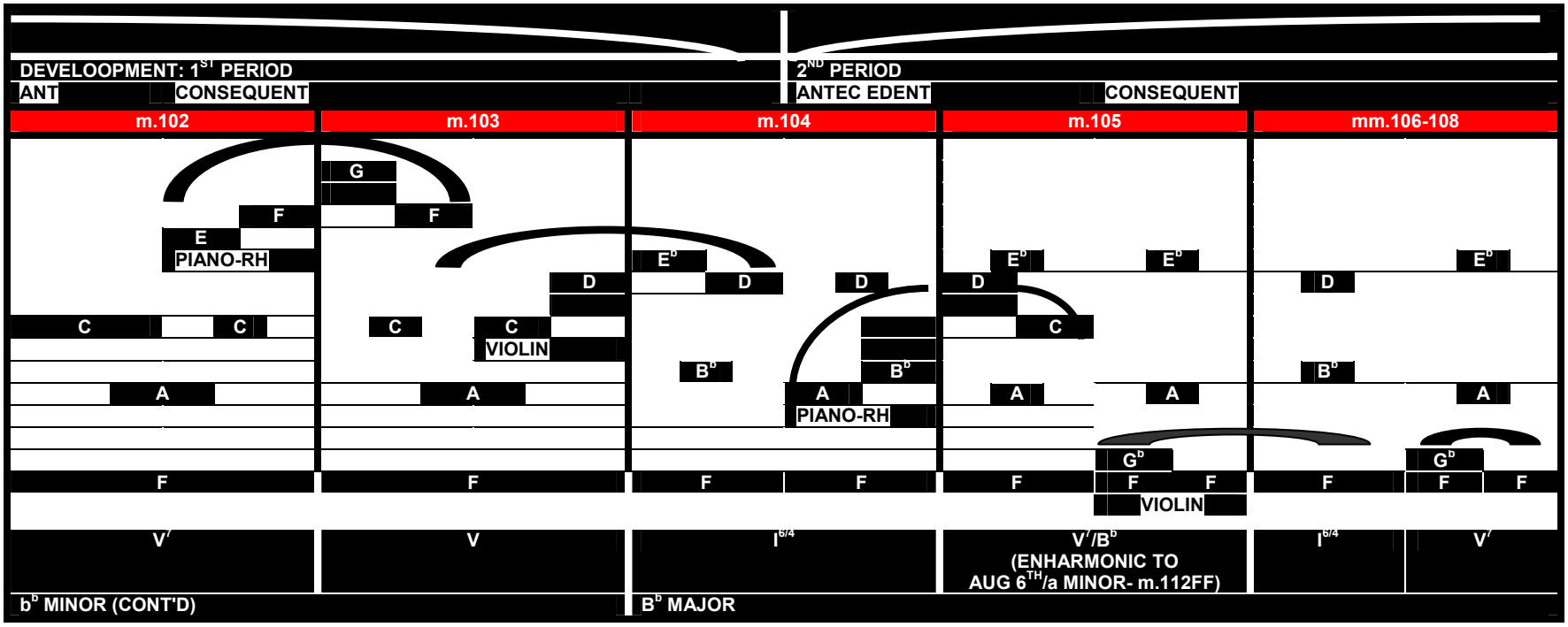
HARMONY



1ST MOVEMENT

Table 16 (Continued)

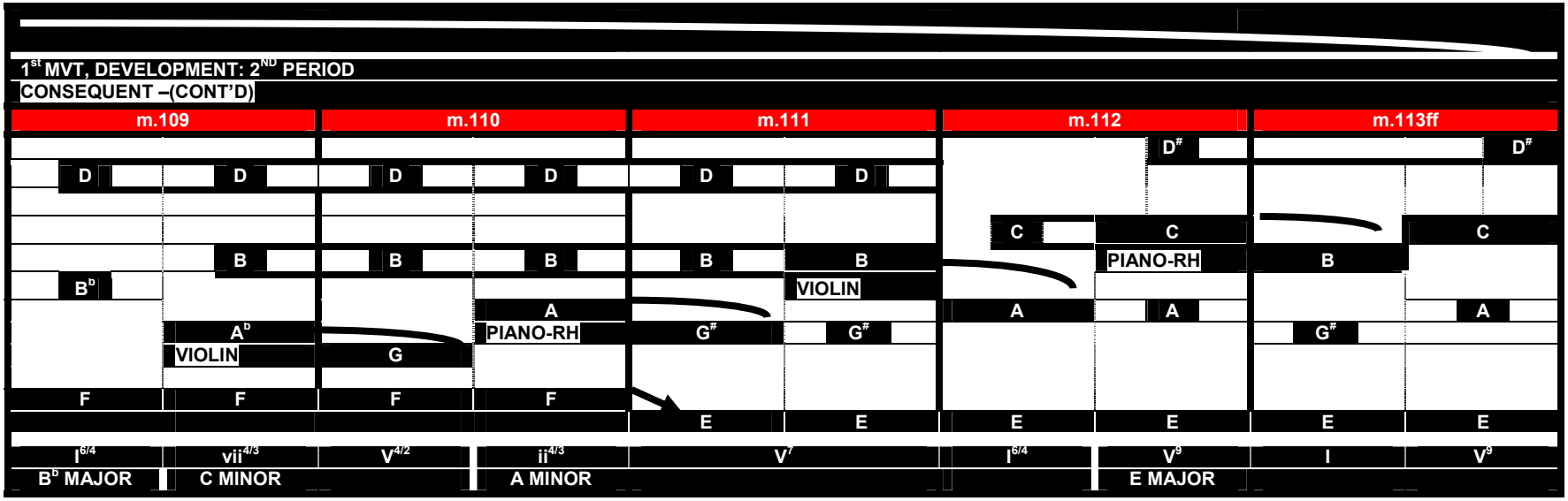
HARMONY



1ST MOVEMENT

Table 16 (Continued)

HARMONY

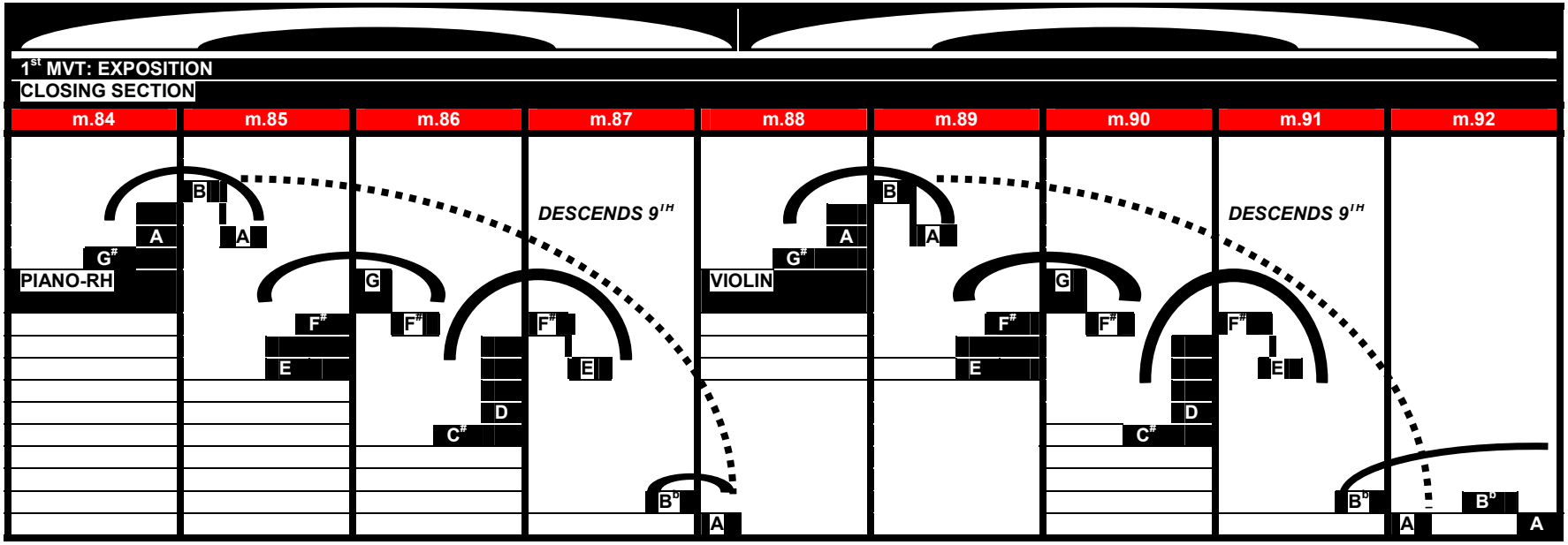


1ST MOVEMENT

Table 17

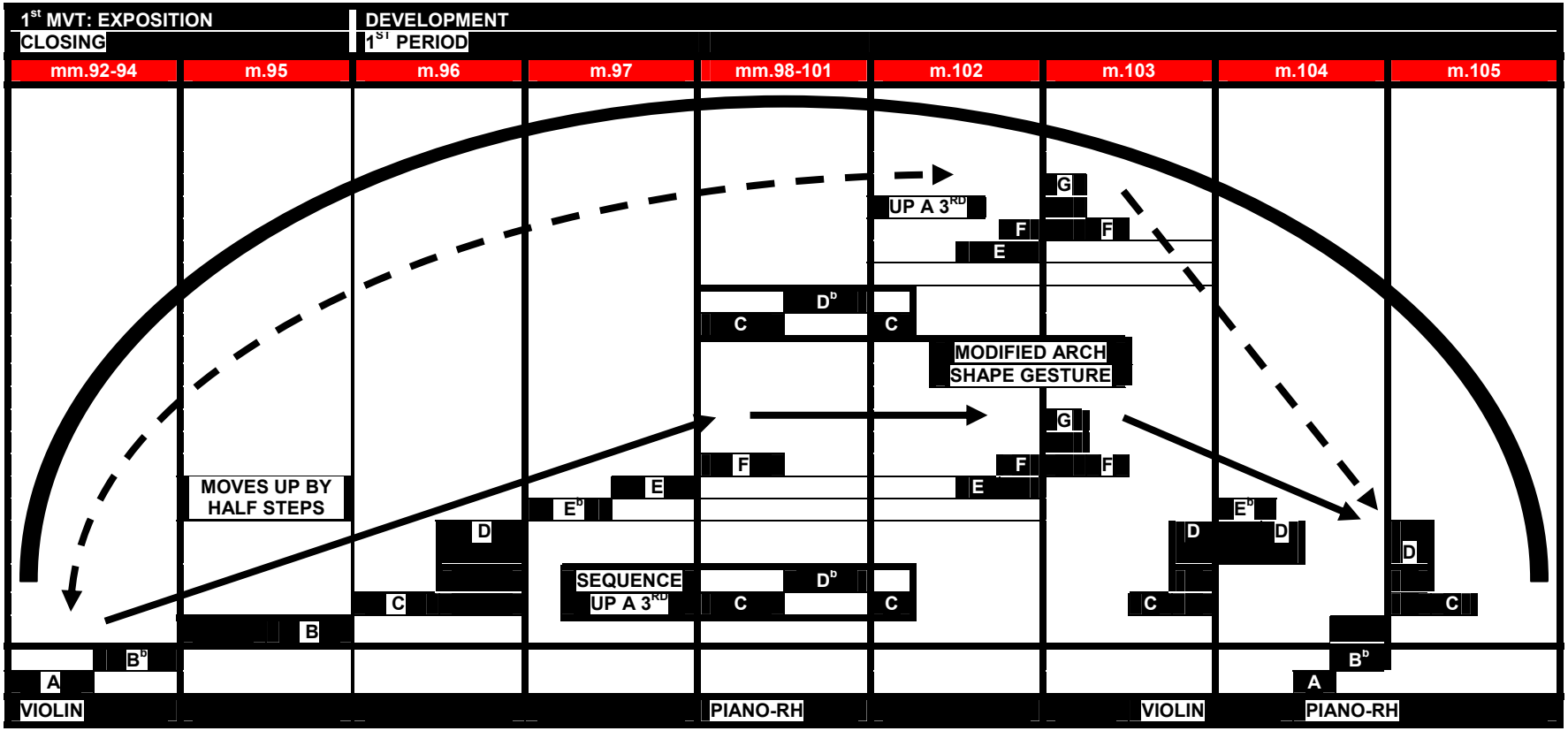
MELODIC PHRASE DESCENDS A 9TH

TONE (B-A), SEMITONE (G-F#), TONE (F#-E), SEMITONE (BB-A)



1ST MOVEMENT

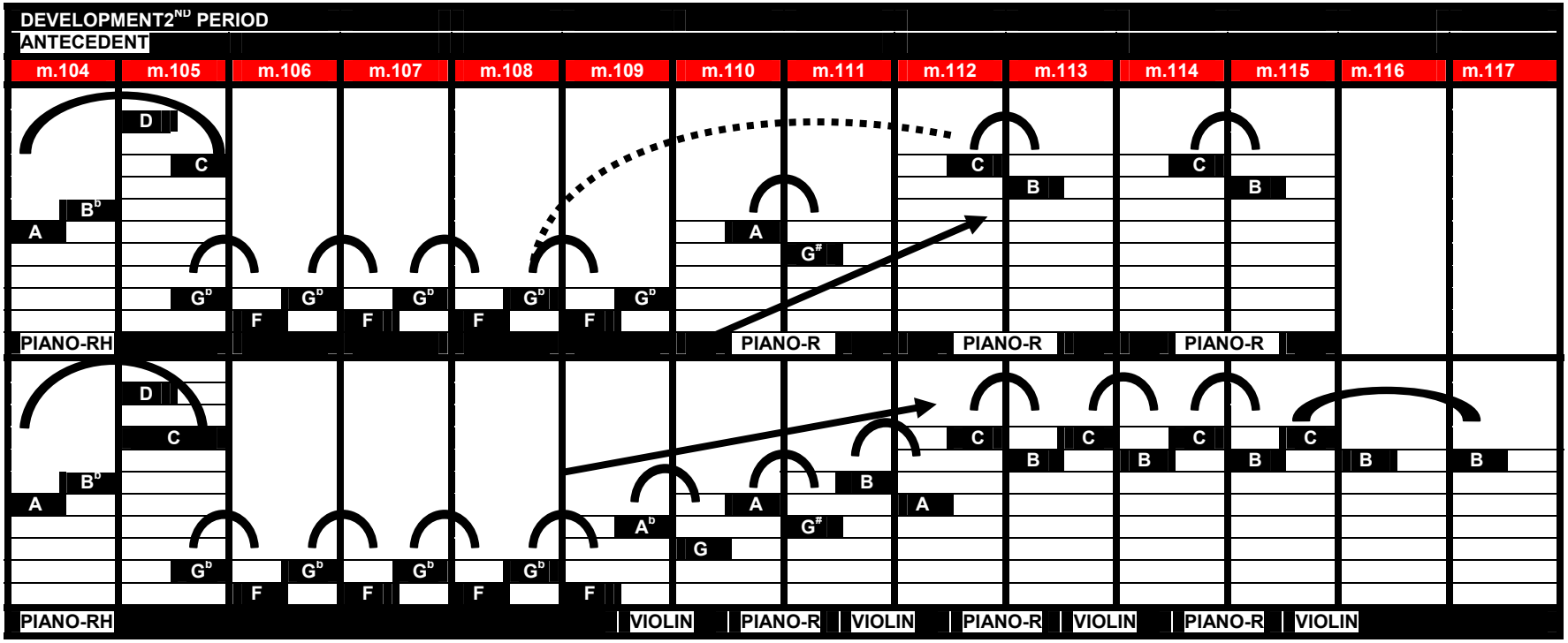
Table 18: EXPOSITION REPEAT CREATES LARGE ARCH SHAPE MELODIC GROWTH



1ST MOVEMENT

Table 19

MELODIC GROWTH - CHROMATIC ASCEND MOTION



2ND MOVEMENT

Table 1: THEMATIC CONCEPTION DIFFERENT TO 1ST MOVEMENT

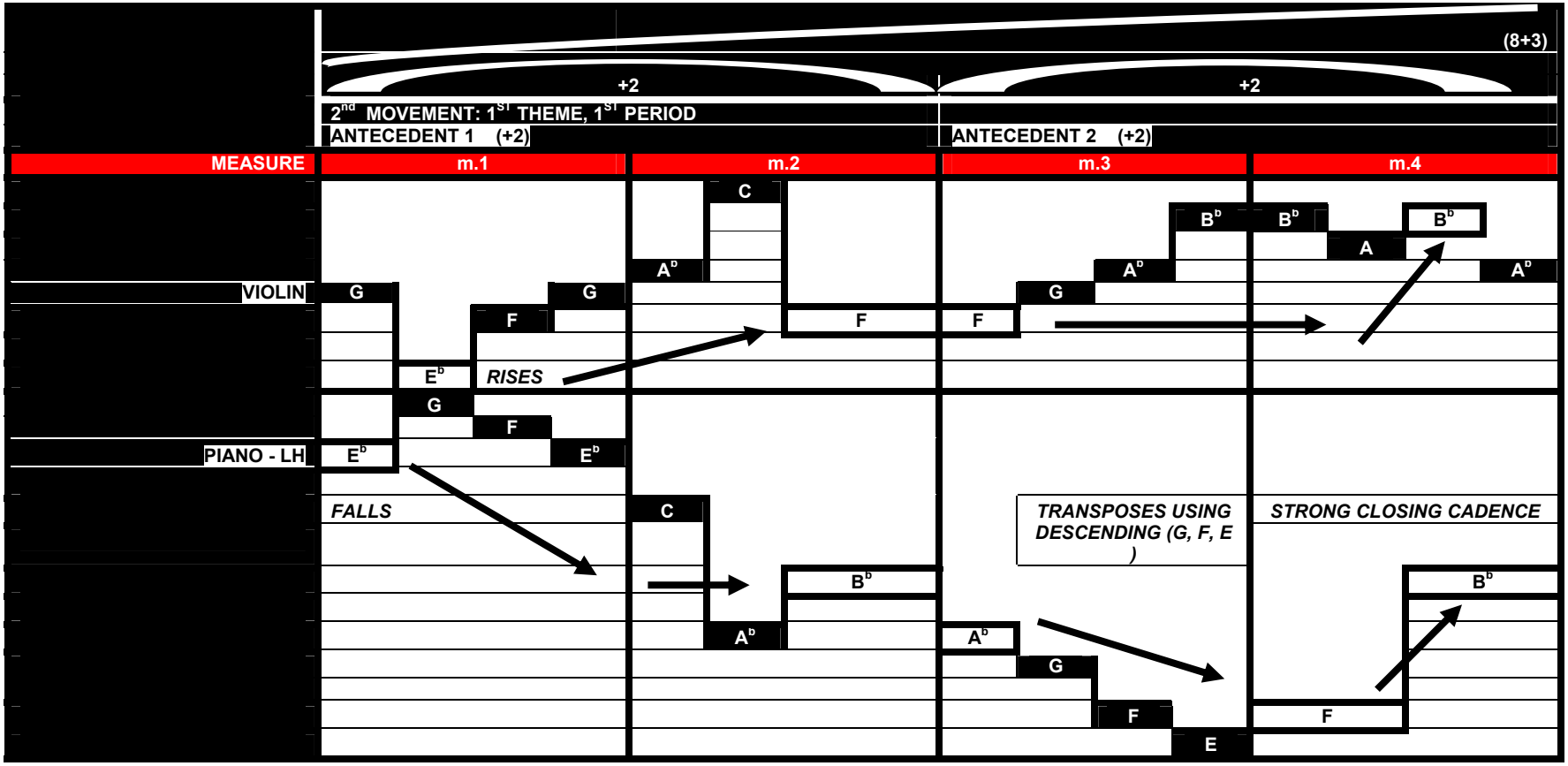
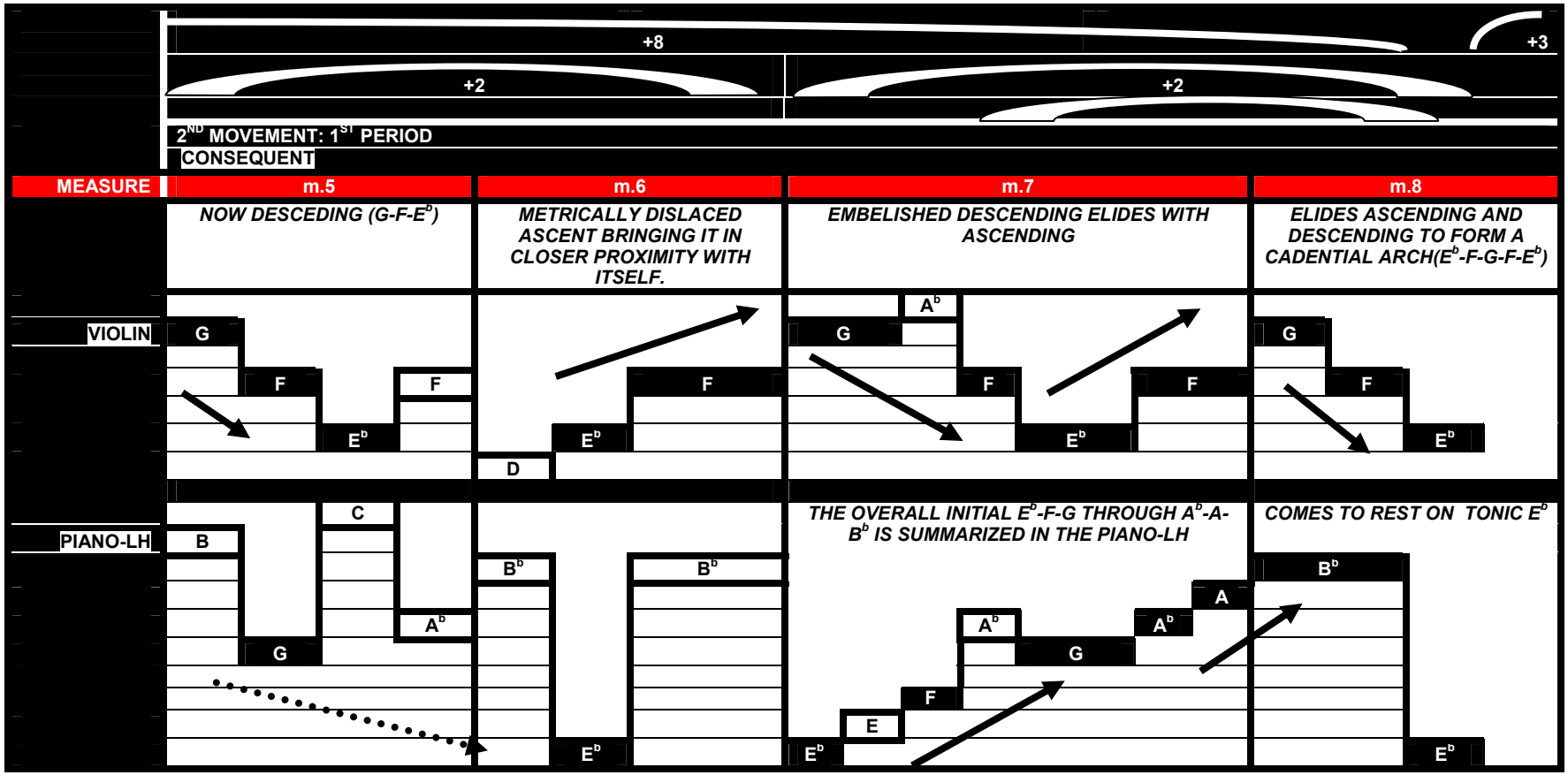
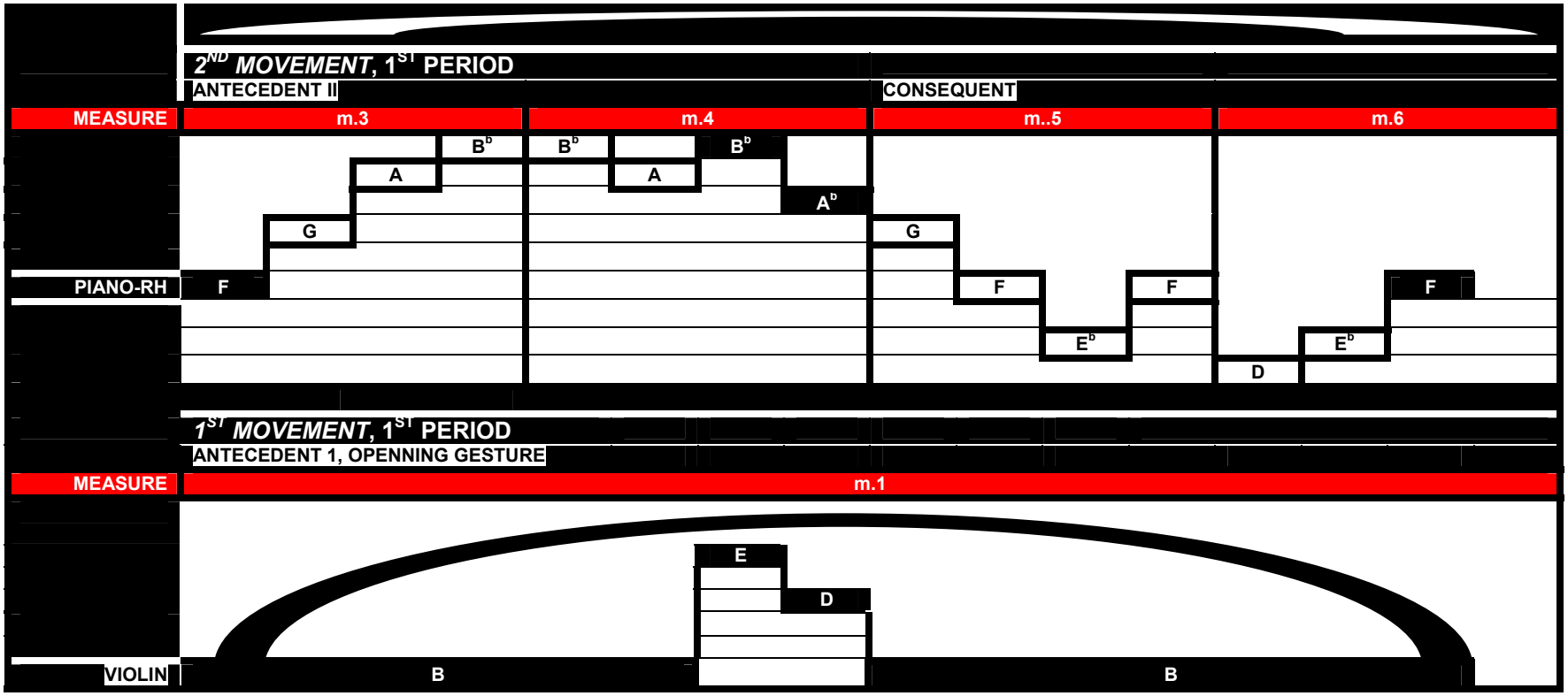


Table 2, CONTINUES: EMBELLISH THE DESCENDING CADENTIAL FIGURE "G-F-E^B" BY BRINGING IT IN CLOSER PROXIMITY WITH ITSELF IN THE COURSE OF THIS PHRASE.



2ND MOVEMENT

Table 3 - 1ST MOVEMENT OPENING GESTURE IN 2ND MOVEMENT 1ST PERIOD



2ND MOVEMENT

Table 4

HARMONY - PHASE OF THE ARCH, IS STRENGTHENED BY THE INCREASING IMPORTANCE OF THE SUPERTONIC NOTE F

	2ND MOVEMENT, 1ST THEME, 1ST PERIOD															
	ANTECEDENT 1															
MEASURE	**m.1**								**m.2**							
	ASCENDING PHASE OF THE ARCH (mm.1-4), SEE TABLE 1-2)															
(THEME) -PIANO-RH	G		E^b		F		G		A^b		C		F			
RH	E^b	B^b	B^b	G	A^b	D^b	A^b	E^b	E^b	C	C	E^b	D	B^b	D	B^b
BASS-PIANO-LH	B^b		B^b		B^b		E^b		C		A^b		B^b			
LH	E^b		G		F		E^b		C		A^b		B^b			
HARMONY	I		I^6		$V^{4/3}$		I		IV^6		IV		V			
	• *E^b MAJOR* • *F-BASS NOTE OF $V^{4/3}$ CHORD*															

2ND MOVEMENT

Table 4 (Continued)

HARMONY - PHASE OF THE ARCH, IS STRENGTHENED BY THE INCREASING IMPORTANCE OF THE SUPERTONIC NOTE F

	2ND MOVEMENT, 1ST THEME, 1ST PERIOD							
	ANTECEDENT 2				CONSEQUENT			
MEASURE	m.3				m.4			
	ASCENDING ARCH CONTINUED (mm.1-4, SEE TABLE 1).				*ARCH PEAKS ON B^b STRENGTHENED BY NEAR MODULATION TO B^b*			*DESCENDING (mm.4-8)*
THEME---------PIANO-RH	F	G	A^b	B^b	B^b	A	B^b	A^b
RH	D B^b	B^b E^b	F D	G D^b	C G	F E^b	D F	D F
BASS---------PIANO-LH	A^b	G	F	E	F	F	B^b	
LH	A^b	G	F	E	F	F	B^b	
HARMONY	V^7	I^6	$V^{4/3}$	vii^{o7}/ii	V^7/vi	V^7/V	V^7	
	THE BASS NOTE 'F' • *F - IS NOW THE BASS NOTE OF AN INCOMPLETE $V^{4/3}$. (B^b root is missing)* • *F - IS EMBELISHED BY ITS LOWER NEIGHBOR LEADING NOTE -E*				• *THE 'F' ON THE DOWN BEAT (piano-LH) FORMS A DISSONANCE AGAINST ITS V^7 CHORD ON 'C' (piano-RH)* • *THE EMPHASIS ON 'F' IS INCREASINGLY PRONOUNCED AS 'F' BECOMES DOMINANT SEVENTH OF THE B^b DOMINANT.* • *THE 7^{TH} (A^b) IS ADDED TO THE DOMINANT (B^b – D – 'F '- A^b) WHICH SHOWS THAT NO MODULATION HAS TAKEN PLACE.*			

2^{ND} MOVEMENT

Table 4 (Continued)

HARMONY

	2ND MOVEMENT, 1ST THEME, 1ST PERIOD						
	CONSEQUENT						
MEASURE	m.5				m.6		
THEME-----------PIANO-RH	G	F	E^b	F	D	E^b	F
RH	D D	B D	G G	F C	B^b F	G B^b	A^b B^b A^b B^b
BASS------------PIANO-LH	B	G	C	A^b	B^b	E^b	B^b
LH	B	G	C	A^b	B^b	E^b	B^b
HARMONY	V^6/vi	V^7/vi	vi	ii^6	V	I	V^7
	G-F-E^b FIGURE AND NEW INTERPRETATION OF THE NOTE 'F' • *DESCENDING G-F-E^b FIGURE MAINTAINS A SENSE OF DESTABILIZATION IN ORDER TO ALLOW FOR THE FINAL CADENTIAL RESOLUTION (m.8) OF THE G-F-E^B FIGURE* • *THIS INSTABILITY IS AFFECTED BY A NEW INTERPRETATION OF THE SECOND DEGREE 'F',* • *THE 'F' NOW APPEARING AS THE 7^{TH} DEGREE OF THE DOMINANT (G-B-D-F) OF THE SUBMEDIANT 'C '*						

2ND MOVEMENT

Table 4 (Continued) HARMONY

	1ST THEME, 1ST PERIOD															
	CONSEQUENT, CLOSING															
MEASURE	m.7												m.8			
THEME-------- PIANO- RH	G		A^b	F	Eb		F		G		F		Eb			
RH	D^b		D	D	D^b	B^b	C	E^b	E^b	B^b	D		B^b			
BASS---------PIANO-LH	B^b	G	B^b	B^b					B^b		A^b	B^b	G			
LH	E^b	(E)	F	A^b	G		A^b	(A)	B^b		B^b		E^b			
HARMONY	V^7/IV		$V^{4/3}$/I		V^7/IV		ii^6	V^7/V	$I^{6/4}$		V^7		I			

CHROMATICISM AND THE DOMINANT

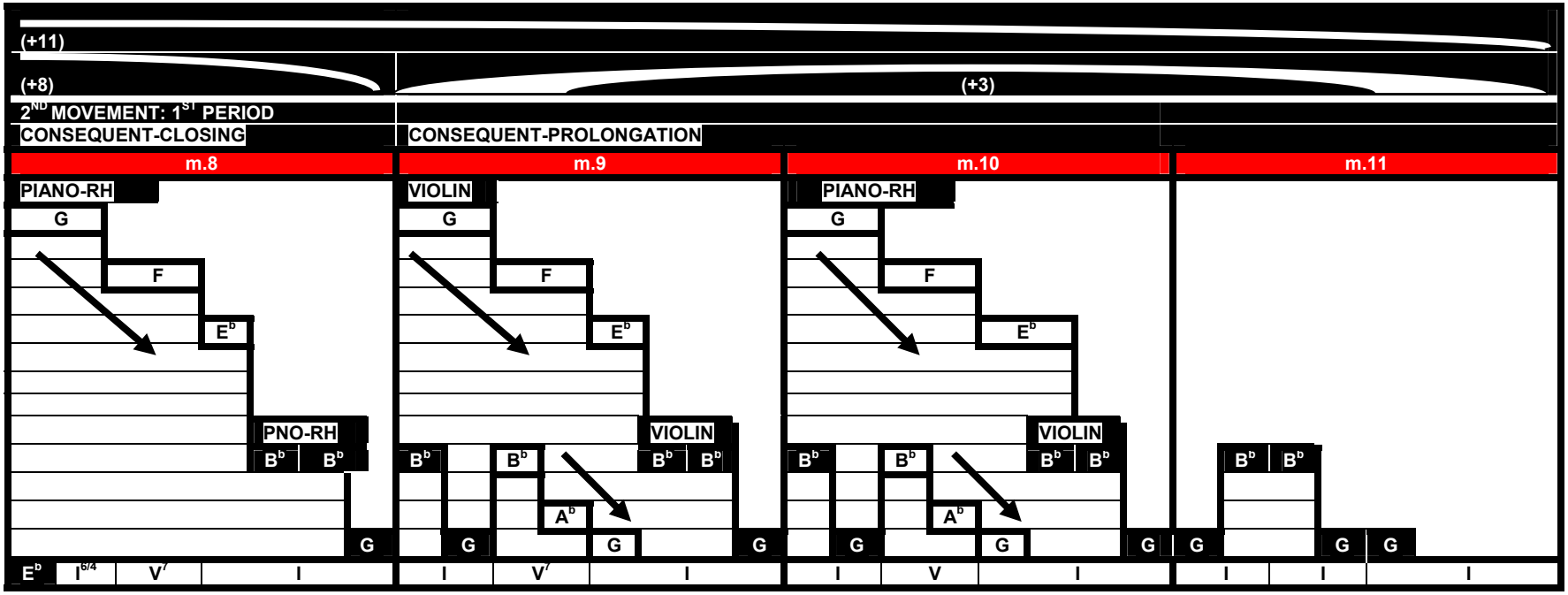
- *THE CLOSING PHASE (MM.7-8) OF THE ARCH IS BASED ON INCREASED CHROMATICISM, WHICH PRIMARILY EMBELLISHES THE DOMINANT.*
- *THE TONIC 'E^b ' IN THE BASS (M.7, BEAT 1) IS ACTUALLY DESTABILIZED BY THE ADDITION OF THE 'D^b ', THE SEVENTH DEGREE.(PIANO-RH) SO IT FUNCTIONS AS THE V^7 OF IV*
- *THE UPPER VOICE LEADING (G-A^b, M.7) SUGGESTS THIS MICROTONICIZATION OF THE AREA OF IV (A^b) HOWEVER THE A^b IS ACTUALLY THE SEVENTH OF THE PRIMARY DOMINANT SEVENTH (B^b, D, F, A^b) WHICH SHOWS THE STRONG TENDENCY TO MOVE HOME.*
- *WE ARRIVE ON WHAT APPEARS TO BE THE TONIC ON BEAT TWO (m.7) BUT AGAIN THE ADDITION OF D^b (BEAT 3) DESTABILIZES THAT TONIC AND AGAIN WE GET THE V^7 /IV.*
- *AGAIN THE VOICE LEADING G-A^b, THIS TIME IN THE BASS (M.7, BEAT 3), SUGGESTS THE MICROTONICIZATION OF THE IV BUT THE 'F' IN THE UPPER LINE OF THE PIANO REVEALS THE SUPER-TONIC.*
- *THE MOVEMENT TO THE CADENCE (MM.7-8) IS EVEN STRONGER AS THE CHROMATIC MOTION IN THE BASS (M.7) ESTABLISHES THE SUPER-TONIC AS THE DOMINANT SEVENTH OF V, WHICH MOVES TO THE $I^{6/4}$ – V – I (M.8)*

- *STRONGEST ASSERTION OF THE E^b TONIC AREA IN THE PROGRESSION $I^{6/4}$ – V – I (M.8)*
- *THE BASS MOTION IN AND OF ITSELF IMPLIES THE PRESENCE OF I-IV-V-I (MM. 7-8)*
- *THE INCREASED CHROMATICISM OF THESE MEASURES (mm.7-8) TENDS TO PROLONG THE RESOLUTION.*
- *THIS INTRICATE HARMONIC STRUCTURE REVEALS BEETHOVEN'S CAPACITY FOR IDENTIFYING AND STRENGTHENING A BASIC GESTURE OR SHAPE.*

2ND MOVEMENT

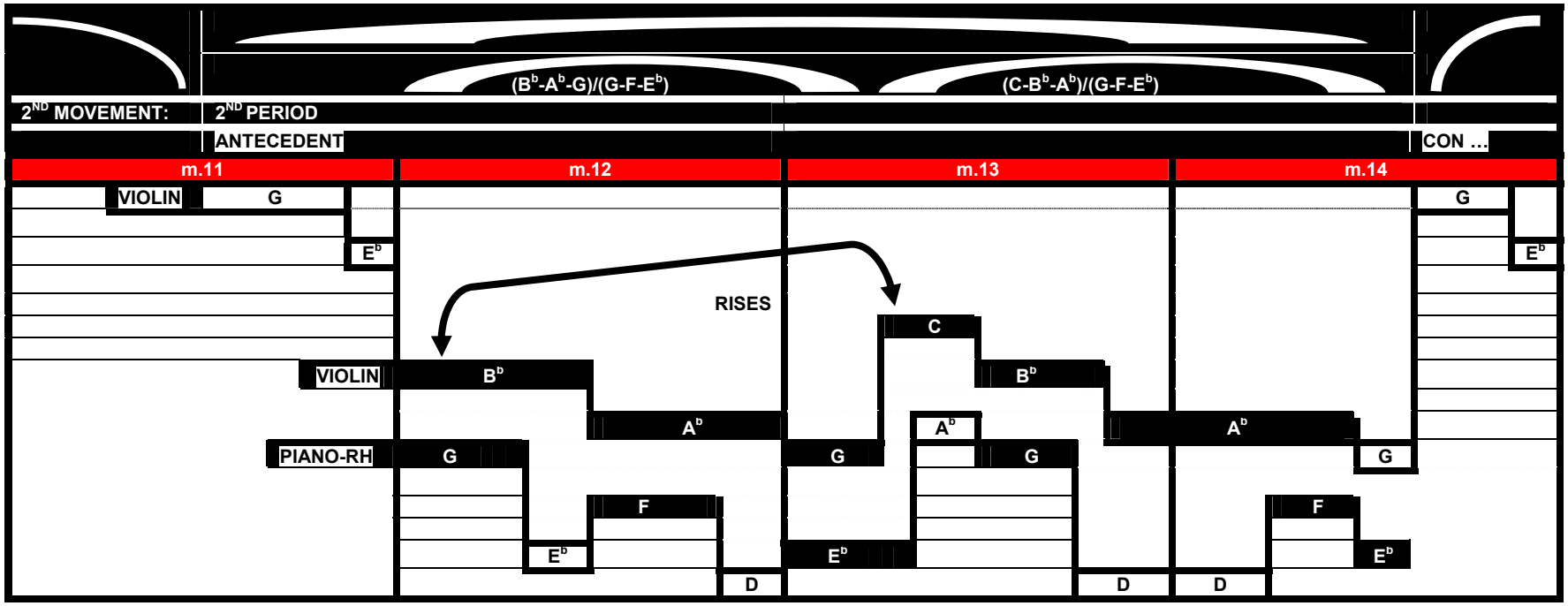
Table 5

MELODIC PROLONGATION OF 1ST PERIOD TO ELEVEN MEASURES



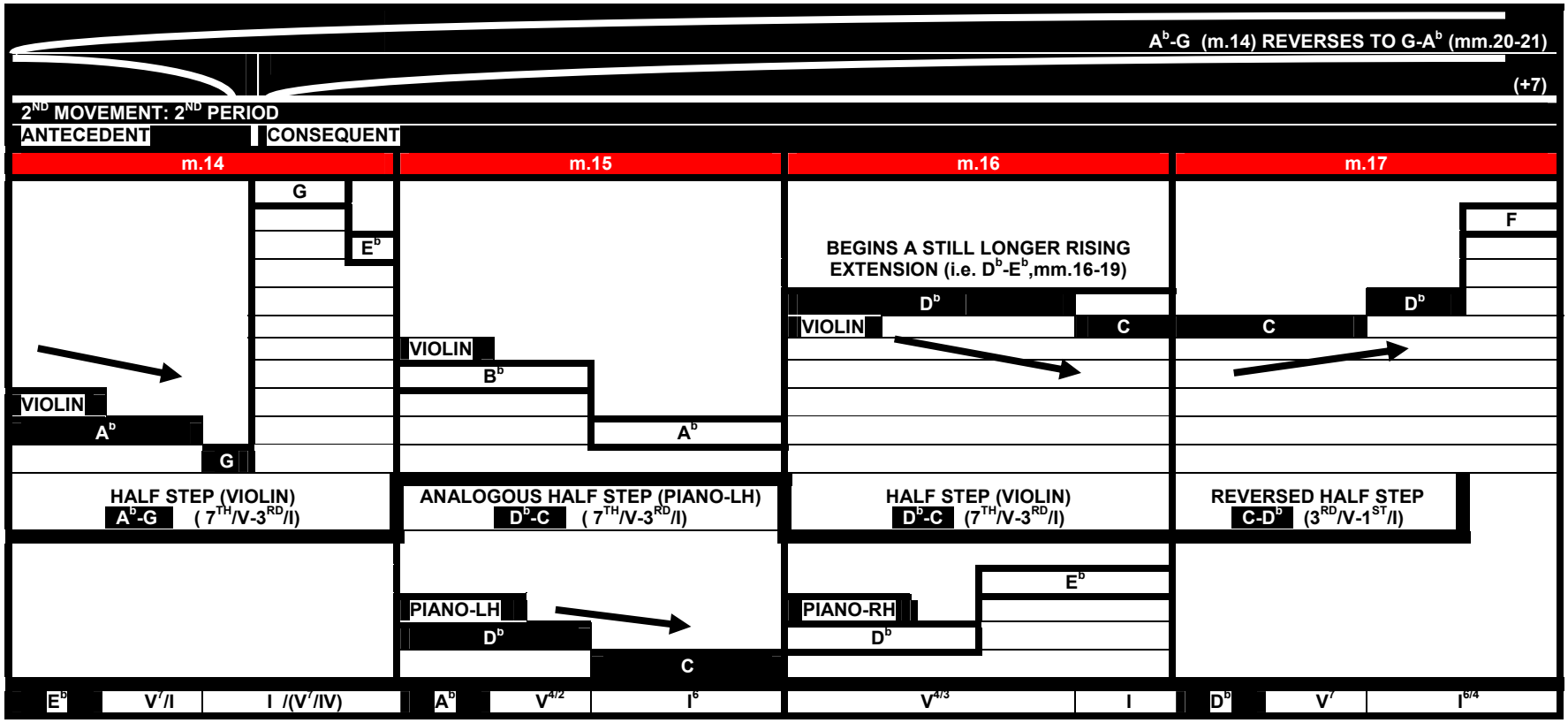
2ND MOVEMENT

Table 6 - ASCENDING SEQUENCE OF MOTIVIC STATEMENTS BASED ON DESCENDING FORM OF THE MOTIVE.



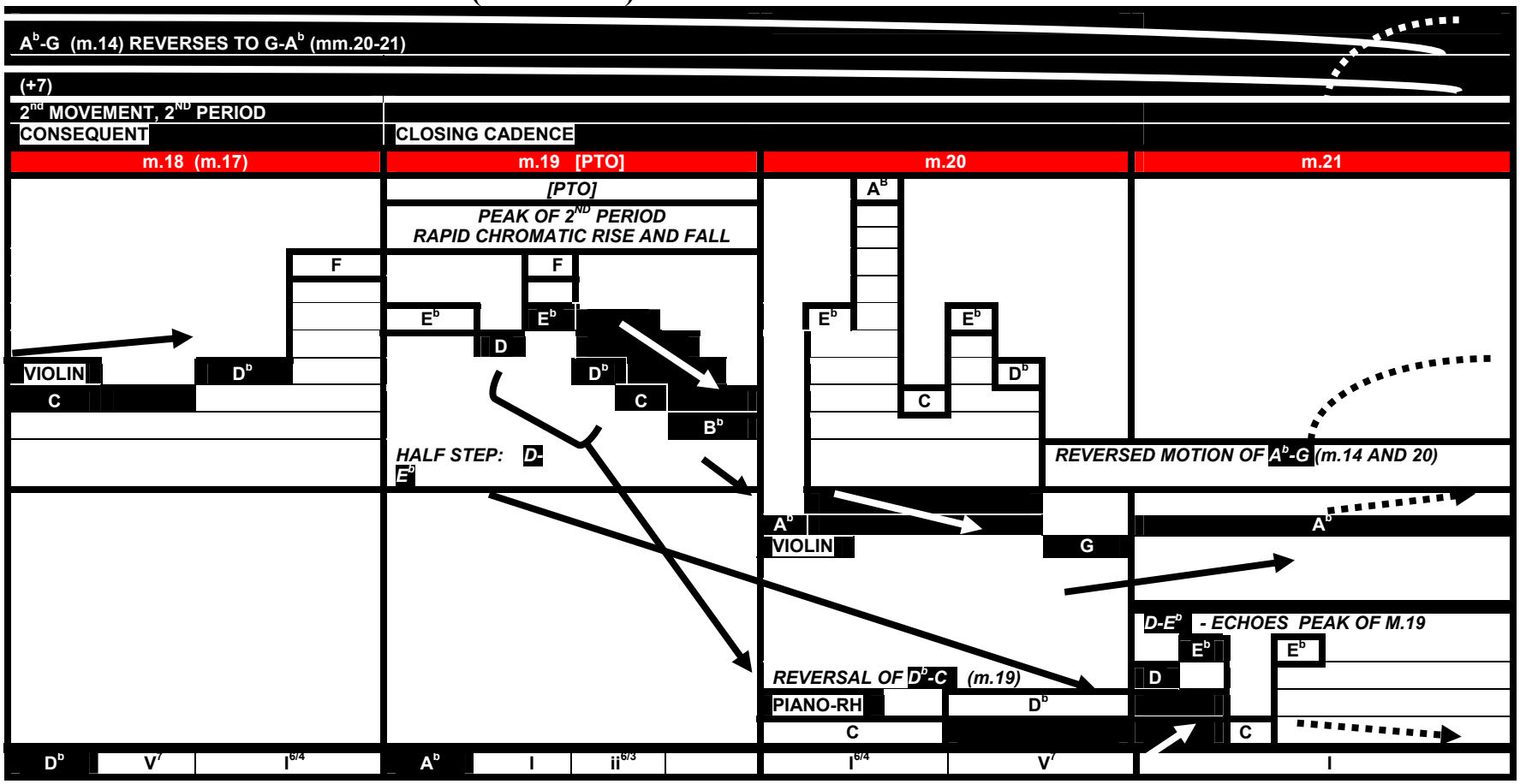
2ND MOVEMENT

Table 7 - SLOW RISE AGAINST GRAVITY - RAPID FALL



2ND MOVEMENT

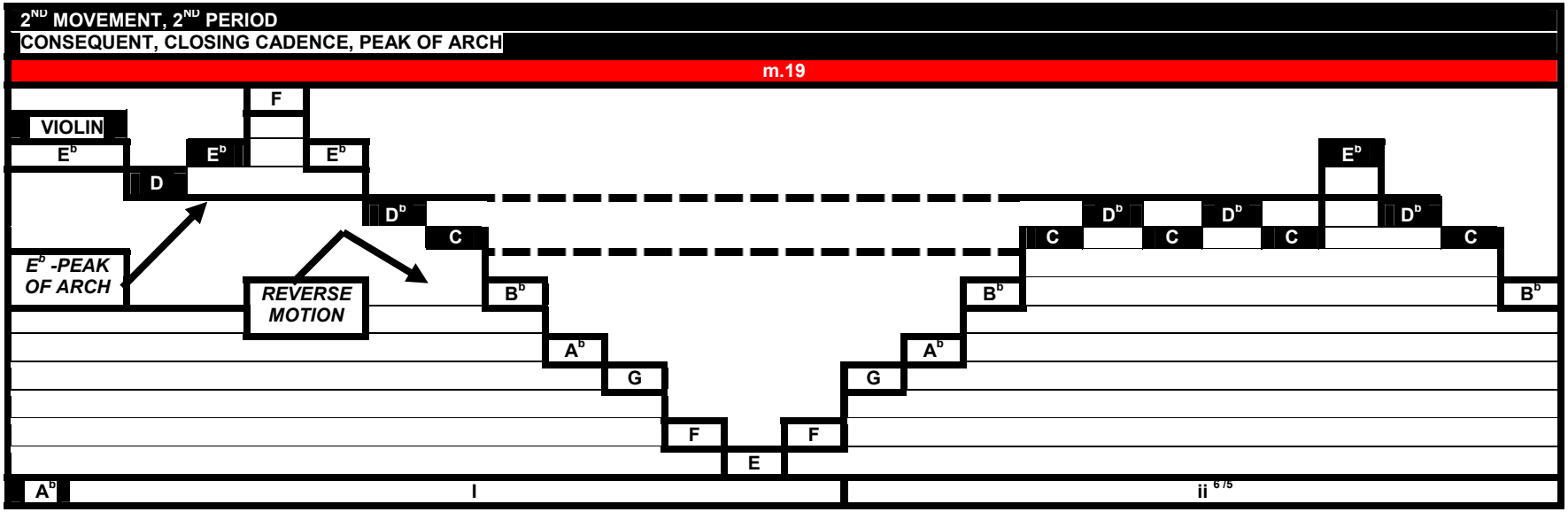
Table 7 - (Continued): SLOW RISE AGAINST GRAVITY - RAPID FALL



2ND MOVEMENT

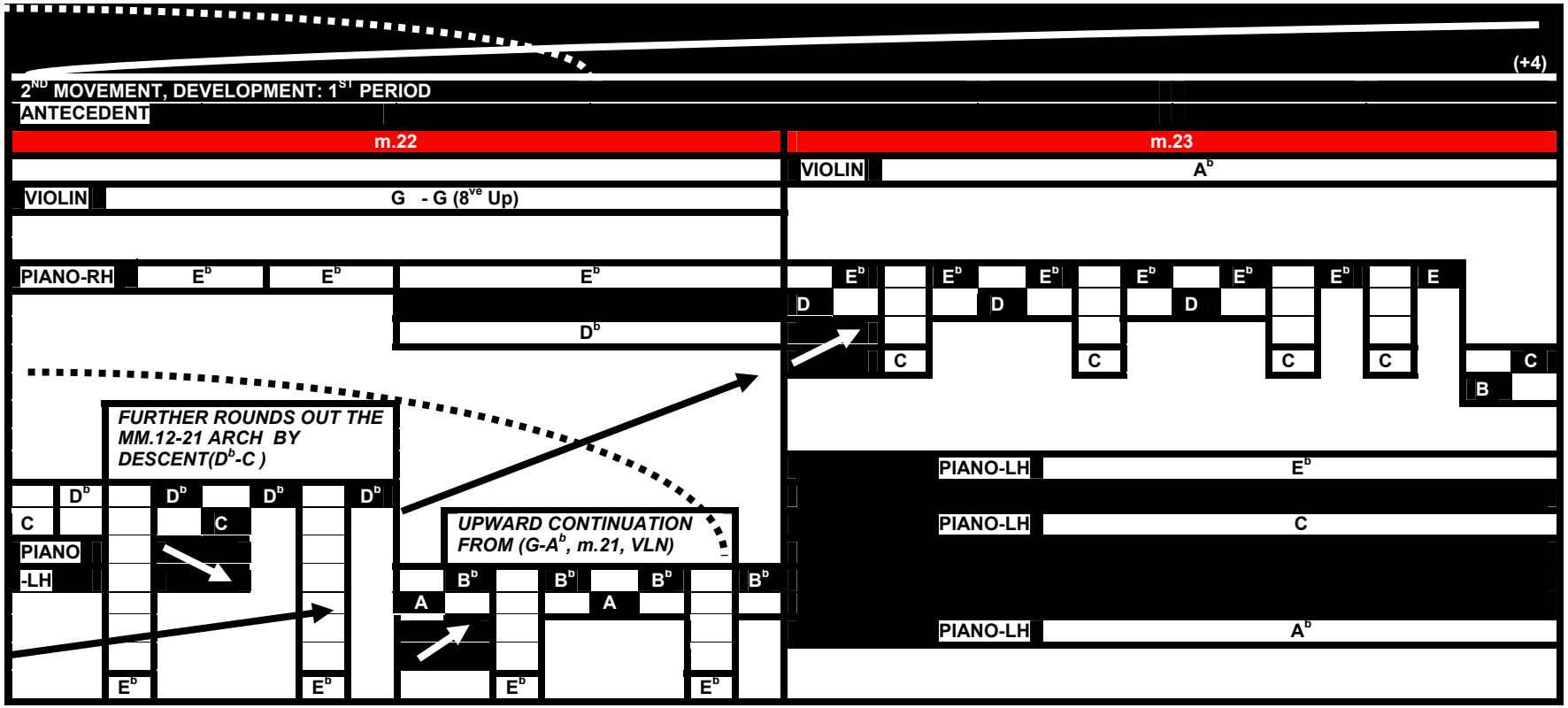
Table 7 (Continued)

PEAK OF ARCH



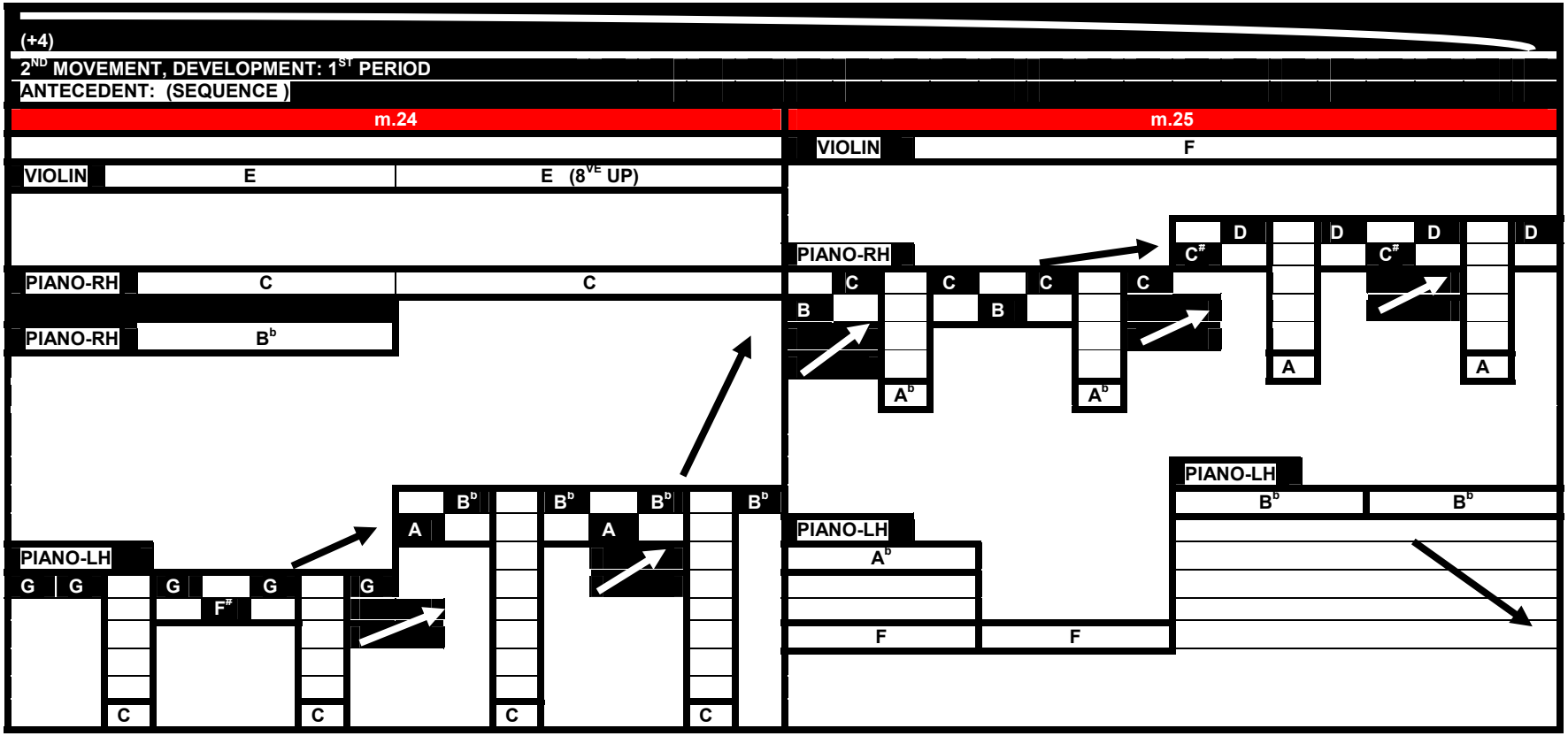
2ND MOVEMENT

Table 8 (ALSO SEE TABLE 11)



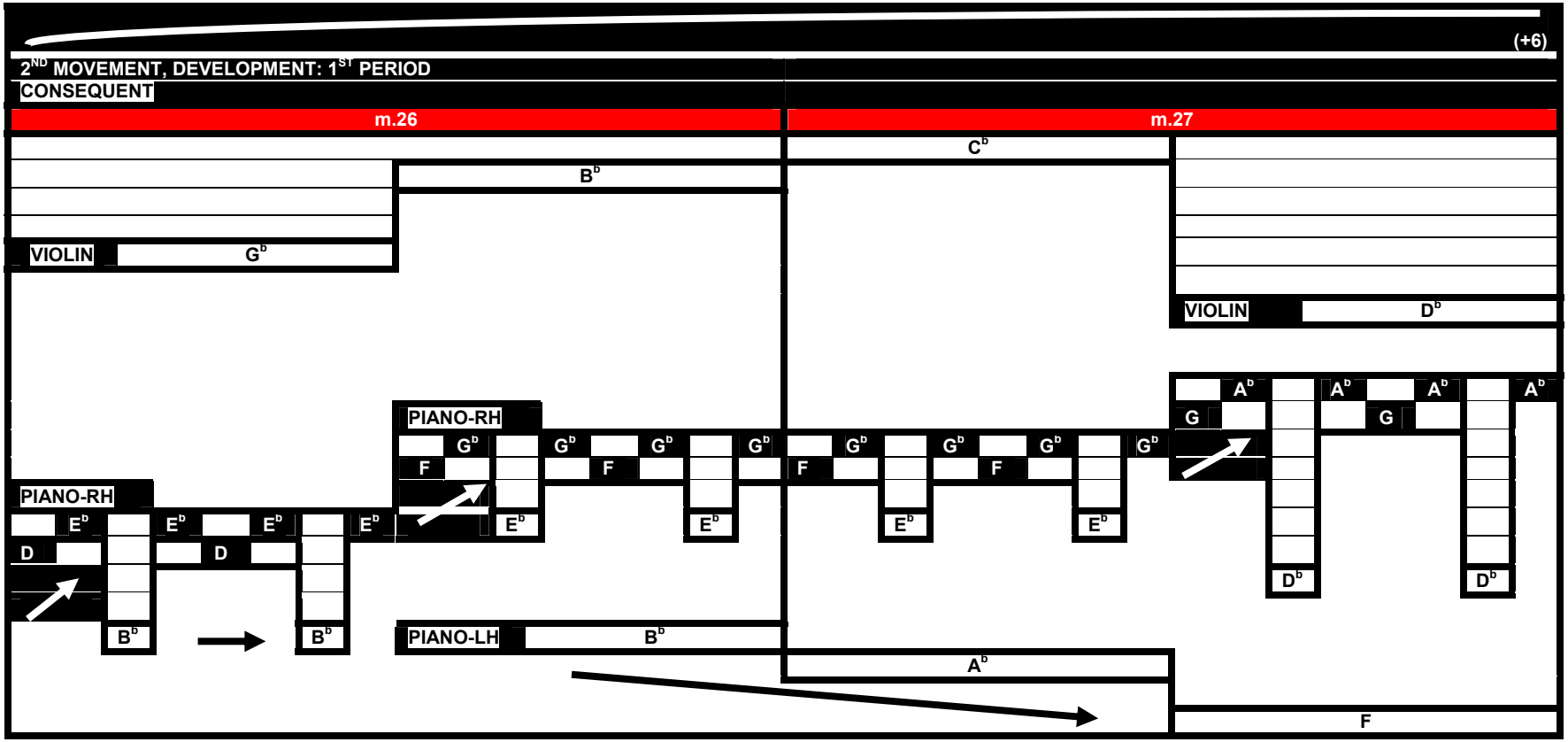
2ND MOVEMENT

Table 8 - Continued (ALSO SEE TABLE 11)



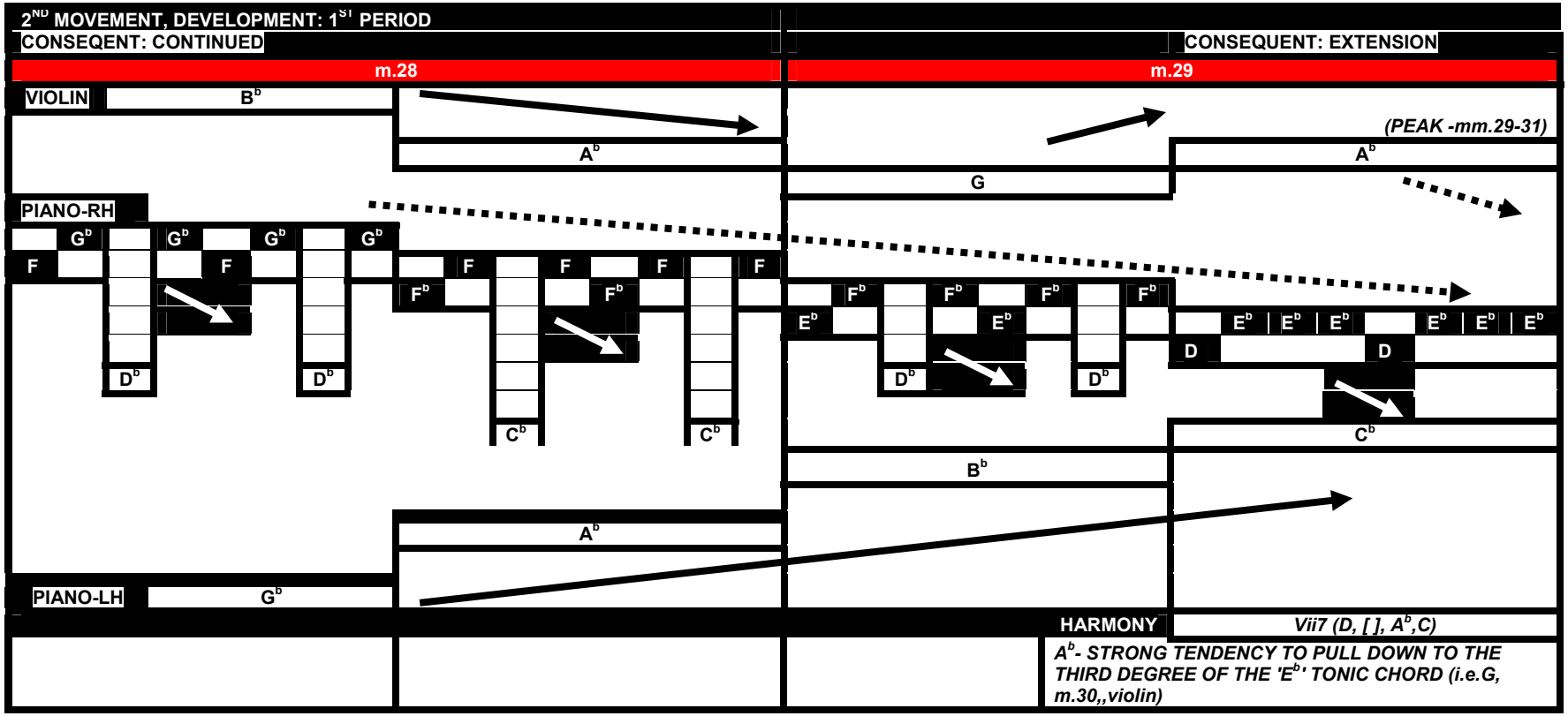
2ND MOVEMENT

Table 9 (ALSO SEE TABLE 11)



2ND MOVEMENT

Table 9 -Continued (ALSO SEE TABLE 11)



2ND MOVEMENT

Table 9 -Continued (ALSO SEE TABLE 11)

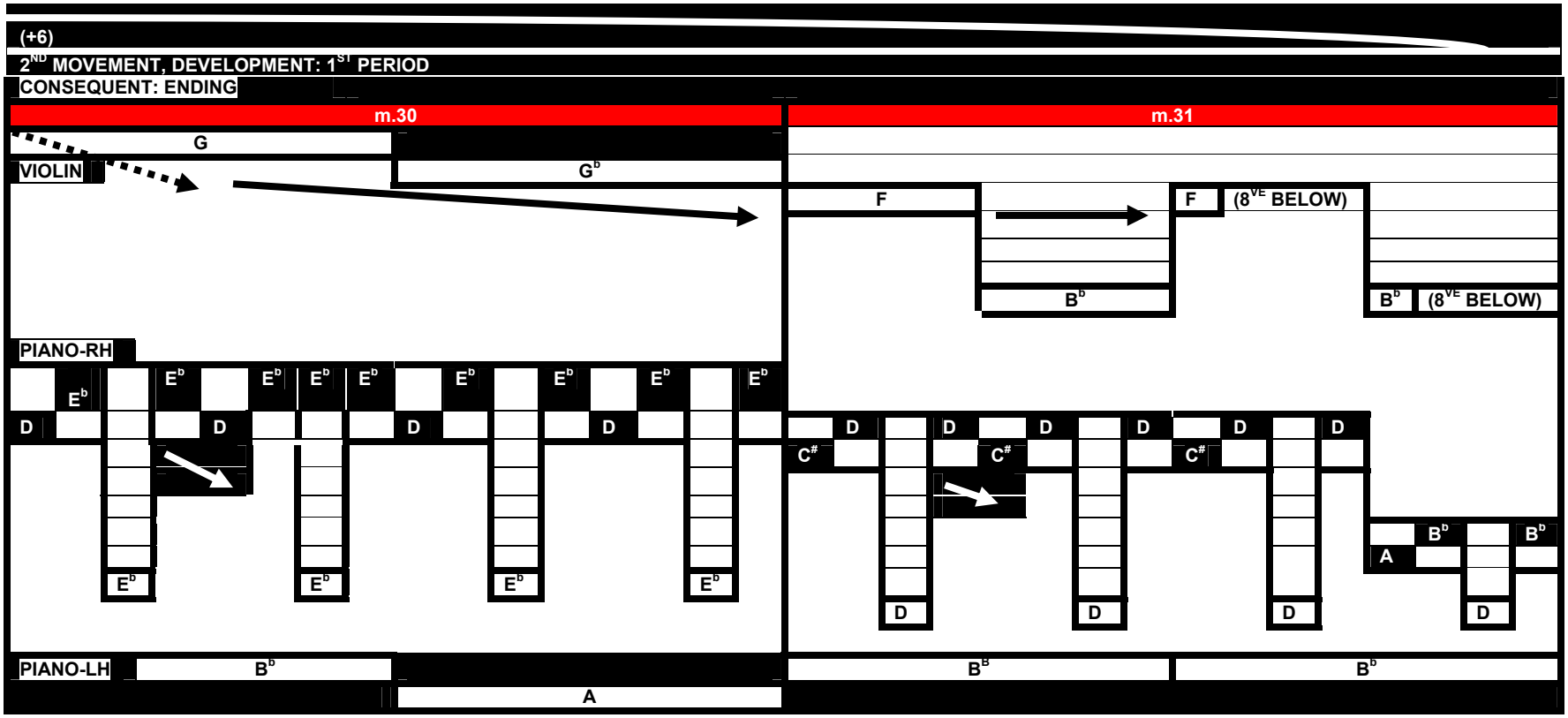


TABLE 10 (Also see Table 7)

OVERLAPPING ARCHES (B^B-B^B / A^B-A^B)

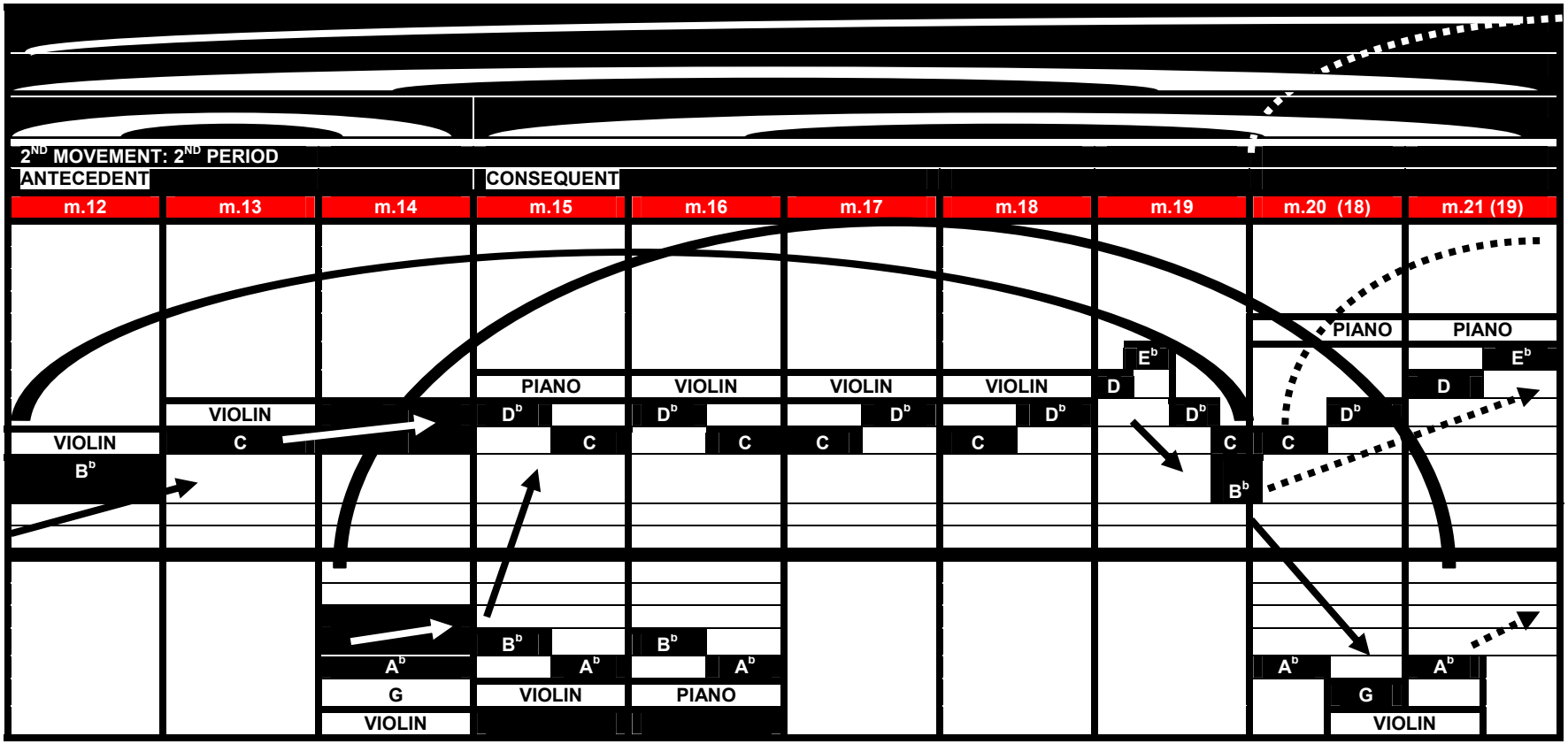


Table 11

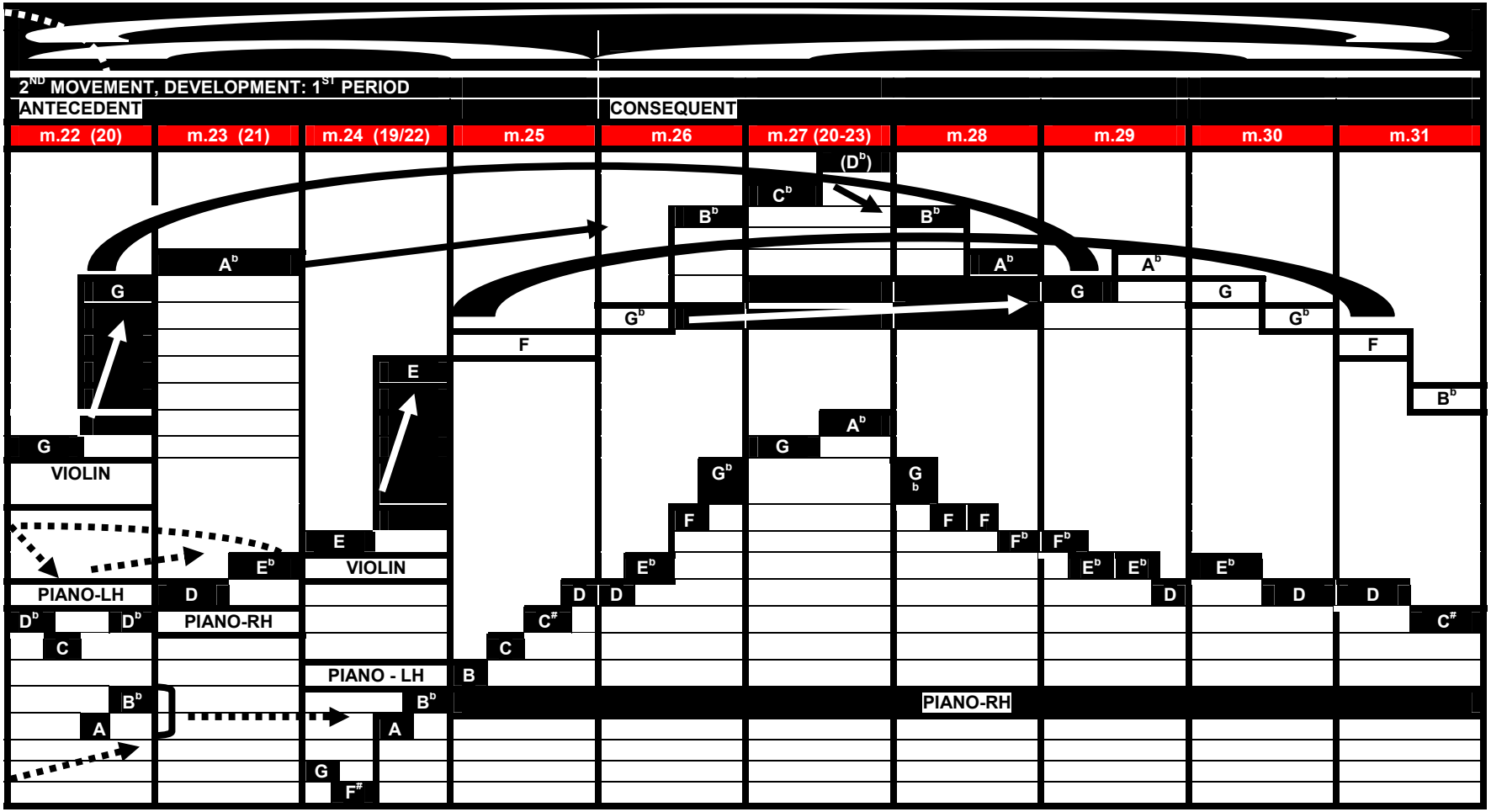
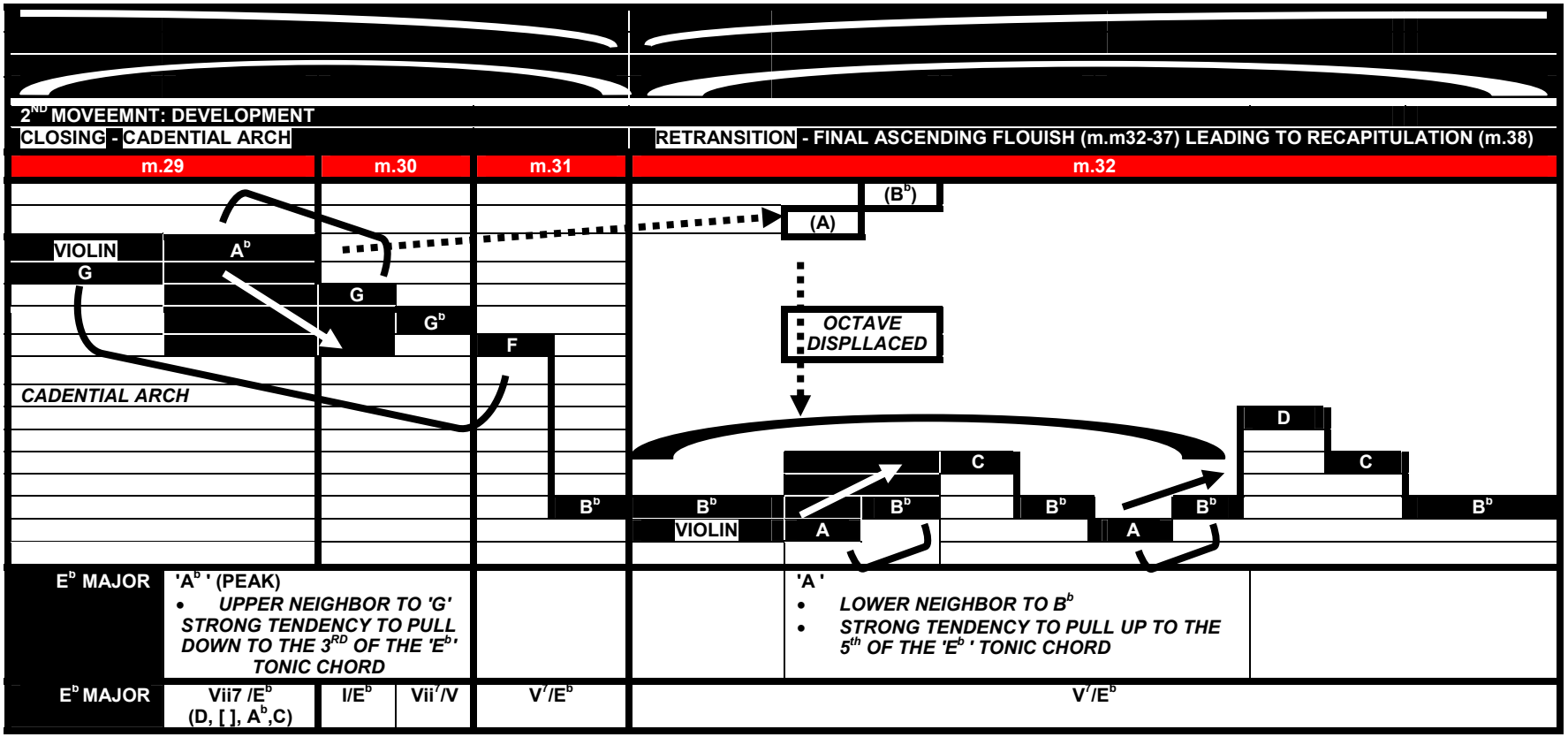

2ND MOVEMENT, DEVELOPMENT: 1ST PERIOD
ANTECEDENT
CONSEQUENT
m.22 (20)
m.23 (21)
m.24 (19/22)
m.25
m.26
m.27 (20-23)
m.28
m.29
m.30
m.31
VIOLIN
PIANO-LH
PIANO-RH
VIOLIN
PIANO - LH
PIANO-RH

Table 12

INTENSIFICATION AGAINST GRAVITY: CONTINUED CHROMATIC RISE

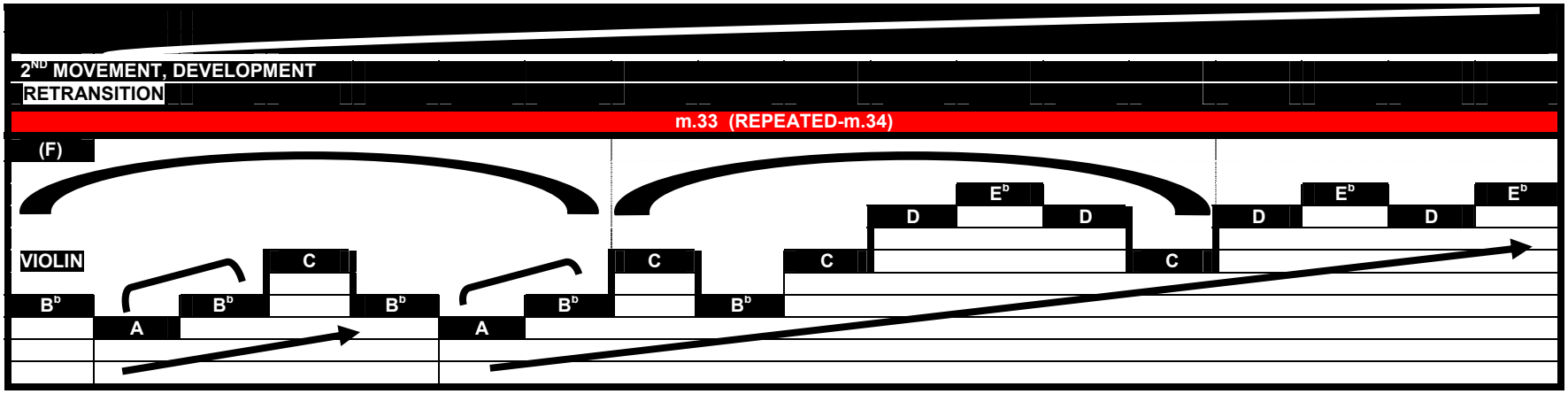


2ND MOVEMENT

Table 12 (Continued)

INTENSIFICATION AGAINST GRAVITY - CONTINUED CHROMATIC RISE

A-B^{b} - Now Reiterated

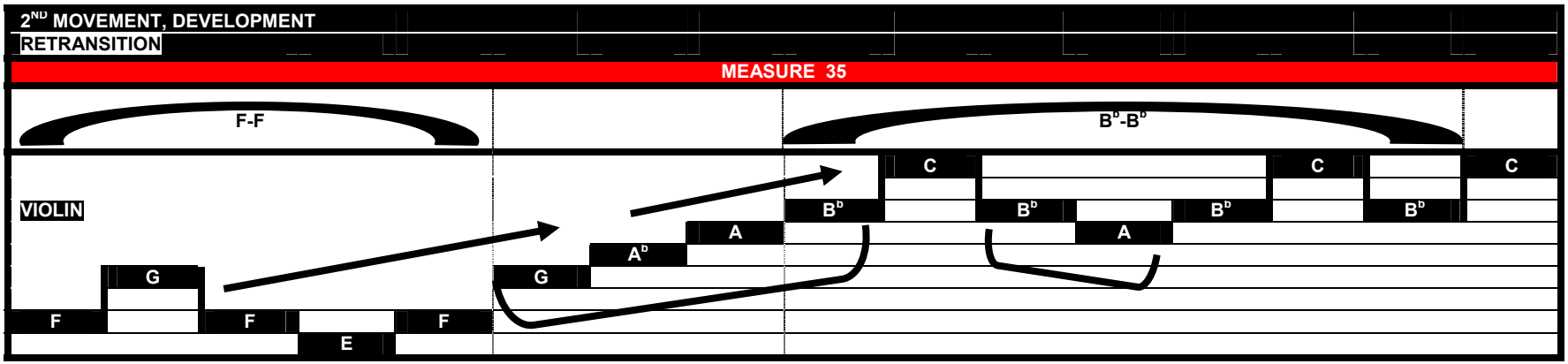


2ND MOVEMENT

Table 12 (Continued)

INTENSIFICATION AGAINST GRAVITY - CONTINUED CHROMATIC RISE

Reiterates mm.29-32 (G-A^{b}-A-B^{b})



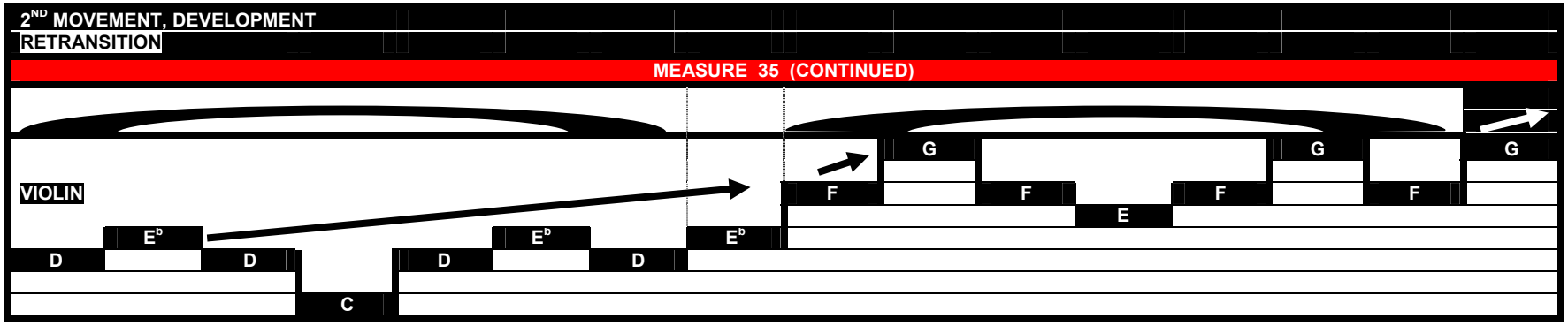
2ND MOVEMENT

Table 12 (Continued)

INTENSIFICATION AGAINST GRAVITY - CONTINUED CHROMATIC RISE

Rising A-B^{b} (m.35) to peak on G-A^{b} (mm.35-36)

Reiterates mm.29-32



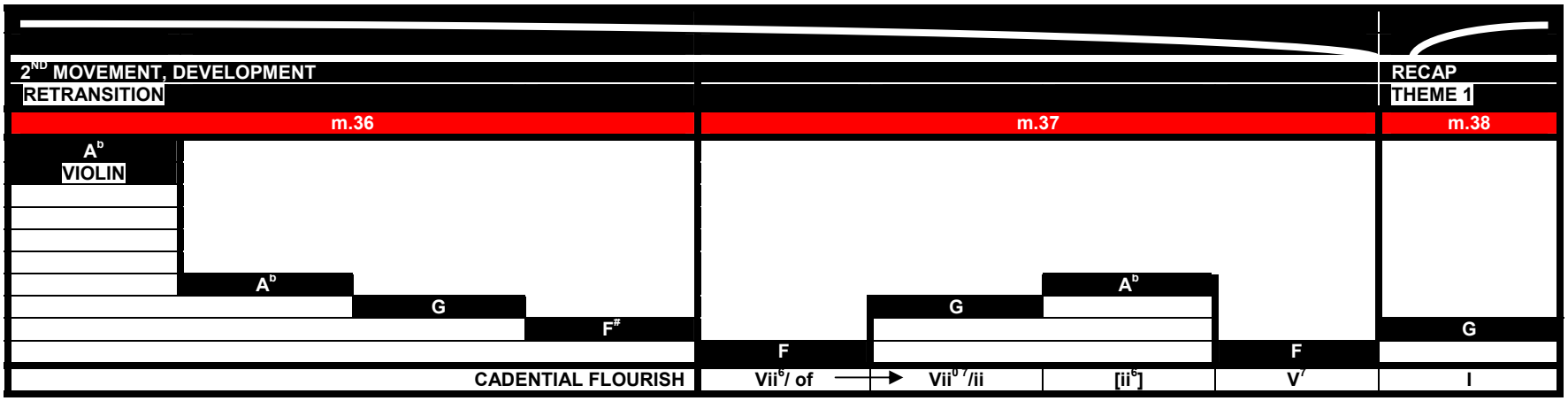
2ND MOVEMENT

Table 12 (Continued)

INTENSIFICATION AGAINST GRAVITY - CONTINUED CHROMATIC RISE

Rising A-B^{b} (m.35) to peak on G-A^{b} (mm.35-36)

Reiterates mm.29-32



2ND MOVEMENT

Table 13

TEMPORAL BOUNDARIES OF LARGE ARCH THAT FORM'S THE DEVELOPMENT

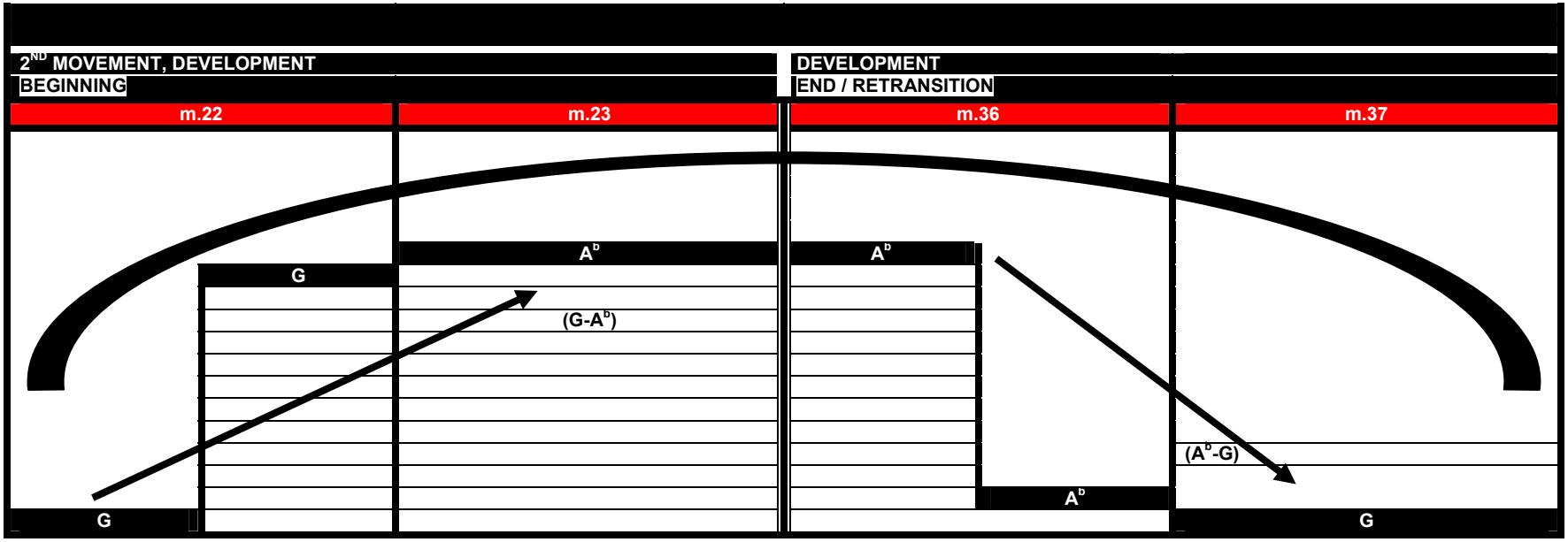
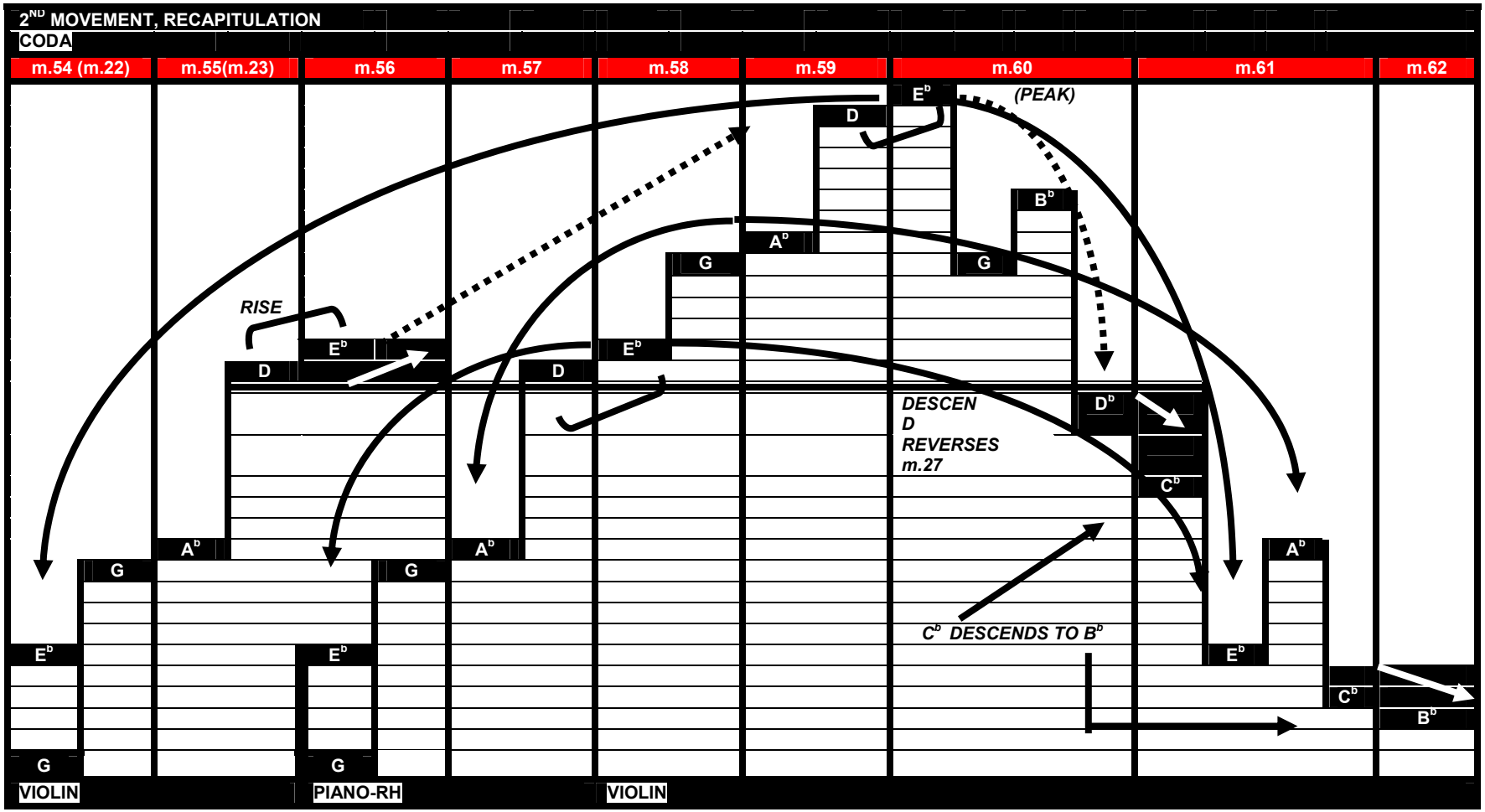
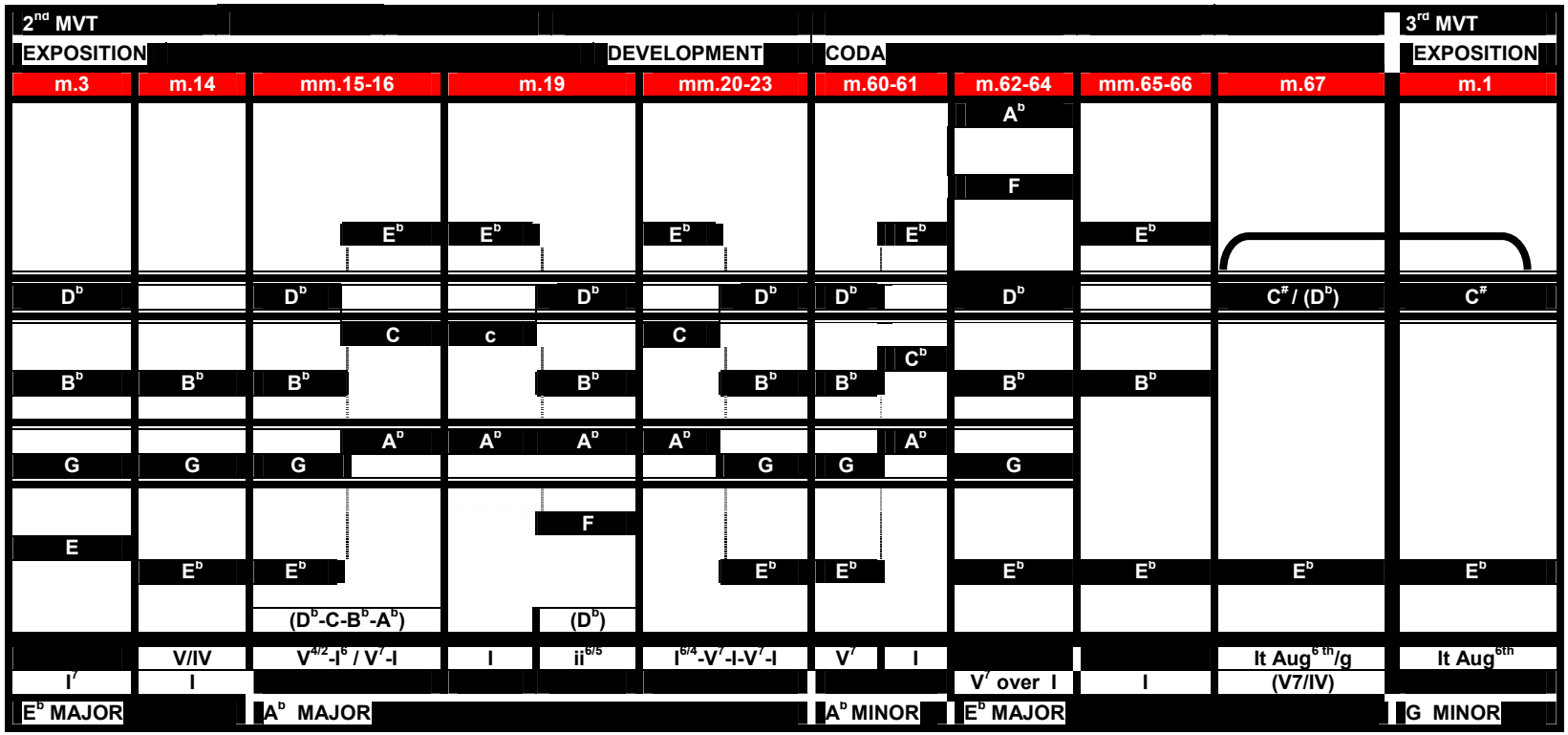


TABLE 14 - OVERLAPPING ARCHES

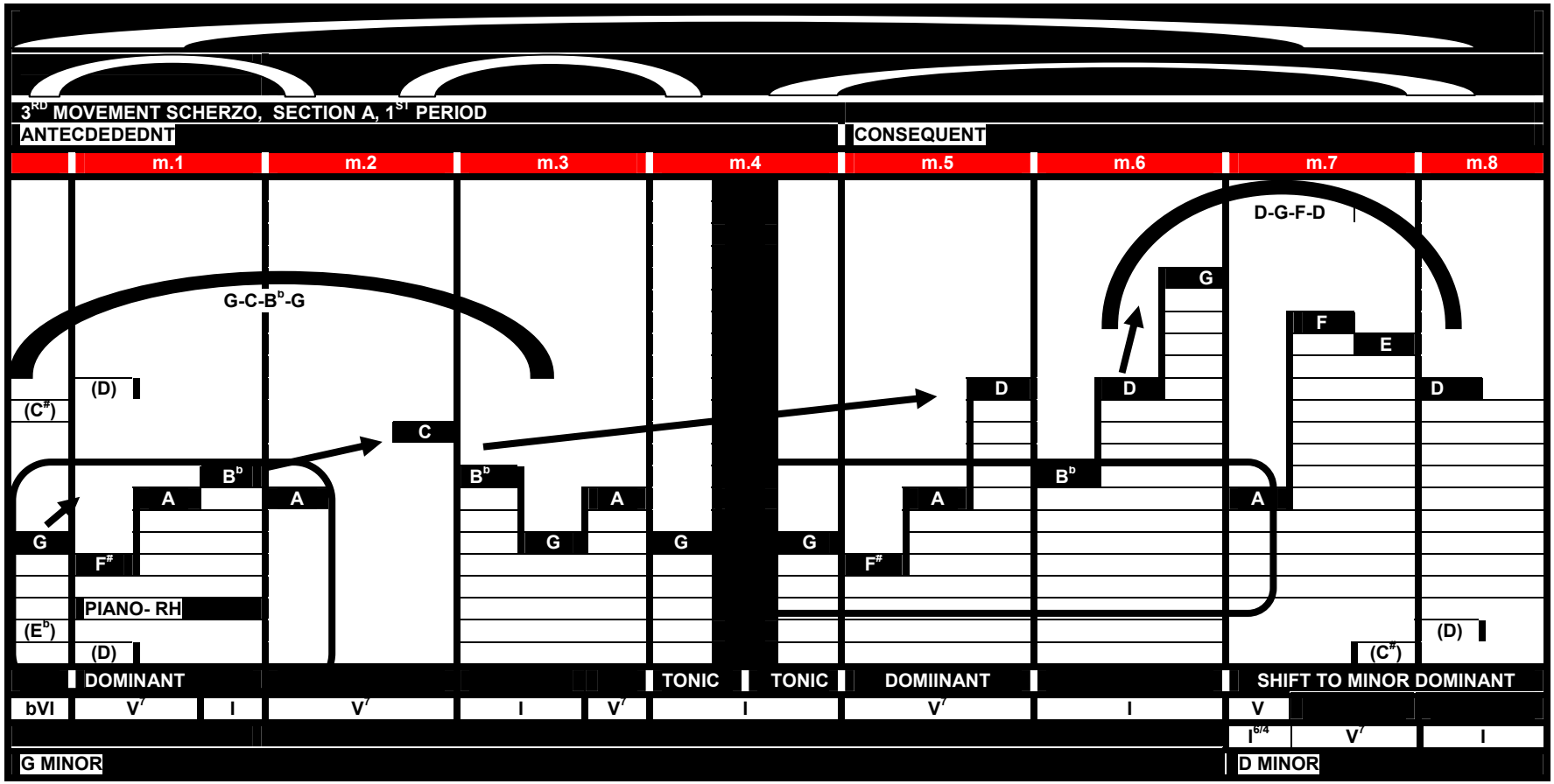


2ND MOVEMENT

Table 15

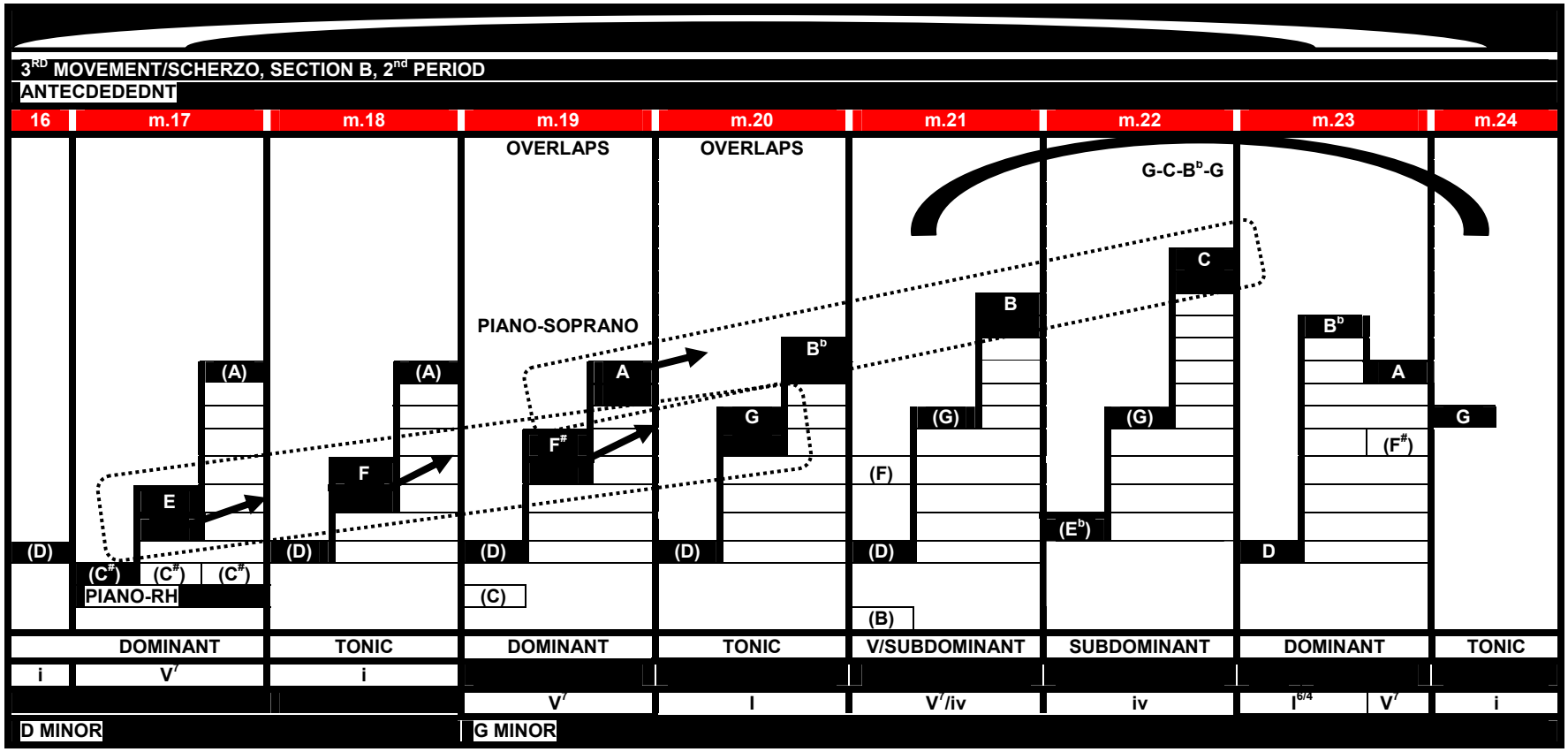


3RD MOVEMENT: TABLE 1



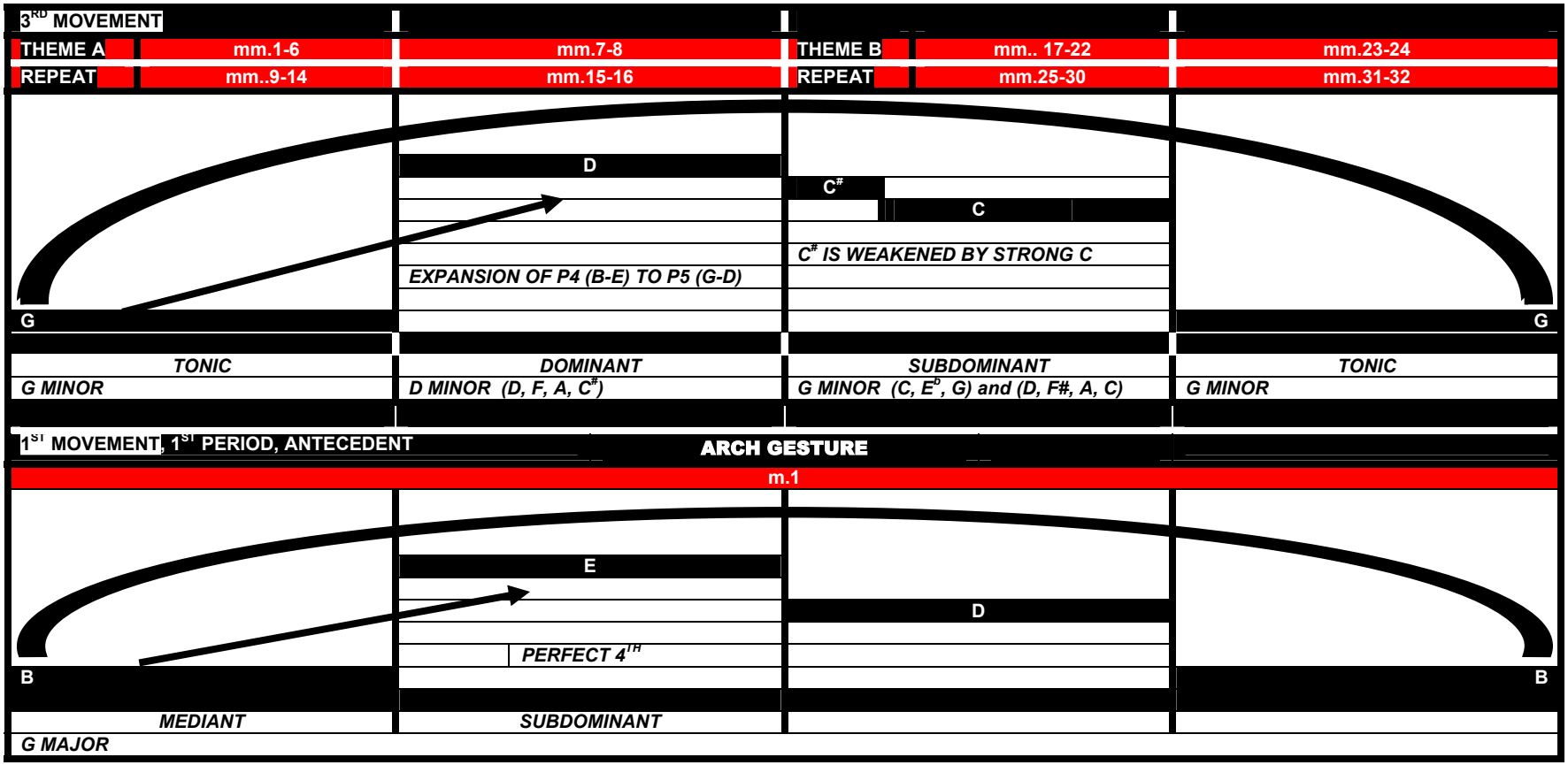
3RD MOVEMENT: TABLE 2

SEQUENTIAL RISE - OVERLAPPING CHROMATIC THREADS (E-F-F#-G) WITH (A-B^B-C-D)

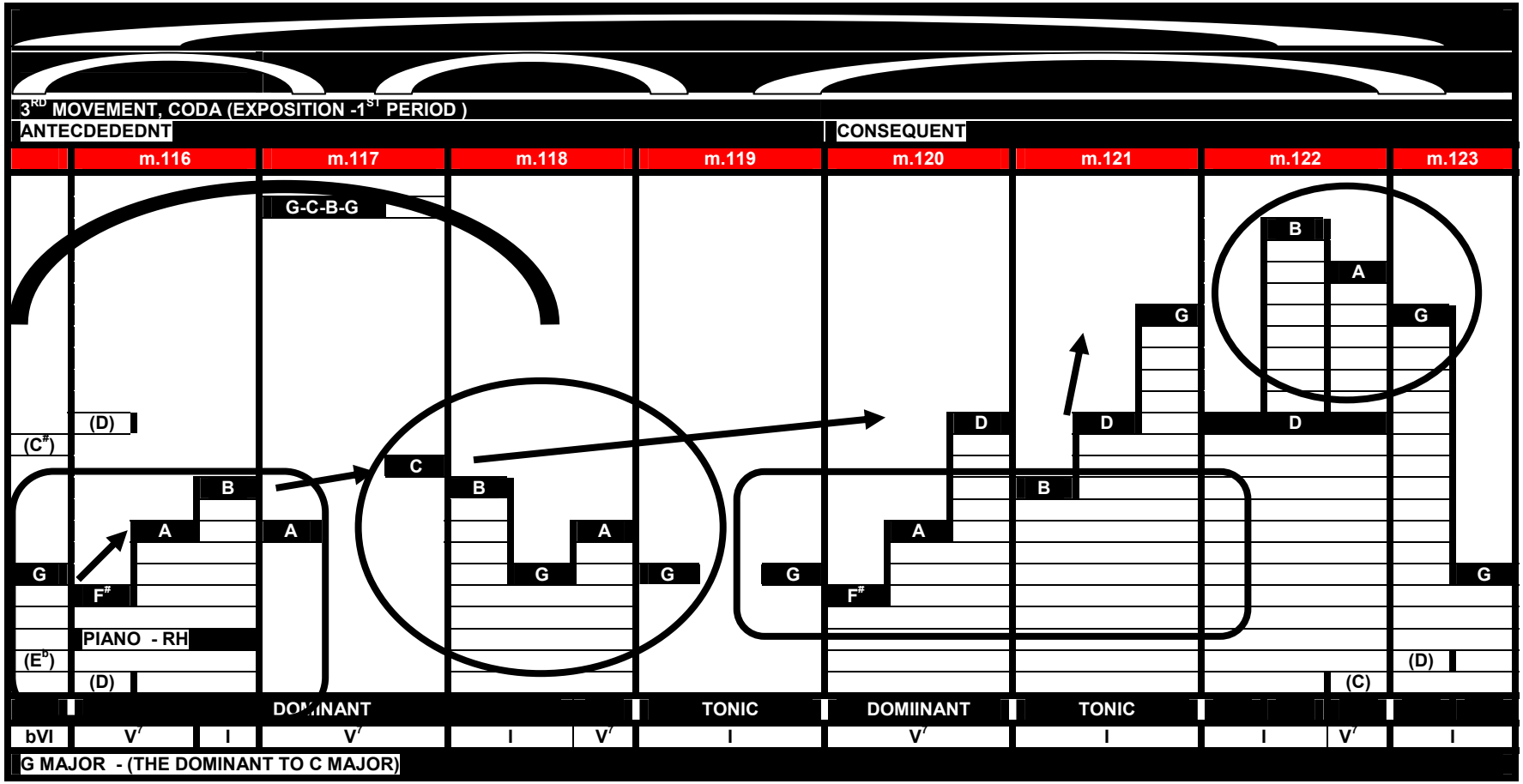


3RD MOVEMENT - TABLE 3

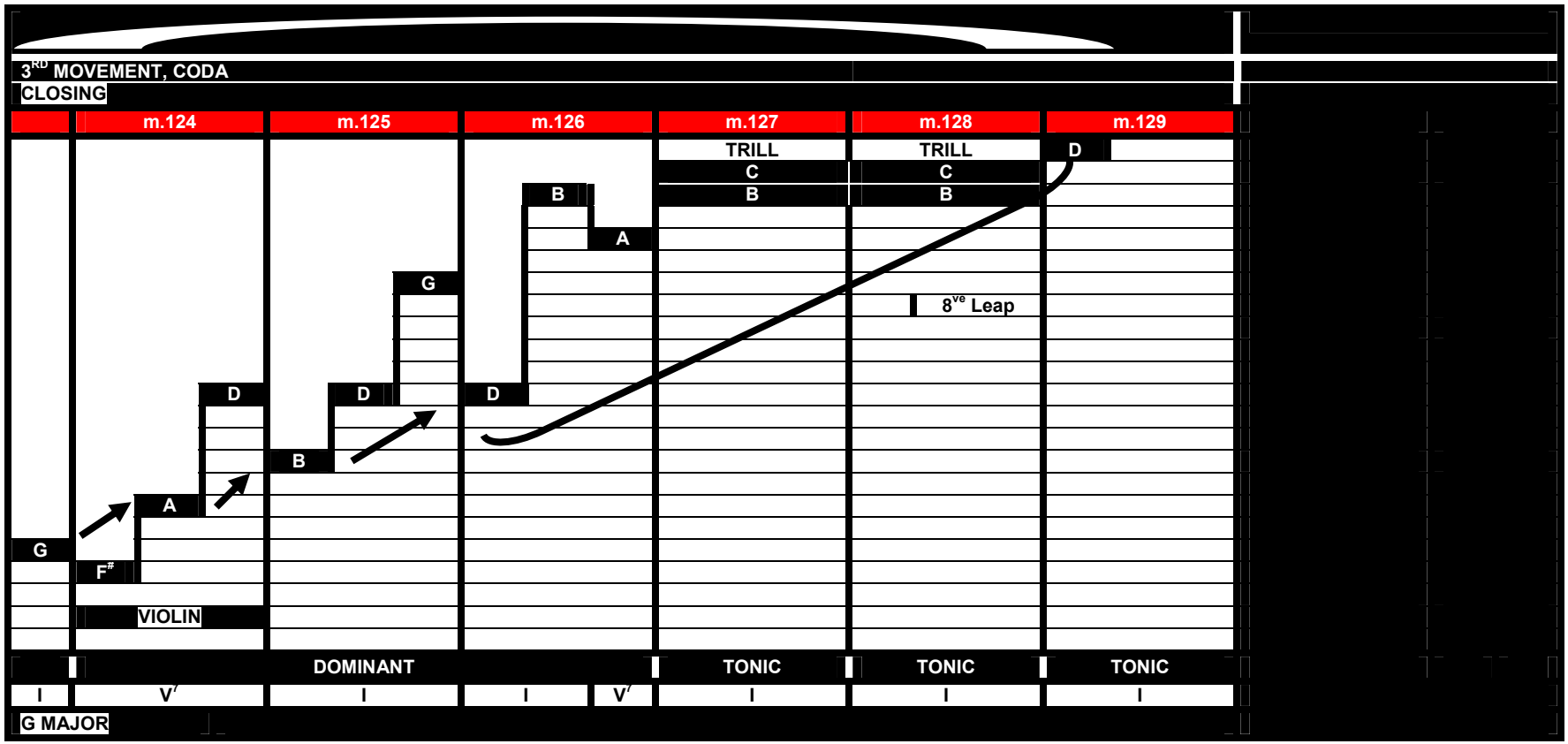
EXPANSION OF ARCH GESTURE - *Implies a Motion Toward its Home Key of G minor*



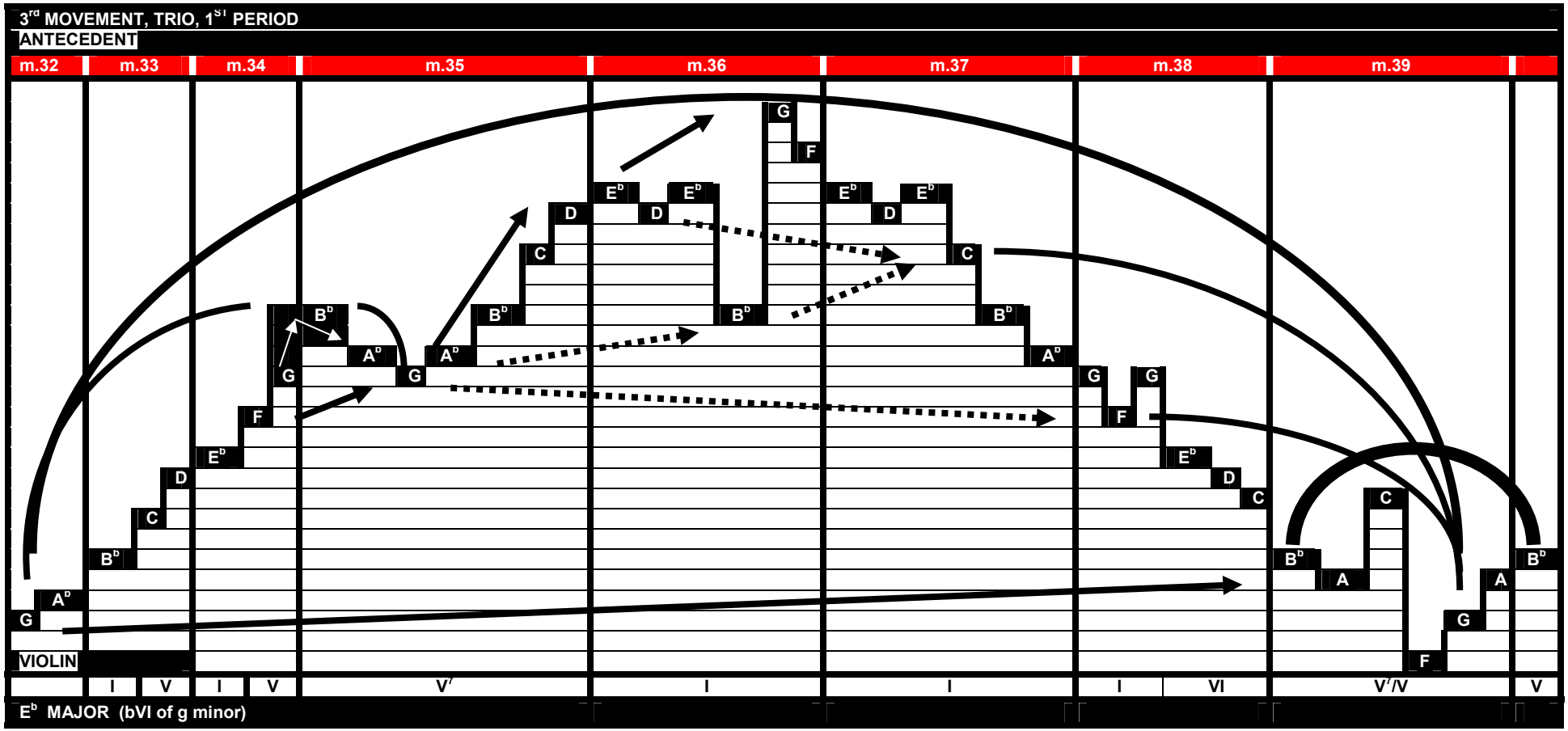
3RD MOVEMENT -TABLE 4



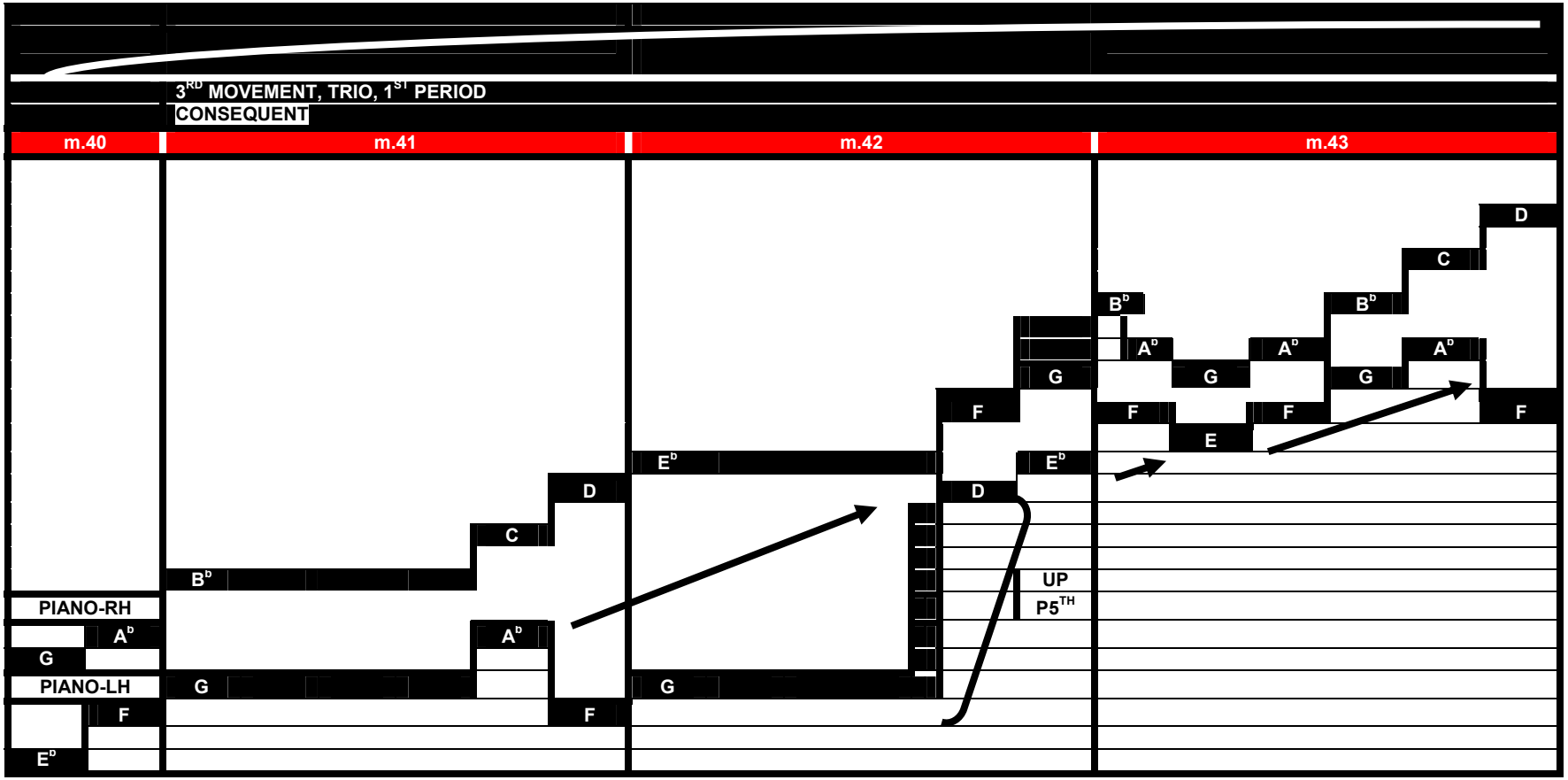
3RD MOVEMENT - Table 4 (Continued)



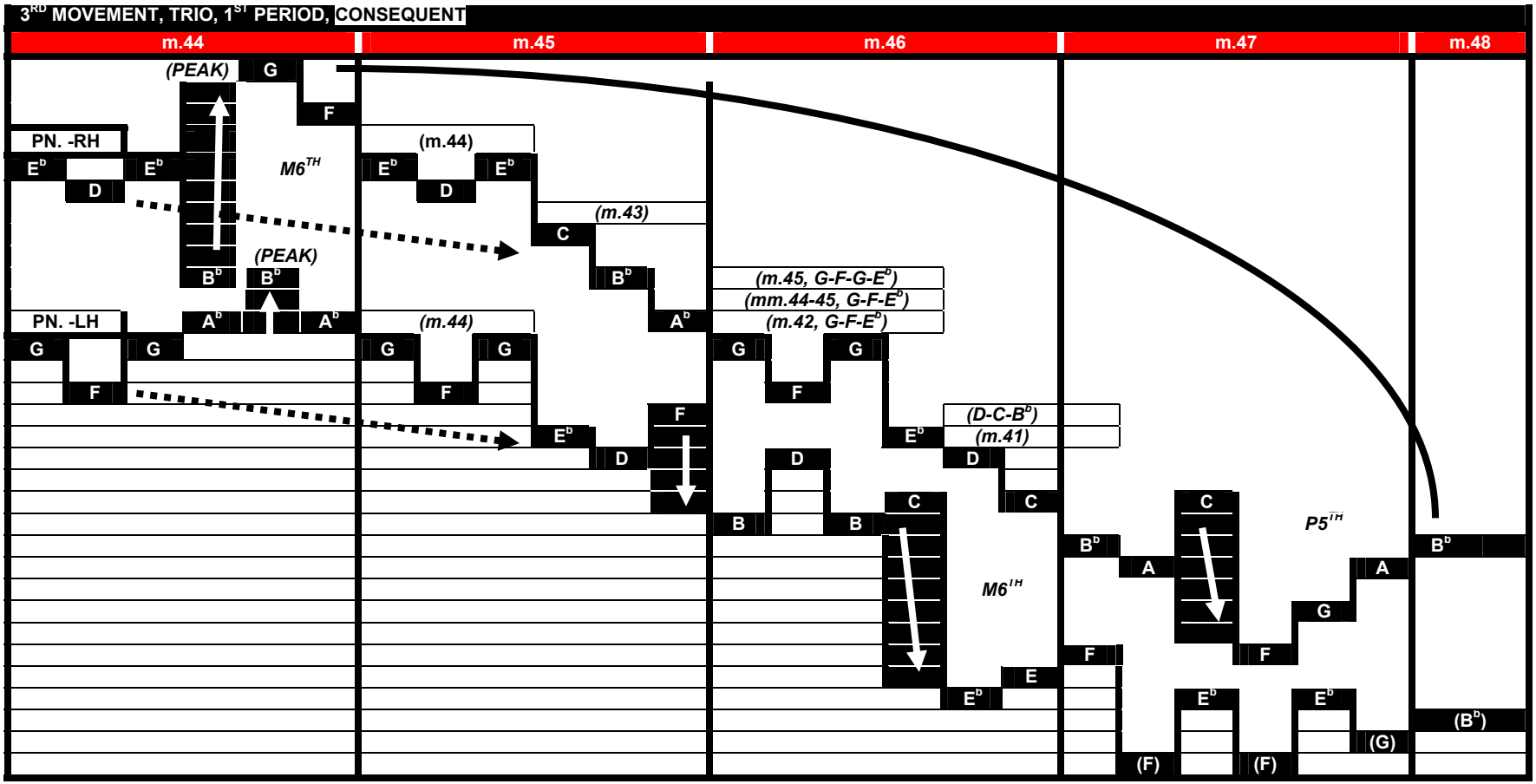
3RD MOVEMENT -TABLE 5



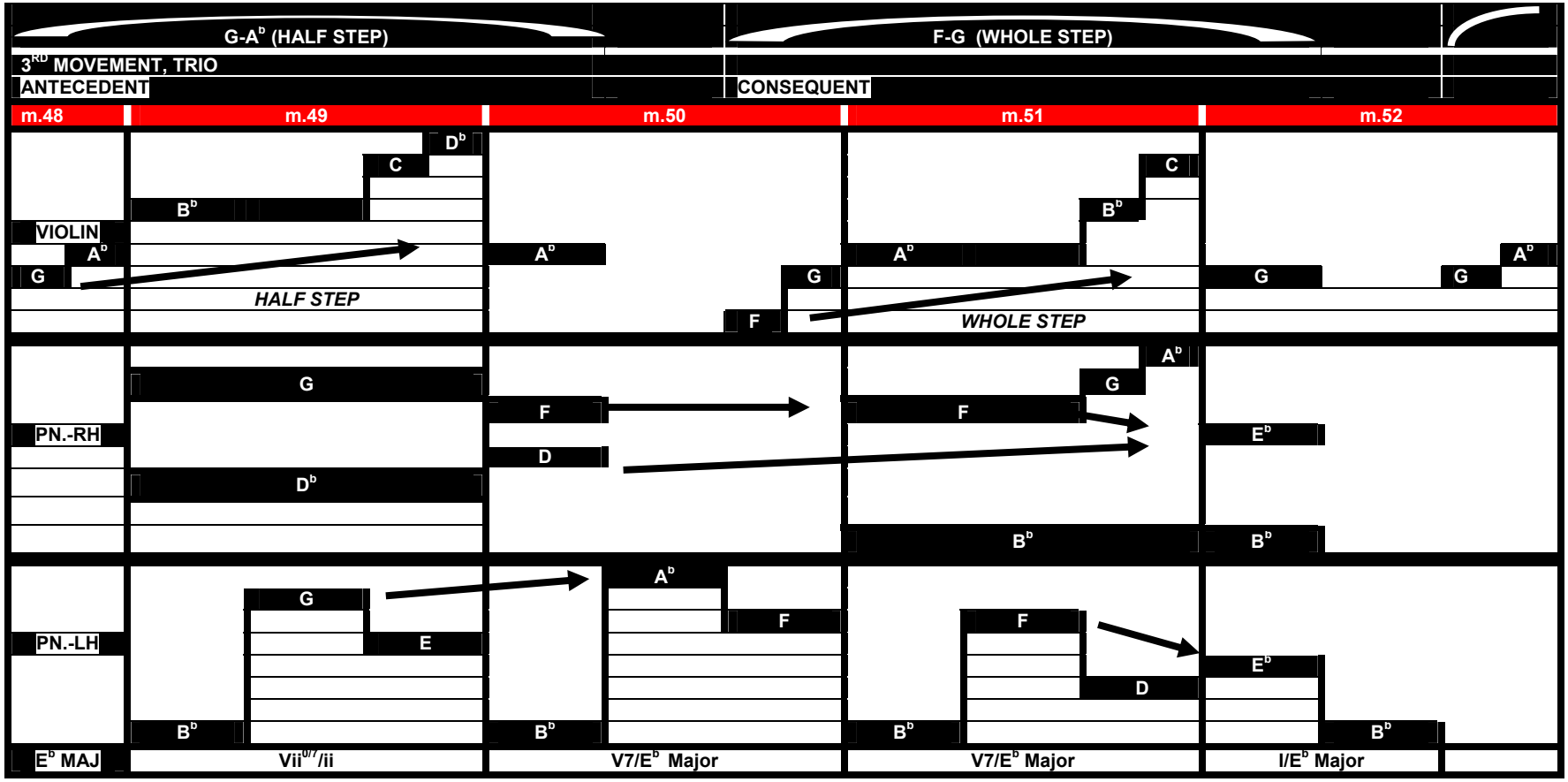
3RD MOVEMENT - TABLE 6



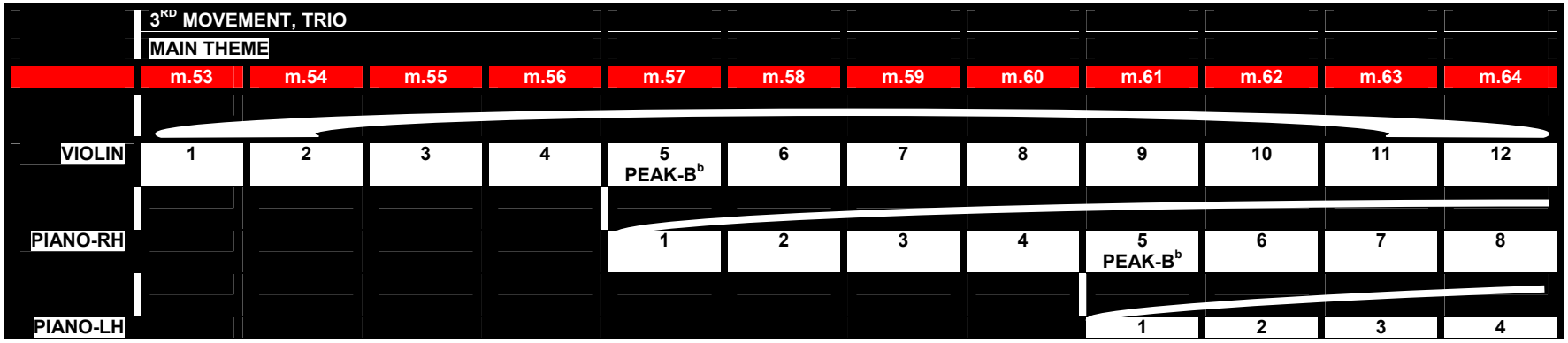
3RD MOVEMENT - Table 6 (Continued)

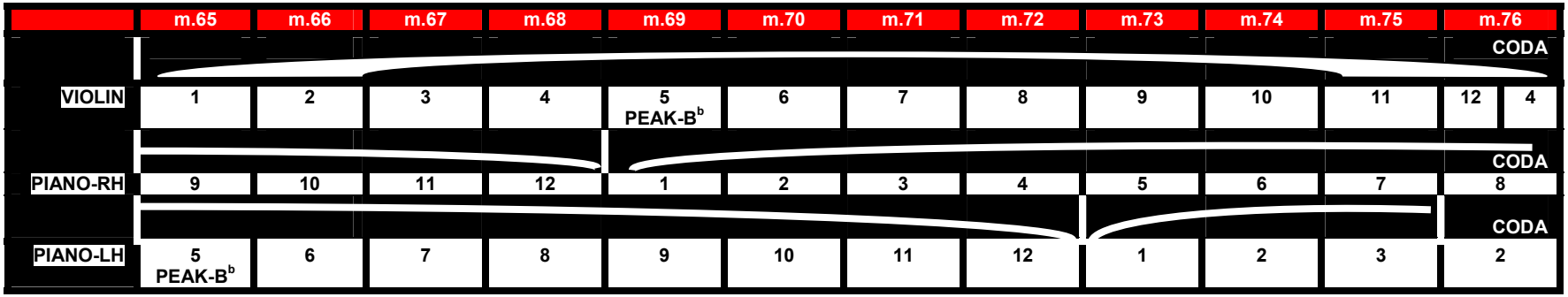


3RD MOVEMENT - TABLE 7 - CONNECTS TRIO THEME TO CANNON



3RD MOVEMENT- TABLE 8 -CANNON





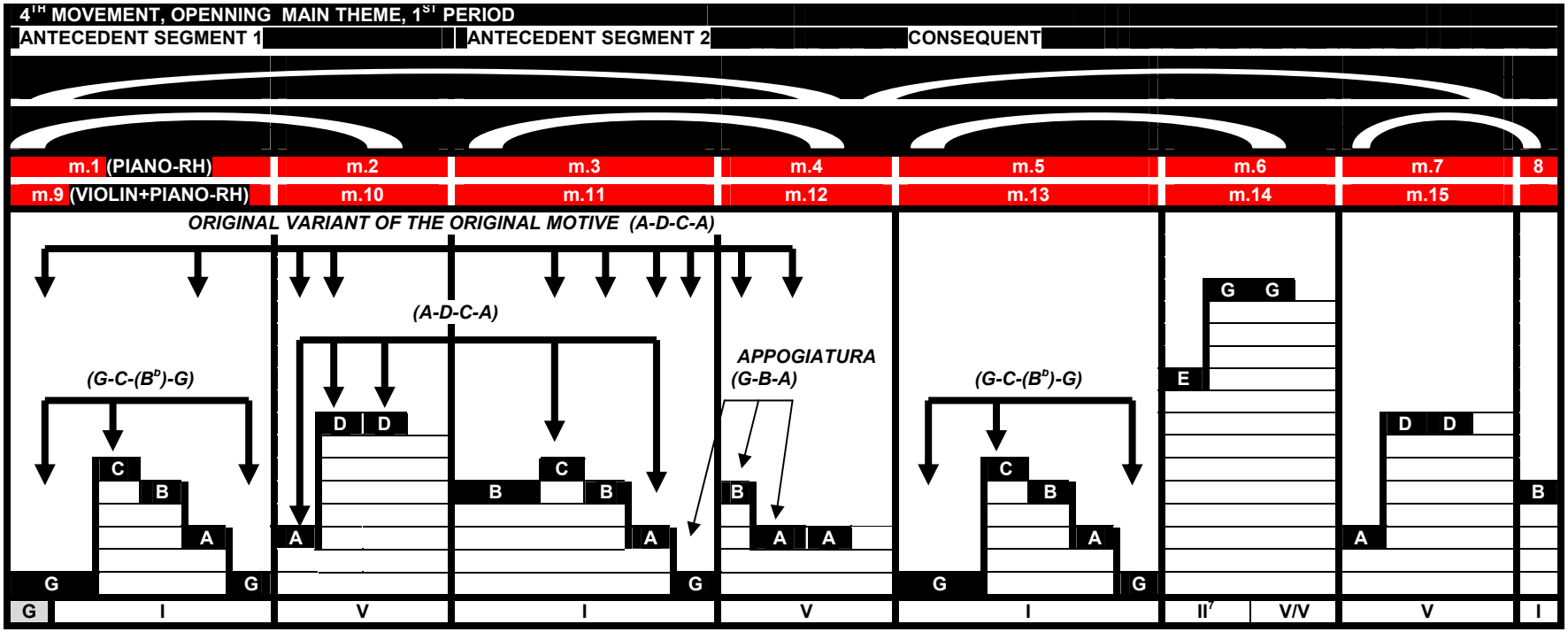
3RD MOVEMENT

Table 8 (Continued)

CANNON

	m.77	m.78	m.79	m.80	m.81	m.82	m.83
VIOLIN	5	6	7	8			
	9	10	11	12			
PIANO-LH	3	2	3				

4TH MOVEMENT - TABLE 1

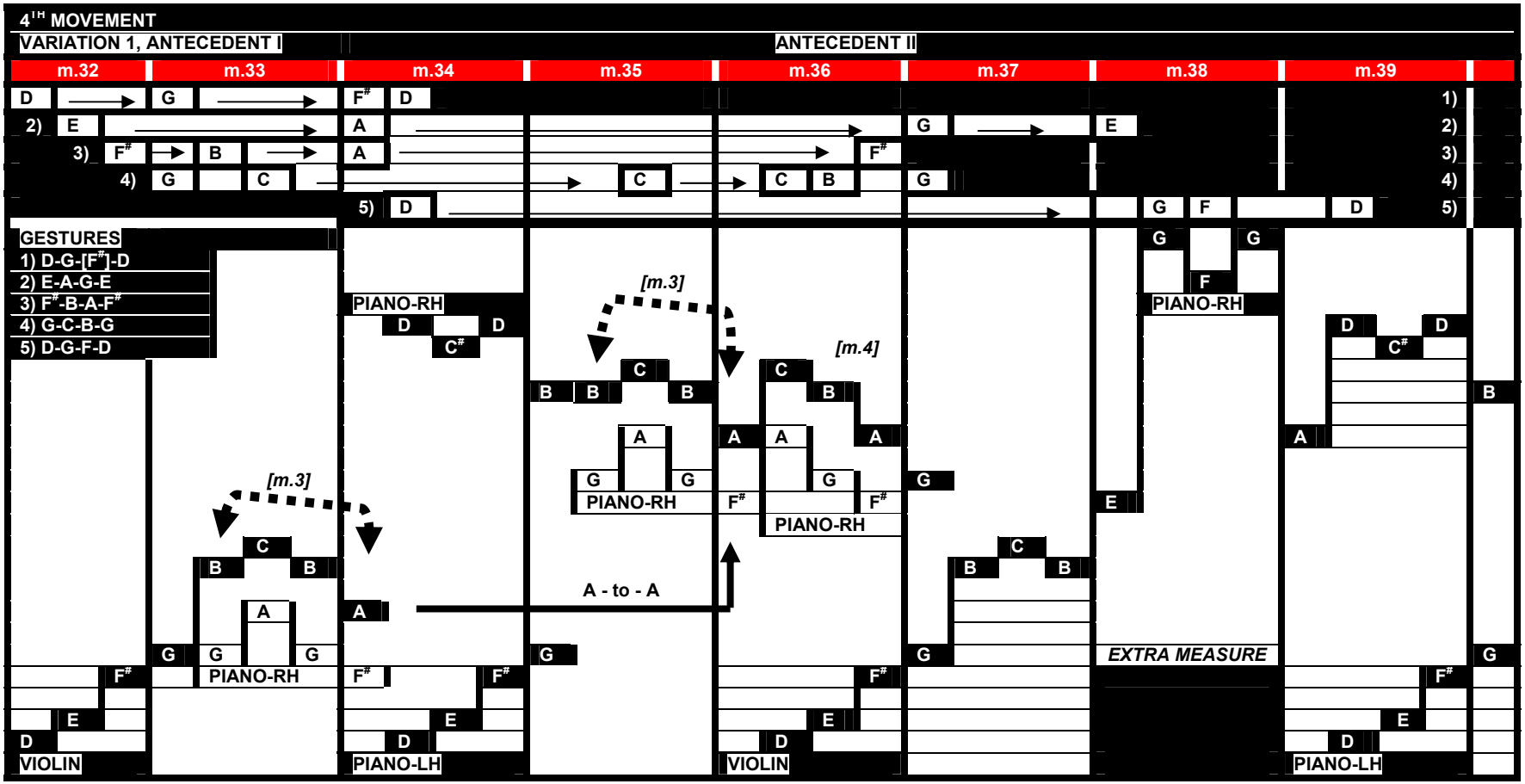


4TH MOVEMENT

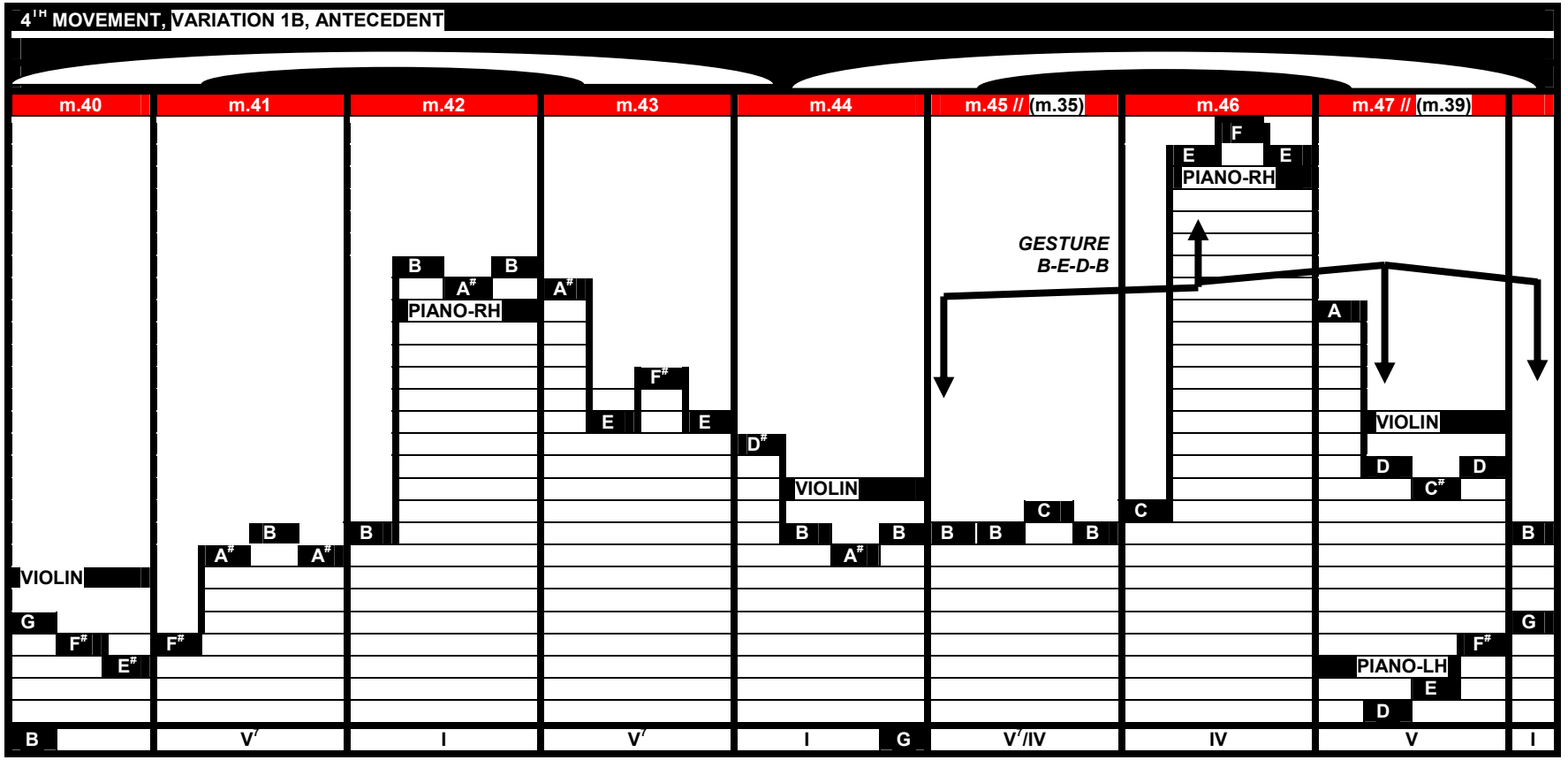
Table 2

4IH MOVEMENT, MAIN THEME			
PIANO-RH			
m.3	m.6	m.7	m.8
VIOLIN AND PIANO-RH			
m.11	m.14	m.15	m.16
PIANO-RH			
m.21	m.22	m.23	m.24
VIOLIN AND PIANO-RH			
m.29	m.30	m.31	m.32
	E		
		D	
B			B

4TH MOVEMENT - TABLE 3 - OVERLAPPING OF FIVE GESTURES

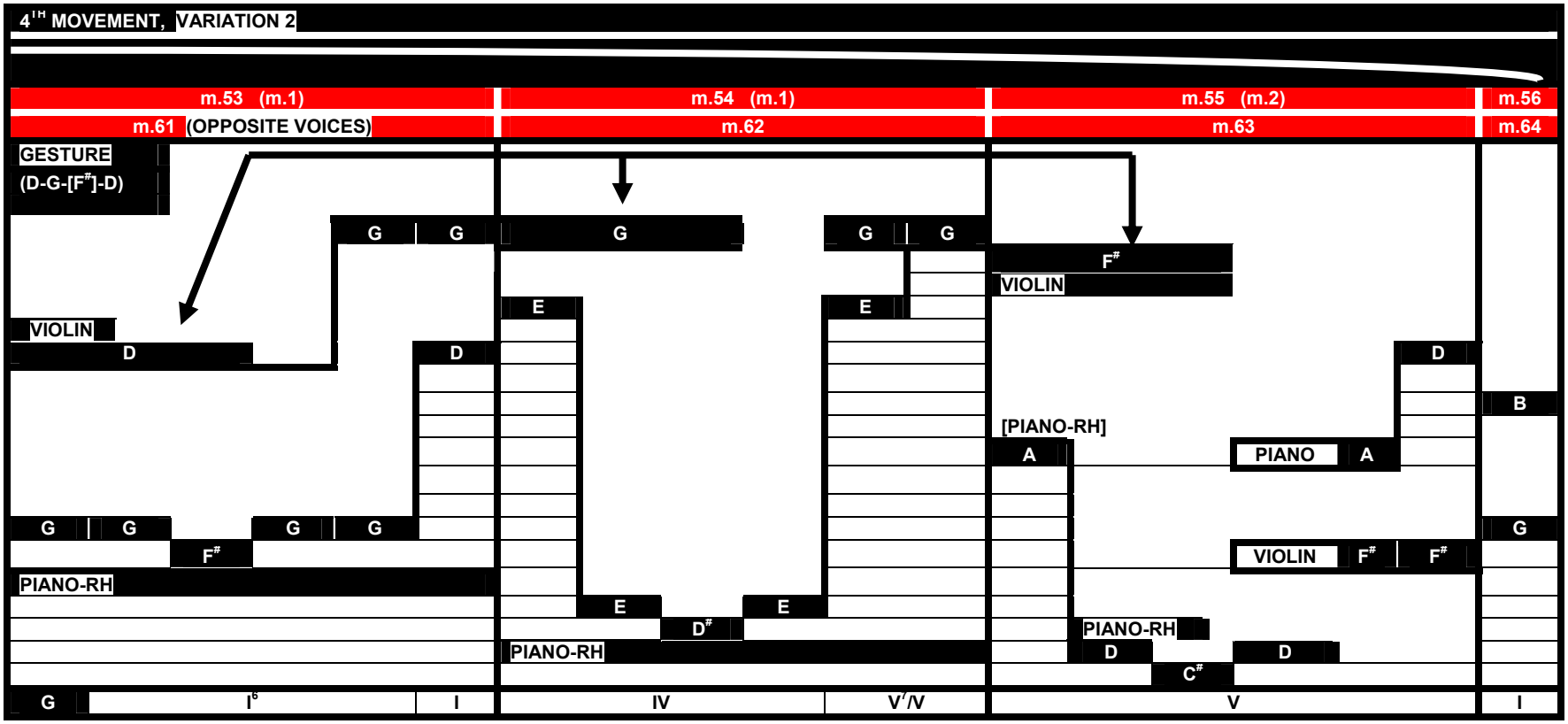


4TH MOVEMENT - TABLE 4 - ORIGINAL GESTURE (B-E-D-B) WITH OCTAVE DISPLACEMENT



4TH MOVEMENT - TABLE 5

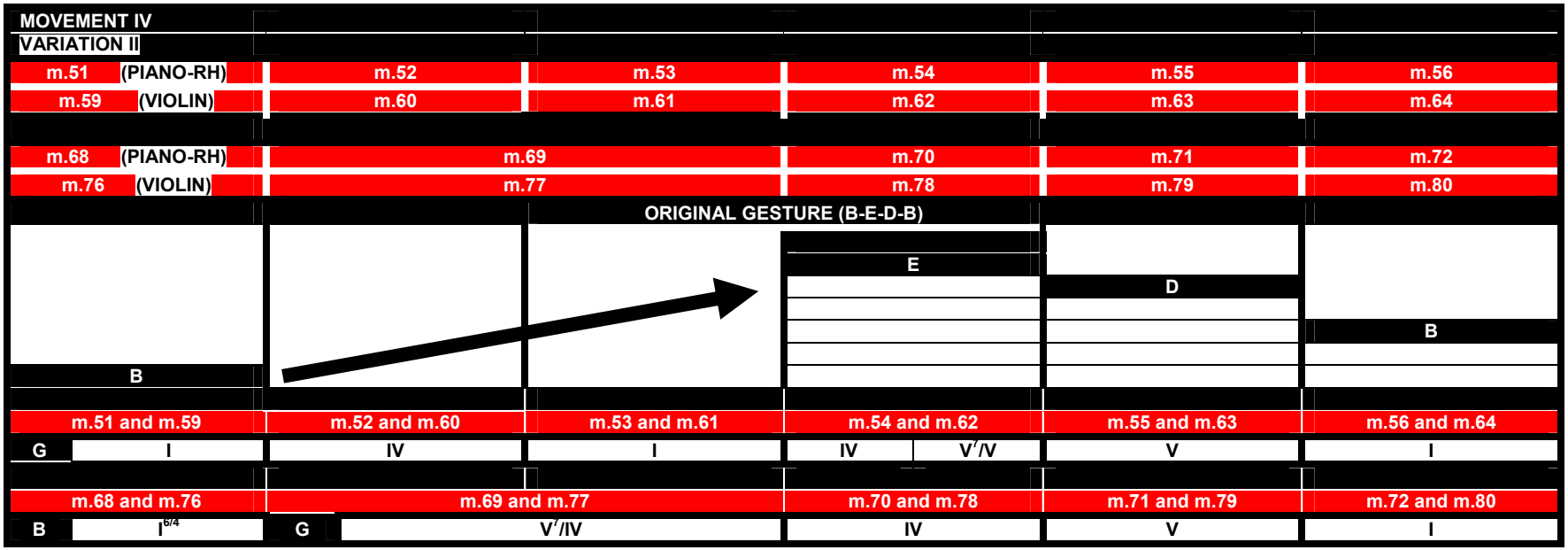
EXPANDED GESTURE (D-G-[F#]-D) UNCOMPLETED IN VIOLIN YET COMPLETED IN PIANO-RH



4TH MOVEMENT - TABLE 6

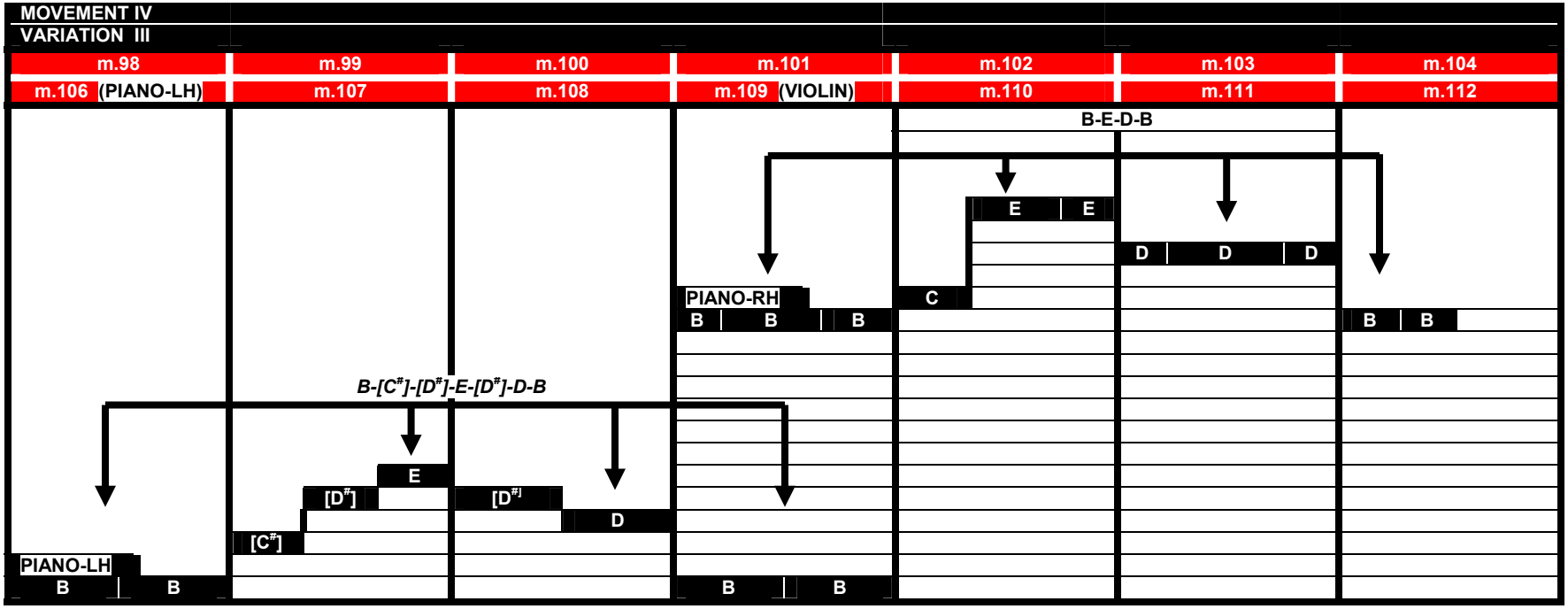
EXPANDED AND COMPLETED ORIGINAL GESTURE (B-E-D-B)

(See Table 5 - Juxtaposing uncompleted Gesture (D-G-F#-[D]), mm.53-55, mm.61-63)



4TH MOVEMENT - TABLE 7

ORIGINAL GESTURE (B-E-D-B)



4TH MOVEMENT

Table 8

MOVEMENT IV			
VARIATION V (mm.145-173)			
m.145 (PIANO-RH)	m.146		m.147
m.149 (VIOLIN)	m.150	m.151	m.152
m.152 PIANO-RH)	m.153 - [E-D#-C#]		
m.154 (PIANO-RH) [B- F#]	m.155 - [E-D#, NOT E-D]		m.156
m.156 (PIANO-RH) [F - DESCENDING SCALIER FIGURE TO B IN THE NEXT MEASURE.]			
[F#]			
[F]	E		
		[D#]	
		D	
B			B

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Vita

Jeremy Milton was born in Sydney, Australia on February 5, 1969. He has a mother and three brothers. Jeremy cannot thank his family enough for all the support and loving care they have given him while he has been in the United States of America.

Jeremy attended the Conservatorium High School in Sydney Australia. He began his Bachelor of Music Degree in Violin Performance at the Conservatorium of Music before transferring to Michigan State University where he earned his Bachelor of Music Degree and continued with his Master of Music Degree in Violin Performance. Jeremy then came to the University of Texas at Austin where he began his Doctoral Degree in Violin Performance.

Jeremy will miss this country and its people very much.

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This treatise was typed by Jeremy Milton.