

SOME FORMAL AND RHYTHMIC FEATURES
OF THE SLOW MOVEMENT
OF BEETHOVEN'S PIANO SONATA OP. 31, NO. 2

by 6791

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A MASTER'S REPORT

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INTRODUCTION

The purpose of this report is to show in part the formal and rhythmic features of the slow movement of Beethoven's Piano Sonata, Op. 31, No. 2. This study has been done to see if it could be discovered how Beethoven advances the slow movement in spite of the slow pulse. One who plays this movement is aware of the very slow quarter note pulse and the long time span of the movement, yet he is conscious of a constant rhythmic activity.

Sonata Op. 31, No. 2, was written in 1802, one of three piano sonatas in this opus number.¹ Milne quotes Beethoven as saying, after writing Op. 28, "From today I will strike out a new road." Milne believes that No. 2 is the most original of the three sonatas contained in Op. 31.²

Op. 31 begins what is referred to as Beethoven's "second period" or "second style." In this period Beethoven injects a more subjective feeling into the sonata form than had been heard previously. The subjective element is not easy to analyze, but the technical means by which it is achieved may be studied. Tovey gives an interesting account of this movement in his book, Beethoven, where he discusses its rhythm from an aesthetic standpoint.³

¹William McNaught, "Beethoven," Grove's Dictionary of Music and Musicians, p. 587.

²A. Forbes Milne, The Musical Pilgrim--Beethoven. I. The Piano-forte Sonatas, p. 31.

³Sir Donald Francis Tovey, Beethoven, pp. 57-59.

Methods Used in Analysis

The first step in analyzing this movement was to mark each phrase and identify each cadence. Through harmonic analysis the key centers were located. Then, by noticing the material and themes, the general form was outlined. Analyzing the movement of the outer melodies and their rhythmic impulses was important in defining the motives and phrases in the first theme material.

In analyzing the rhythm, the number of rhythmic impulses per measure in the melody, the accompaniment, and the accumulative rhythm were recorded. The accumulative rhythm is shown on Chart I in the appendix. A comparison of the rhythm of the melody and the supporting parts is seen on Chart III. Graphs such as these are somewhat inadequate as the number of impulses per measure does not illustrate adequately if these impulses were of even or uneven rhythm, as shown in this comparison.

Ex. 1.

Handwritten musical notation for measures 31 and 32. The notation is in treble and bass clefs with a key signature of one flat (B-flat). Measure 31 shows a melody line with a 3/4 time signature and an accompaniment line with a 4/4 time signature. Measure 32 shows a melody line with a 3/4 time signature and an accompaniment line with a 4/4 time signature. Below the notation, the text 'Accum. Rhythm: 8 impulses' is written for both measures.

Definition of Terms

Switch--a term indicating change of direction in the tonality plan in the recapitulation. In the recapitulation of the sonata-allegro form, the first and second theme groups both appear in the tonic key, unlike their appearance in the exposition. The "switch" technique, sometimes sounding like

an apparent key change, helps prepare the listener for the second theme material by emphasizing the dominant chord sound.

Anchor--the technique of firmly establishing a new key center by alternating between the tonic and a first classification chord (usually the dominant) in the cadence area.

Phase--a section of music unique and identifiable because of like rhythmic and melodic activity throughout the section.

Accumulative rhythm--the total number of rhythmic impulses heard in the measure in all parts. In Ex. 2 the number of impulses in the accumulative rhythm of measure 23 is eleven.

Ex. 2.

The image shows a handwritten musical score for measure 23. The top staff is in treble clef with a key signature of one flat (B-flat) and a 3/4 time signature. It contains a piano accompaniment with chords and a triplet of eighth notes. The bottom staff is in bass clef with a key signature of one flat and a 3/4 time signature, containing a melodic line with eighth and quarter notes. Below the bottom staff is a separate line labeled 'Accum. Rhythm' which shows a sequence of notes representing the total rhythmic impulses in the measure, with a '3' written below the first group of notes.

Rhythmic impulse--"rhythmic impulses per measure" means the number of times notes are struck in that measure. The term may be used when discussing specific areas, such as the melodic rhythm. For example, there are four rhythmic impulses in the melody in measure 23.

Materials

The works referred to for supplemental help were Grove's Dictionary of Music and Musicians, The Musical Pilgrim--Beethoven, by A. Forbes Milne, and

Beethoven and A Companion to Beethoven's Pianoforte Sonatas, by Sir Donald Francis Tovey.

A FORMAL AND RHYTHMIC ANALYSIS OF THE
SECOND MOVEMENT (ADAGIO) OF BEETHOVEN'S SONATA
OP. 31, NO. 2

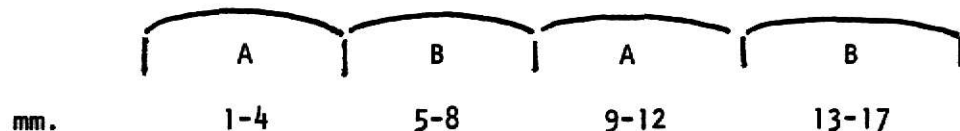
Tovey, in his Companion to Beethoven's Pianoforte Sonatas, describes the form of this movement as "sonata form without development."¹ In a single word, the form is that of a sonatina. A. Forbes Milne thinks that all three movements of this sonata are basically sonata forms, yet their dissimilarity shows the elasticity of that form in Beethoven's hands.²

The manner by which the rhythm affects this aspect of the music will be noted in this study, especially as to how it makes for continuity.

Exposition

The exposition is composed of a first theme, measures 1-17, a transition, measures 17-30, and a second theme, measures 30-38. There is no development section, but a transition section, similar to the one between the two themes, leads into the recapitulation.

First Theme. The form of the first theme (measures 1-17) is a double period.





At first sight, it seems as if the B \flat major chord in measure 1 is introductory, while the thematic material proper starts in measure 2. But analysis

¹ Sir Donald Francis Tovey, A Companion to Beethoven's Pianoforte Sonatas (Complete Analyses), p. 131.

² Milne, Musical Pilgrim, p. 32.

of the underlying rhythmic structure indicates quite a different thing.

Rather, the section seems to be composed of two-measure motives or rhythmic figures (somewhat changed by the metric displacement after dropping the  figure, measures 14-15). The agogic accents () help point out the division of these two-measure motives as shown in this example of the rhythm of the bass and melody (especially the bass line).

Ex. 3.



The condensed two outer melodies also help illustrate this grouping:

Ex. 4.

Handwritten musical notation for Example 4, showing two systems of a melody in 3/4 time. The first system contains measures 1 through 13, and the second system contains measures 14 through 17. The melody is in B-flat major and consists of eighth and quarter notes.

Melodically, the first theme is based on this three-note figure.

Ex. 5.

Handwritten musical notation for Example 5, showing a three-note figure in 3/4 time. The notes are G4, A4, and B4, beamed together.

The first theme begins very simply--melodically, harmonically, and especially rhythmically, as shown on Chart 1 (one to four rhythmic impulses per measure). But starting in measure 5 Beethoven uses the techniques of connecting melodic runs, mordants, and trills to keep the continuity between phrases and measures.

There is a "quasi" resting place after the second phrase (measure 8) where the dominant chord is preceded by a suspension. This makes the half close more satisfying, though the definitely dominant sound and some leading tones keep the feeling of forward motion.

Throughout the remainder of the first theme (and the movement) the addition of ornamentation (♩) above the slow pulse and simple melody gives the composition a rich texture. Also note that the ♩ figure tightens toward the cadence, as seen in this portion of the accumulative rhythm:

Ex. 6.



This first theme section does not rest on a perfect authentic cadence until its end in measure 17. Most of the cadences in this section end on a dominant or subdominant chord; and in the one instance of an authentic cadence (measure 5), the effect of finality is diminished by the fact that the third tone of the chord is heard in the right hand melody.

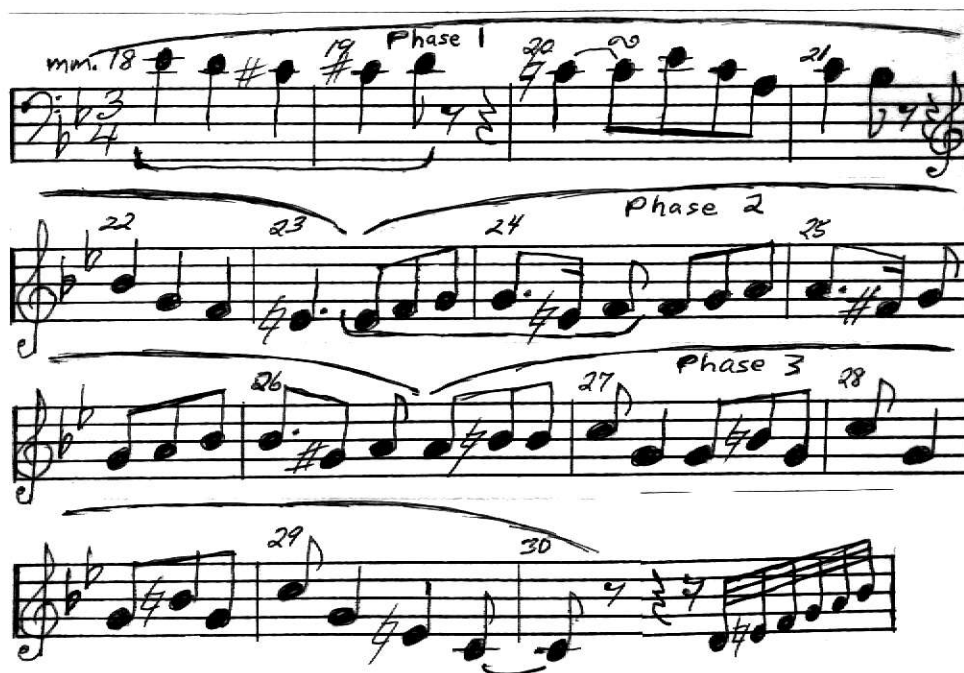
Transition. Rhythmic impetus is perfectly demonstrated in the transition section in measures 17-30. First, in measure 17, new rhythmic vitality is added by the anacrusis-like figure (B♭ pedal point) leading into the first beat of measure 18, where the section proper begins.

Ex. 7.



Second, the melodic material in measures 18-30 falls into three distinct phases, each with its own distinctive rhythmic character. Each is underlined by the vitality of the new rhythmic figure in Ex. 7.

Ex. 8.



Phase 1 is placid; nevertheless, increased rhythmic activity is noted in measure 20. The introduction of such rhythmic activity in the cadence region is typical of Beethoven's treatment.

In Phase 2, rhythmic activity is greatly increased, while in Phase 3,

the introduction of syncopation gives further rhythmic impetus. The shortening of the time span for the figures creates this feeling of increased activity. While one figure takes up an area of around five pulses in Phase I, only three pulses are used "per figure" during the other two phases. A plan of forward motion develops, finally leading to a fulfillment in the rapid anacrusis leading into the second theme (measure 30).

Ex. 9.




It should be noted that the timpani-like figure does not appear at the beginning of the first beat of a measure or a beginning of any beat (though sometimes a group of figures end on the first pulse, as in measures 18, 20, 22, and 30); this figure is always reaching toward the accented beat. Note in

this example how the group of figures work toward the first beat of the measure in measures 18, 20, and 22, but thereafter the individual figures lead into the next beat.

Second Theme. Milne states that the second theme of the Adagio is very "Mozartian."³ It is a simple melodic theme in F major of two four-measure phrases. At the end of the first phrase, although it ends on a tonic chord, the melody is heard moving up to the mediant tone of the chord (measure 34). This and a melodic run provide momentum into the second phrase, which also ends with the mediant tone in the melody, but is approached by downward movement (more final).

Ex. 10.



The  figure gives the simple melody its vitality. This rhythmic figure is also used, in typical Beethoven style, at the cadence--where one might expect a lessening of intensity from a lesser composer--and on the first beat of that measure, though the beginnings of the other measures of the phrase are marked by rhythmic simplicity.

³Milne, Musical Pilgrim, p. 36.

Ex. 11.



The second phrase, which seems to be a repeat of the first, has an additional note in each measure (as seen in this comparison of the accumulative rhythm of measures 31 and 35).

Ex. 12.



This is enough to give an increased sense of rhythmic continuity.


Transition. The transition (measures 39-42) is again marked by the timpani-like figure, this time an F pedal point, again not appearing on the first portion of the beat. Harmonically Beethoven builds a dominant ninth chord on the F, leading to the recapitulation in the tonic key (B \flat major). A long dominant run into the cadence chord is a period of great cadence activity, adding to the anticipation of the beginning of the recapitulation.

Ex. 13.



Recapitulation

The recapitulation is composed of the first theme, measures 43-59, a transition, measures 60-72, a second theme, measures 73-80, and the coda, measures 81-103.

First Theme. The first eight measures of the recapitulated first theme (measures 43-50) are fairly simple in a rhythmic sense with an occasional turn () above the basic three-note figure (Ex. 5). If one followed only the Ex. 14.



Handwritten musical score for measures 43 to 60. The score is written on six systems of two staves each. Measure numbers 43 through 60 are written above the first staff. The notation includes various rhythmic values, accidentals, and a turn symbol in measure 44. The key signature changes from one flat to two flats between measures 50 and 51.

melody in the remainder of the first theme, it would again be based on that three-note figure. But Beethoven has made this section of the slow movement the part with the most rhythmic and dynamic intensity through use of a continuously active accompaniment. Beginning with the anacrusis to measure 51, there is an almost constant thirty-second note (♩) accompaniment until the end of measure 58. (An interesting comparison of the rhythmic activity of the melody and the accompaniment can be found in Chart III.)

The first theme is presented in the same form in the recapitulation as it was in the exposition: double period, two-measure motives. Although the rhythmic activity is increased greatly, the rhythmic impulses of the bass or the accompaniment still show the two-measure motives marked clearly by the agogic accents.

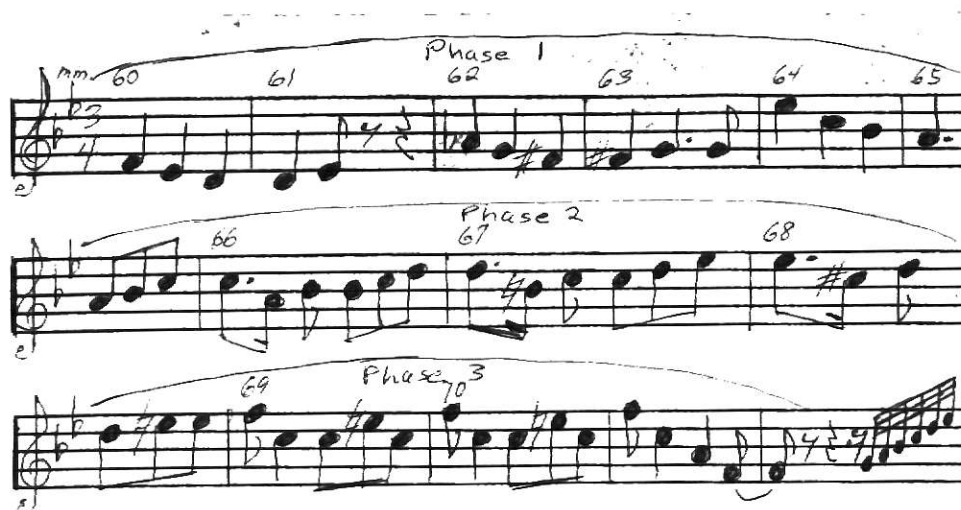
Melodically and harmonically, in the first phrase, the listener could think he was hearing an exact repetition of the first theme of the exposition; however, there are some alterations. There is slightly more rhythmic activity and there is the insertion of a deceptive cadence (measures 46-47) before the arrival of the first close, a half cadence in measure 50.

Ex. 15.



Transition. The transition to the second theme can again be divided by phases:


Ex. 16.



As in the transition section in the exposition, an ongoing feeling is achieved by shortening the time span of the figure from Phase 1 to Phase 2, and by the syncopation in Phase 3. The bass line rhythm timpani-like figure, Ex. 7 and 9, is the same as found in the exposition.

The transition's purpose this time is not to change key centers, but to create a "switch;" that is, to prepare a dominant feeling before beginning the second theme in the same key as the first theme (tonic).

Second Theme. The second theme of the recapitulation (measures 72-80), now appearing in the tonic key, is an exact transposition of its appearance in the exposition.

Coda. The rest of this movement (measures 81-103) is a coda of three sections, the first two using material found elsewhere in the movement, and the third part being new material. The first section (measures 80-89) contains material similar to the transition in measures 39-42, including the rhythmic figure , now on a B \flat pedal point. Note that again this figure

produces anacrusis-like forward motion as it works toward the next beat.



Ex. 17.

Handwritten musical score for Example 17, measures 80 through 89. The score is written on four staves. The first staff contains measures 80, 81, and 82. The second staff contains measures 83 and 84. The third staff contains measures 85, 86, and 87. The fourth staff contains measures 88 and 89. The music is in 3/4 time, marked 'mm.' (meno mosso). The notation features eighth and sixteenth notes, often beamed together, with some triplets indicated by a '3' and a slur. The key signature has one flat (B-flat).

The melodic rhythm would show this section to be divided as follows:

Ex. 18.

Handwritten musical score for Example 18, measures 81 through 89. The score is written on two staves. The first staff contains measures 81, 82, 83, 84, and 85. The second staff contains measures 86, 87, 88, and 89. The music is in 3/4 time, marked 'mm.' (meno mosso). The notation features eighth and sixteenth notes, often beamed together. The key signature has one flat (B-flat). Dynamic markings include 'sf' (sforzando) at measures 84 and 88.

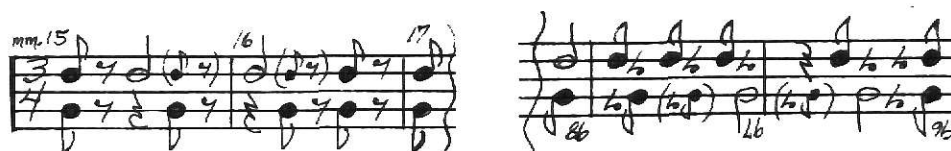
The second part of the coda uses material similar to that found in the first theme (i.e.,  and ) , including the metric displacement before the cadence. This section falls into these divisions:


Ex. 19.



Measure 92 is a dramatic point in the movement, partly because it stops on a low note with the dominant chord implied, but mainly because it stops. The chart (Chart 1) shows one rhythmic impulse in this measure, the first time the rhythmic intensity has dropped to this level since the beginning of the movement (measures 1 and 3). There is more rhythmic activity at the cadence of this section than at the final cadence of the first theme in the exposition (to prepare for the ending of the movement).

Ex. 20.



Melodic runs are important to keeping this section moving, as is also the overlapping of the  figure (as seen in Ex. 19).

It is now at the end that Beethoven introduces new material as he anchors the tonic feeling with a tonic pedal point and continuous V-I harmony, which is resolved on the last pulse. These final measures of the coda are in two-measure motives, beginning one-half beat after the first beat of the measure (giving a feeling of forward motion).

Ex. 21.






The new material begins in continuous eighth notes (measures 98-99), almost as in relief from the activity (uneven rhythms and more notes) that has appeared before. Then, in typical Beethoven fashion, the rhythmic activity increases toward the cadence with the addition of trills and extra sixteenth notes, and, in the final measure, the dotted figure.

Ex. 22.

Handwritten musical notation for measures 100-103. The notation is on two staves, treble and bass clef, with a key signature of one flat (B-flat). The time signature is 3/4. Measures 100-102 show a complex rhythmic pattern with trills and extra sixteenth notes. Measure 103 shows a cadence with trills and extra sixteenth notes, ending with a dotted figure.

SUMMARY

The second movement of Beethoven's Piano Sonata Op. 31, No. 2, is the slow movement (Adagio), but Beethoven has used many methods to keep the rhythmic flow, and to keep the movement from sounding "slow."

Methods used to keep rhythmic continuity and vitality include the basic three-note figure used in the first theme. Beethoven used the double dotted eighth-note figure () rather than  or . Melodies and rhythms giving an anacrusis feeling are important in giving an on-going feeling. Melodic runs are used in and lead to first and second theme material. The timpani-like rhythmic figure used in the transition always works toward a beat, rather than beginning on a beat. The last part of the coda (beginning at measure 98) is divided into two-measure motives, each starting on the last half of the first beat of the measure, thus creating a "carrying-over" sound.

An important technique in Beethoven's music is extra cadence activity. In the "Adagio" this includes metric displacement toward the end of the first theme sections. Additional cadence activity also includes ornamentation and other rhythmic figures not previously used.

One can note increased activity (added notes, fewer rests) through each section (i.e., more activity in a second phrase than a first phrase). There is also more rhythmic activity in the recapitulation (first theme) than there is during the exposition. Beethoven also used the technique of shortening the time span of a rhythmic figure, as in the transition sections, and the overlapping of figures, as in the coda (first theme material).

Another technique often used by Beethoven in long lyrical melodies,

where it was not feasible or desirable to develop the theme otherwise, was the variation technique. The *first theme* in the recapitulation is essentially the same as it is in the exposition; the addition of the thirty-second note accompaniment has provided the variation and created a high rhythmic plateau.

These are among the ideas found in the slow movement (Adagio) of Op. 31, No. 2, that keep a continuous rhythmic feeling through a long time span.

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APPENDIX

**THE FOLLOWING
DOCUMENT(S) IS
OVERSIZED AND
IS BEING FILMED
IN SECTIONS TO
INSURE
COMPLETENESS
AND
CONTINUITY**

ILLEGIBLE DOCUMENT

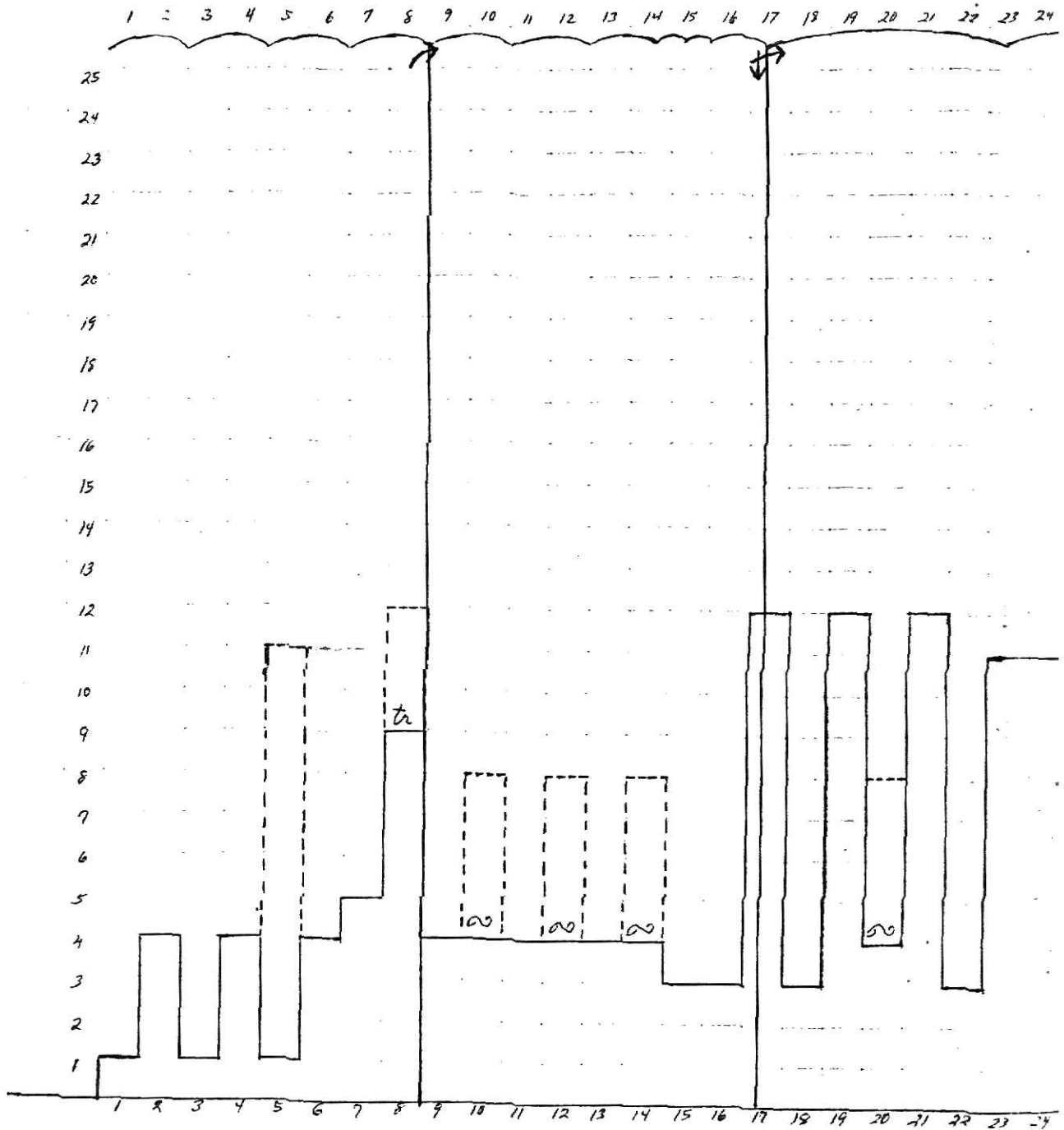
**THE FOLLOWING
DOCUMENT(S) IS OF
POOR LEGIBILITY IN
THE ORIGINAL**

**THIS IS THE BEST
COPY AVAILABLE**

Material	B6 Major
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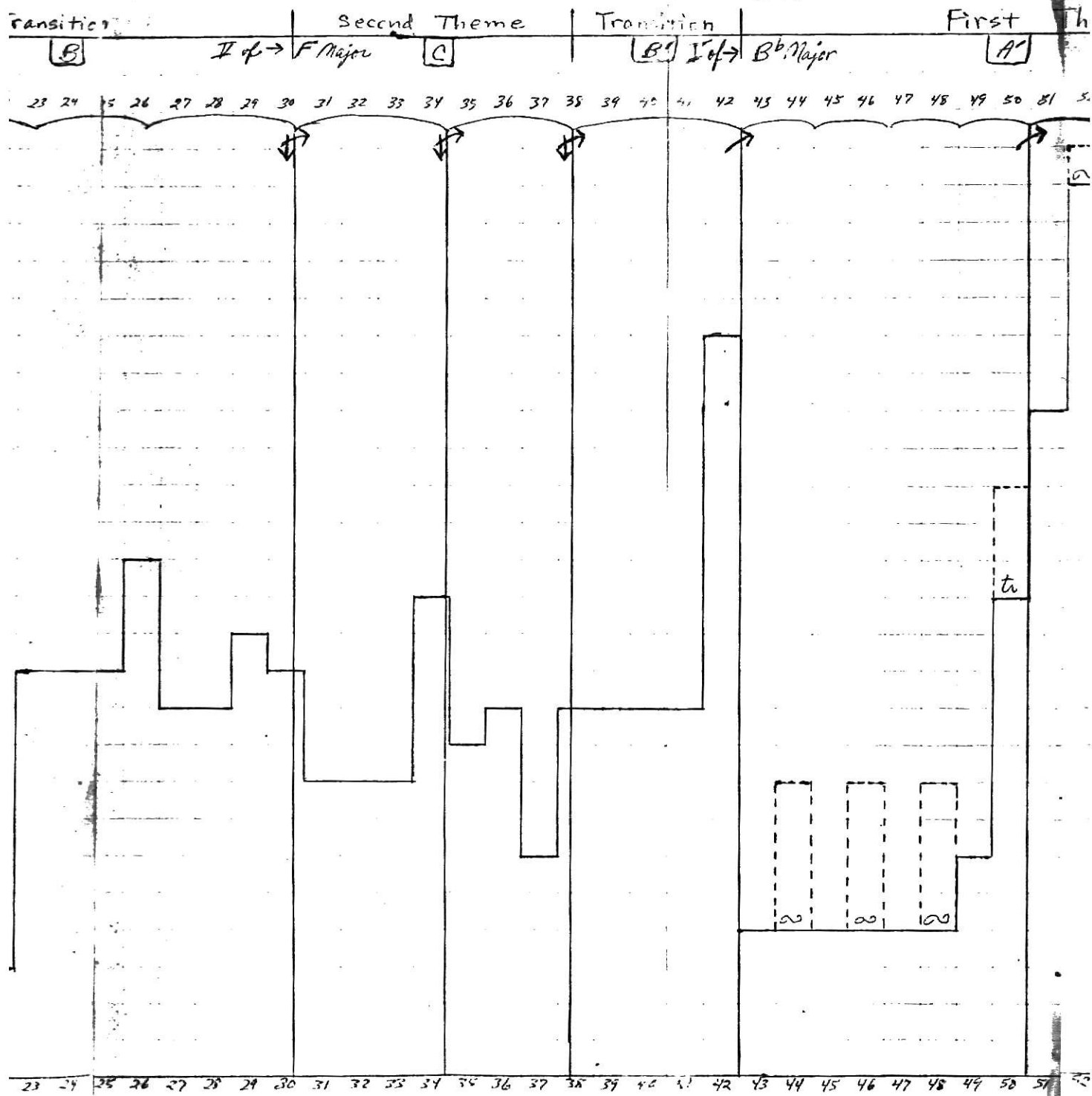
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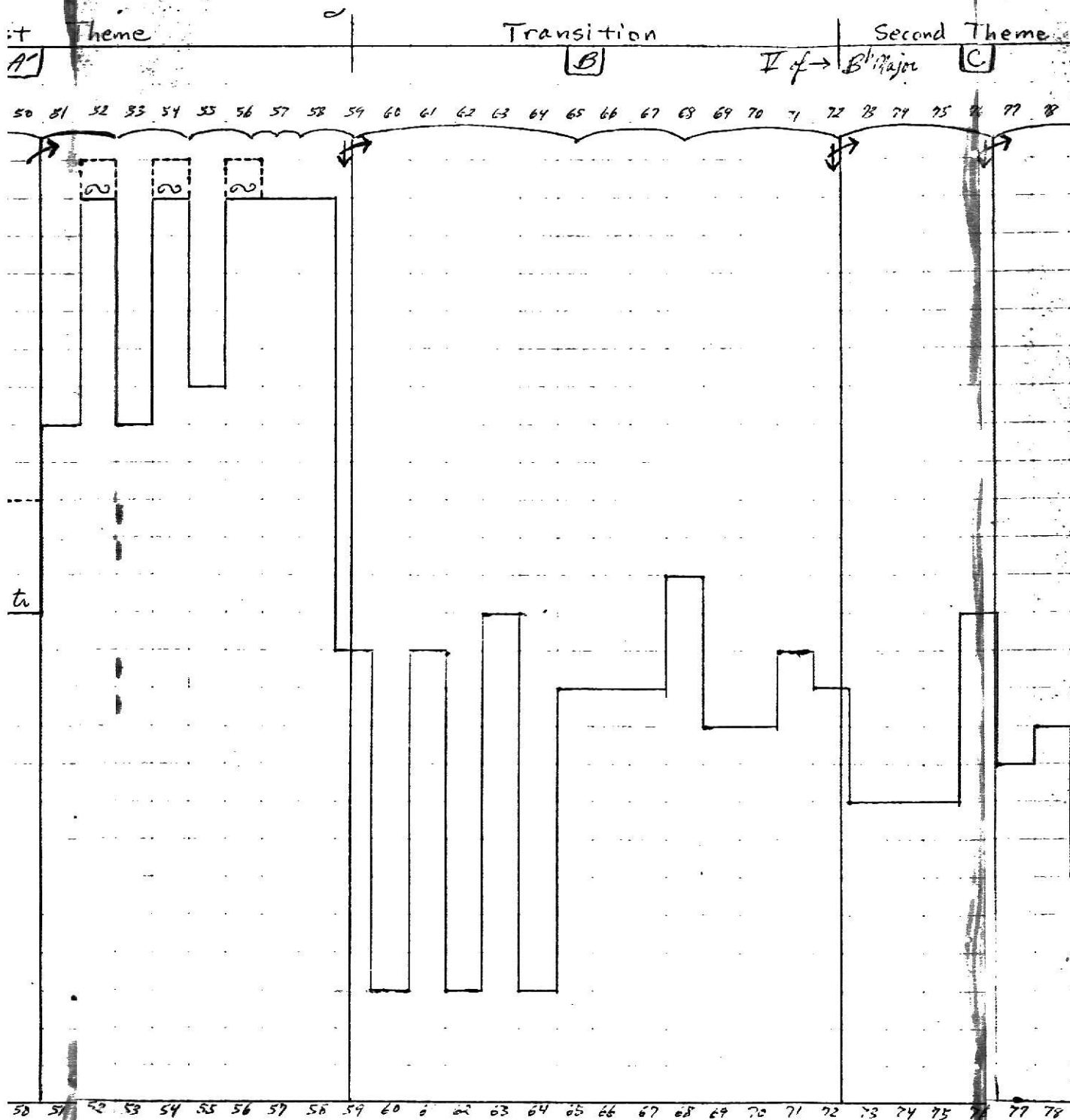
Rhythmic Development Beethoven Piano Sonata

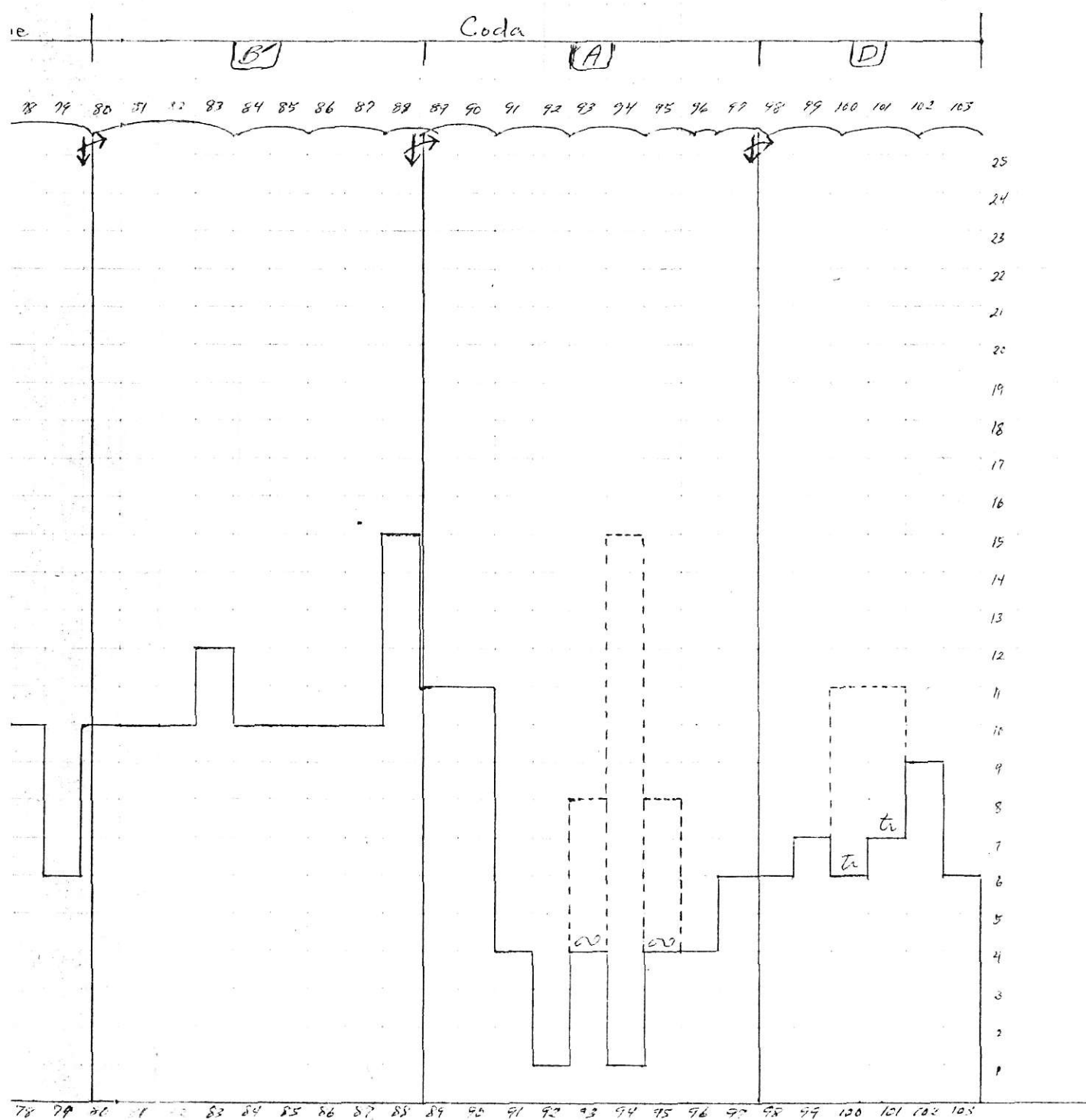


ART I

Development (Accumulative Rhythm)

Sonata Op. 31, No. 2 - Adagio





Scale: One horizontal space equals one measure
One vertical space equals one note impulse

CHART II

Thematic Chart

Op. 31, No. 2

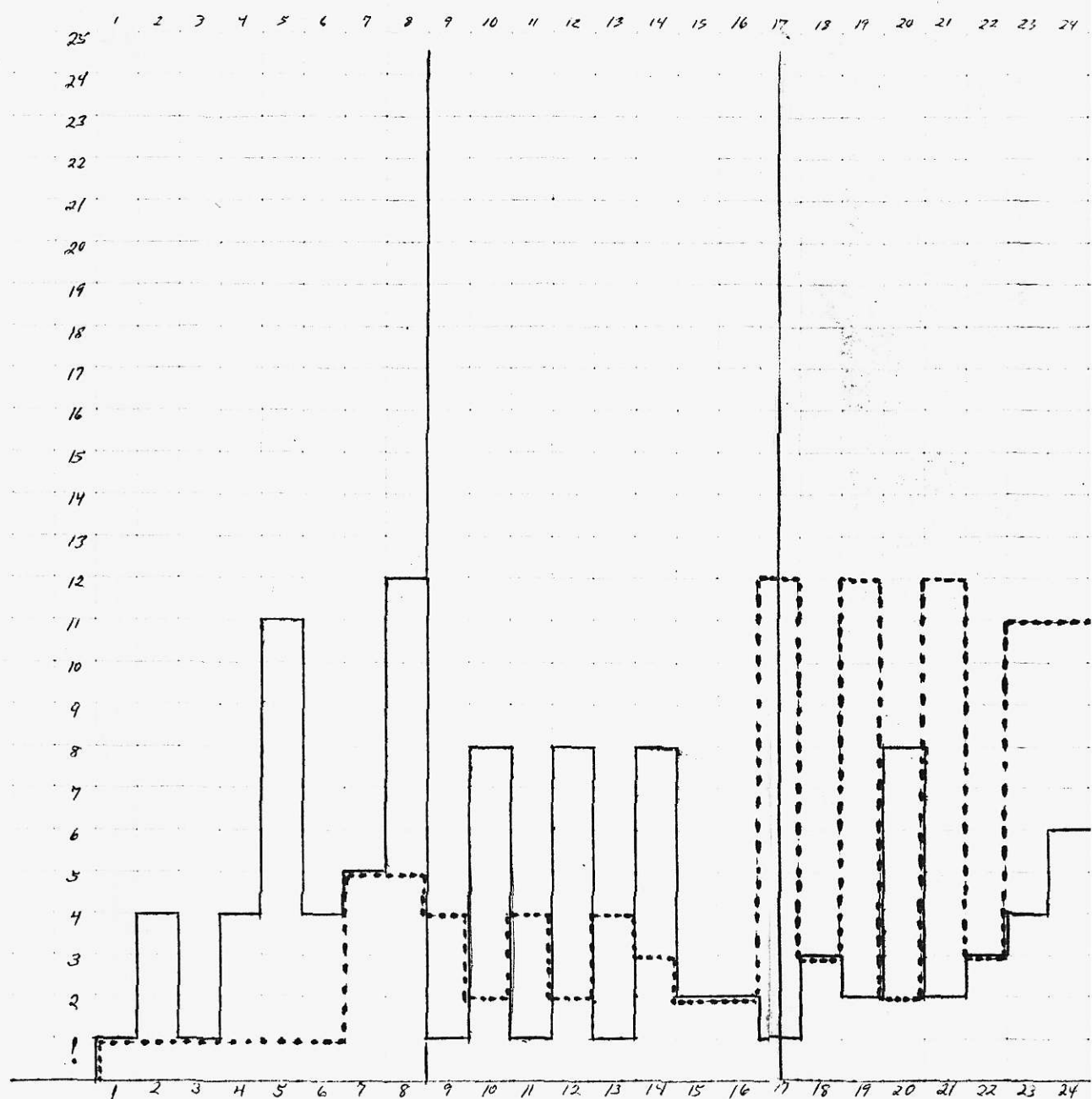
Adagio

Section	Exposition				Recapitulation			
	1 st Theme	Transition	2 nd Theme	Trans.	1 st Theme	Transition	2 nd Theme	Coda
Material	A	B	C	B'	A'	B ²	C	B' A
Measures	1-17	17-30	30-38	38-42	43-59	59-72	72-80	80-89 89-98 98-103

Scale: 1 square = 3 measures

First Theme

Transition

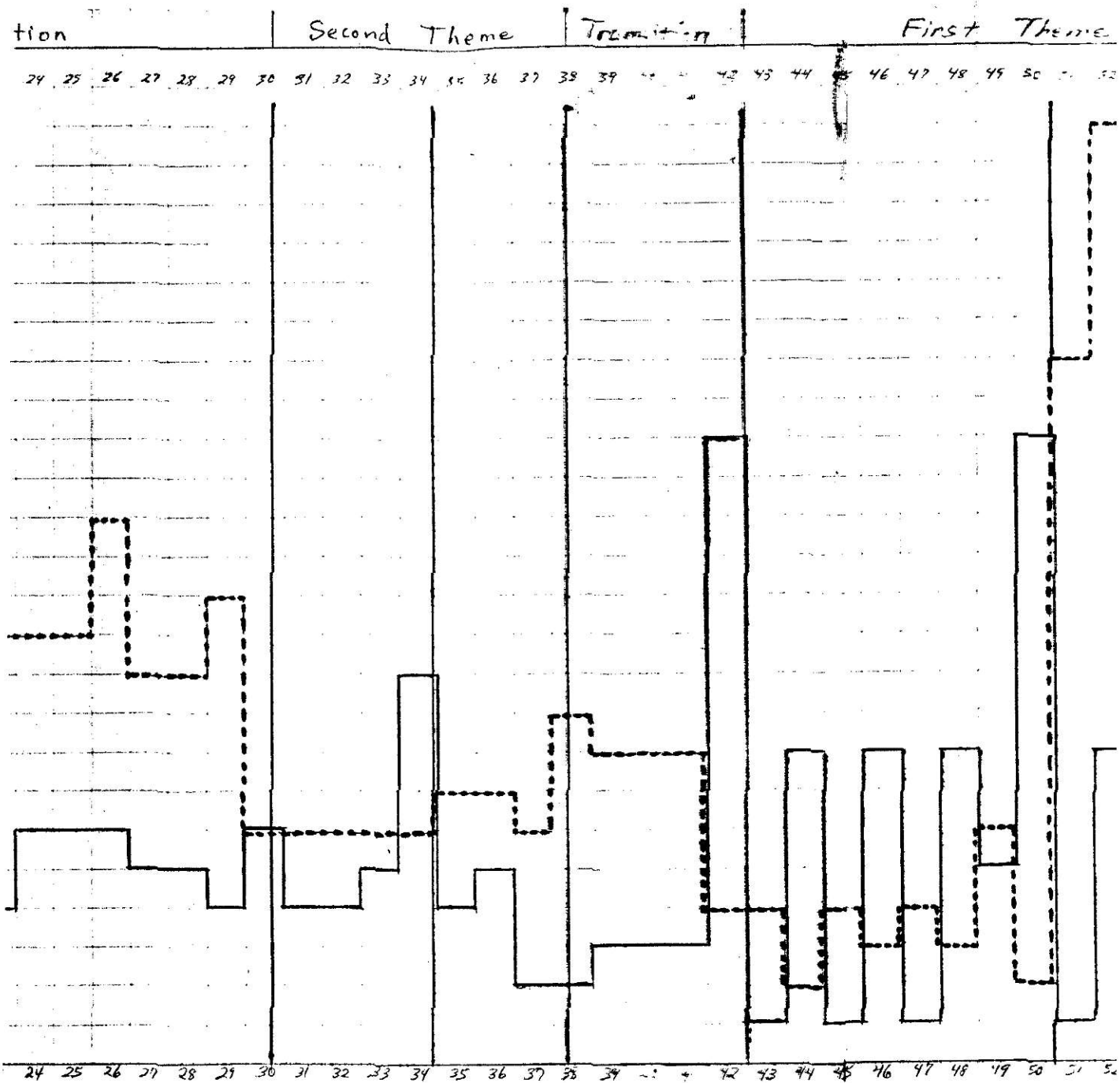


———— Melodic Rhythm
 - - - - Accompaniment Rhythm

Scale: One horizontal space
 One vertical space

CHART III

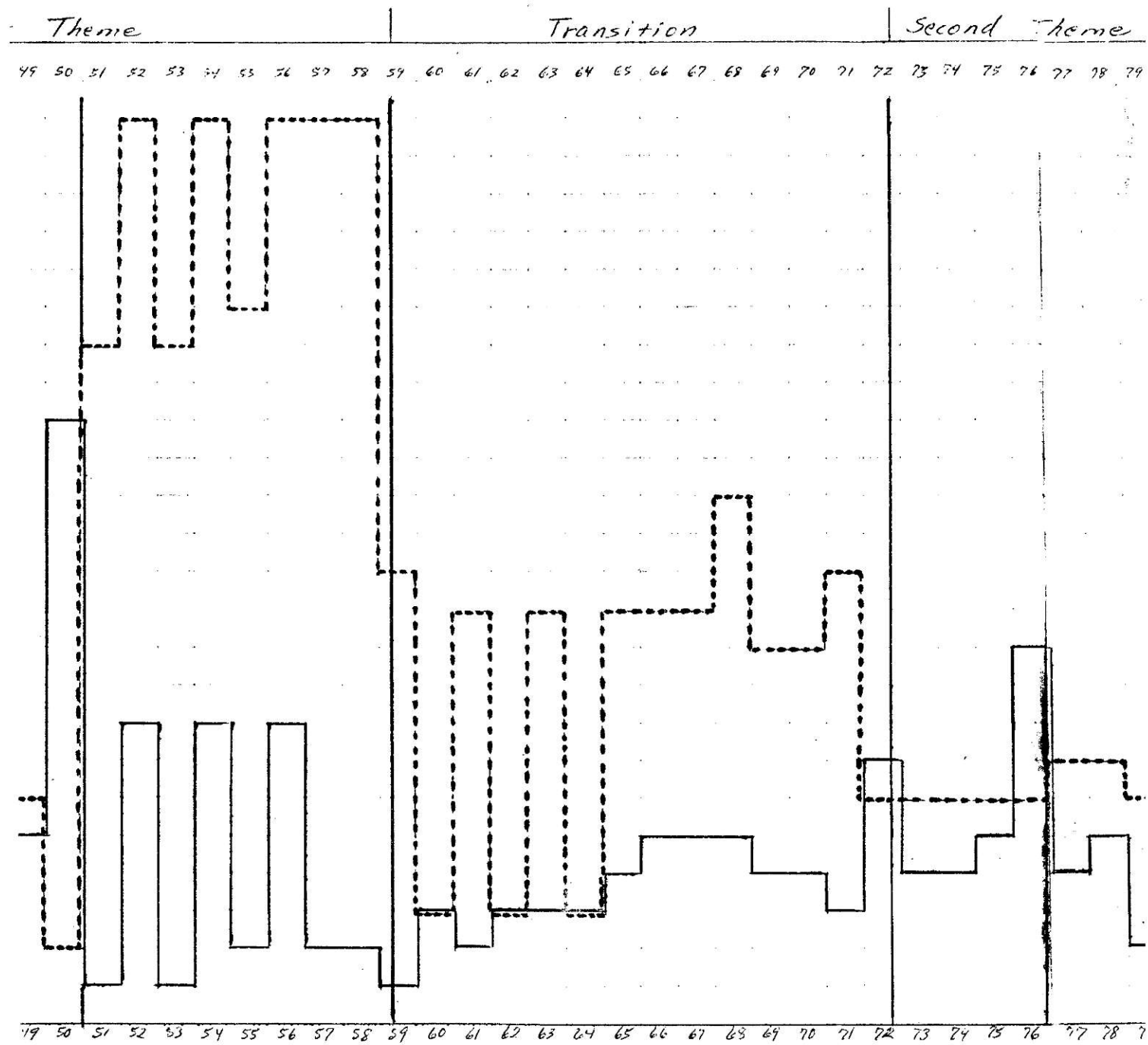
Beethoven Piano Sonata Op. 31, No.
Comparison of Melodic and Suppo



space equals one measure
ice equals one note impulse

III

Op. 31, No. 2 - Adagio and Supporting Rhythm



Theme

Coda

77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103

25

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103

END

OF

OVERSIZE

DOCUMENT(S)

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One can note increased activity (added notes, fewer rests) through each section (i.e., more activity in a second phrase than a first phrase). There is also more rhythmic activity in the recapitulation (first theme) than there is during the exposition. Beethoven also used the technique of shortening the time span of a rhythmic figure, as in the transition sections, and the overlapping of figures, as in the coda (first theme material).

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