THE UNIVERSITY OF CALGARY

String Quartet No. 2

by

Paul Zicheng Fu

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE

DEGREE OF MASTER OF MUSIC

DEPARTMENT OF MUSIC

CALGARY, ALBERTA

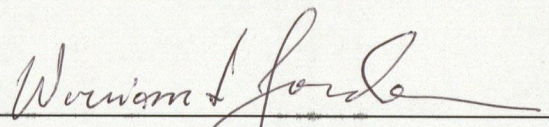
JUNE, 1994

© Paul Zicheng Fu, 1994

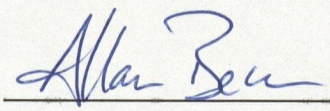
THE UNIVERSITY OF CALGARY

FACULTY OF GRADUATE STUDIES

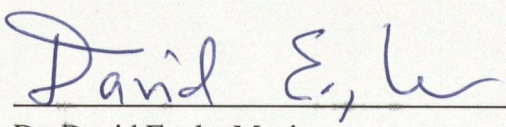
The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "String Quartet No. 2" submitted by Paul Zicheng Fu in partial fulfillment of the requirements for the degree of Master of Music in Composition.



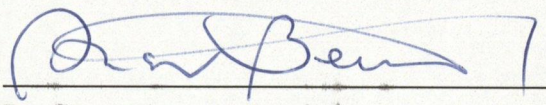
Supervisor, (Dr. William Jordan, Music)



Professor Allan G. Bell, Music



Dr. David Eagle, Music



Dr. Susan Bennett, English

DATE: June 23, 1994

ABSTRACT

This thesis contains a score and analysis of an original three movement work entitled String Quartet No. 2. The piece is approximately fifteen minutes in duration and is scored for two violins, viola and 'cello. The essay provides a detailed analysis of the motivic structure, harmony and form of the work.

ACKNOWLEDGEMENTS

I wish to express sincere thanks to my supervisor William Jordan for his enthusiastic and unlimited support throughout this and other projects. Without his patience, advice and supervision, the realisation of this thesis would not have been possible. I would also like to thank Professor Allan Bell for his constant encouragement which gave me the confidence to pursue this degree.

TABLE OF CONTENTS

	Page
Approval - - - -	ii
Abstract - - - -	iii
Acknowledgements - - - -	iv
Table of Contents - - - -	v
Introduction - - - -	1
Chapter I - Motivic Relations - - -	2
Chapter II - Harmony - - - -	7
Chapter III - Form - - - -	12
Appendix - - - -	17
Score - - - -	19

Introduction

I have chosen to discuss those elements which were most important to me as the composer of the work. To this end, I have written three chapters dealing with the motivic relations, the harmony, and the form respectively. It is not possible to isolate these elements from each other entirely, and so I have discussed the thematic structure of the work in each of the chapters, in the hope that by doing so a picture of the unity of the piece will emerge. I have designated the thematic contents of the quartet alphabetically, themes A - I.

There is a programme to the work which I prefer not to discuss in detail. Suffice it to say that the piece derives its musical materials from a programme which roughly follows the composer's experience of oppression in the People's Republic of China during the Cultural Revolution and of liberty upon his immigration to Canada in 1988.

Chapter I - Motivic Relations

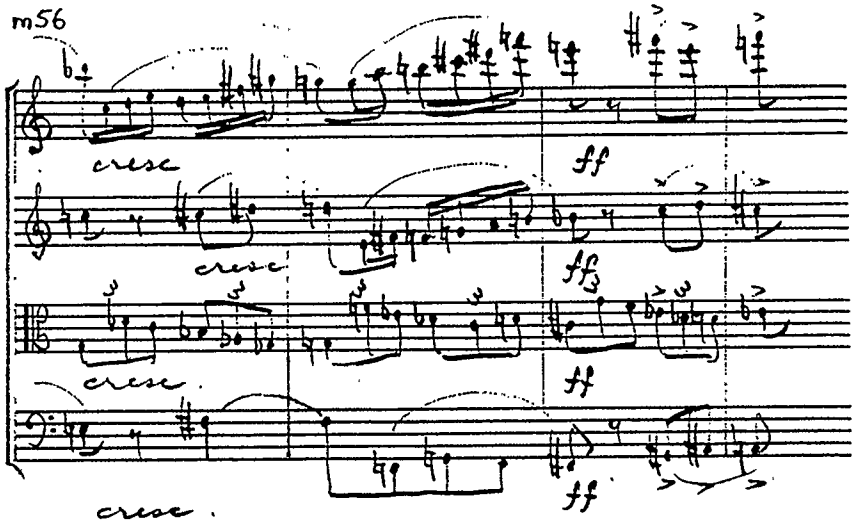
1. The three-note motive

In planning this piece, a series of small motives were written out which determined my train of thought. For reference, I have given them names: 1) the three-note motive, 2) the chorale motive, 3) the motive of Liberty, and 4) the essential motive.

The first of these is a three-note motive (0,1,2) which has a characteristic progression of stepwise diatonic motion followed by a chromatic step in the opposite direction (example 1).

Example 1

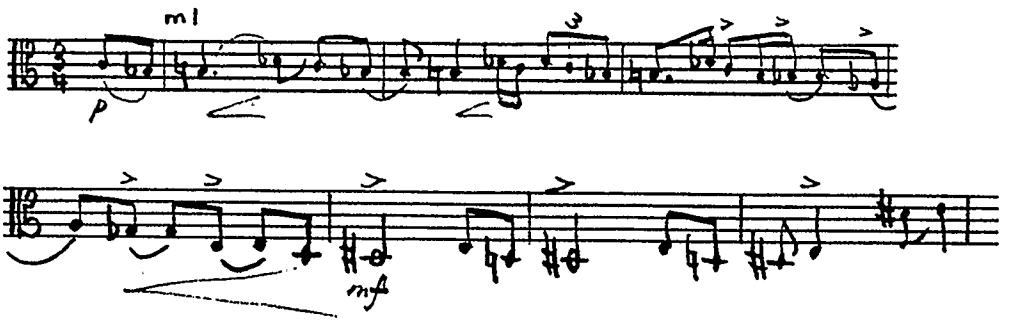
Aesthetically, this three-note motive supports my idea of creating effective musical images, and over the course of the composition it evolved a style of its own. Technically, as a specific cell, the three-note motive forms a pivot pattern which penetrates phrase by phrase, paragraph by paragraph of the form . Eventually, it became a dominant figure in my writing, and spread to the whole piece, particularly in the first and the third movements: the three-note motive gives an incisive manner of organising many passages in the piece. The progression of pitches was formed by the pattern of the motive (a stepwise major second followed by a minor second in its opposite direction, or its retrograde), either in the extreme voices, or the inner voices. Like a sort of textile fabric, the three-note motive not only weaves, but locks up in a zigzag way, to make the texture dense, thick and vigorous. Its tendencies, from note to note, become inevitable, squeezing the notes up one after another. It also helps to make cadences effective, whenever it occurs at a cadence-point (example 2).



Example 2

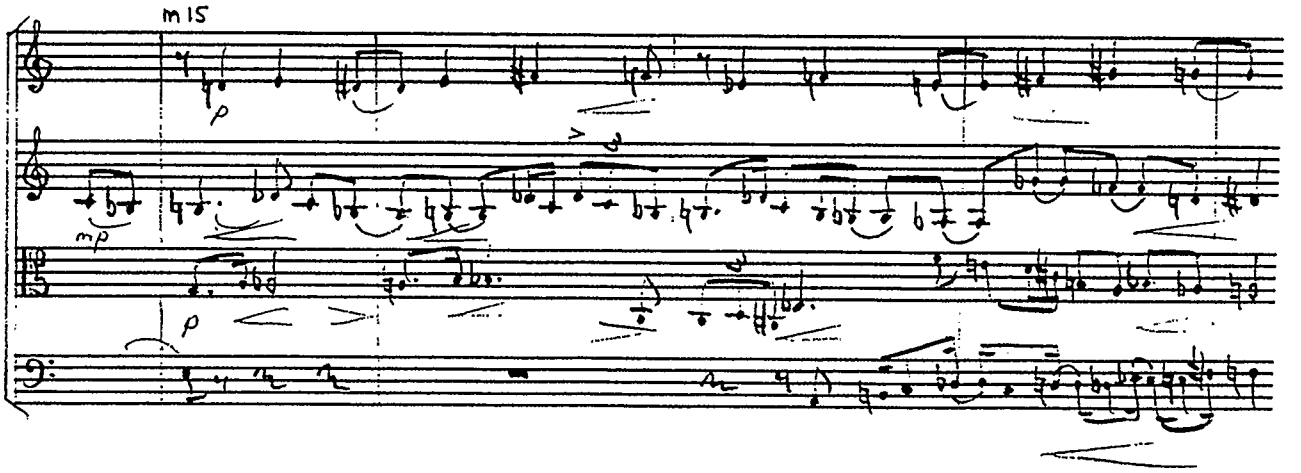
The piece can be seen as integrated by this motivic pattern in its consistent manner. It is a cell, spreading to form the web of the whole.

The structure of Theme A conforms to the three-note motive and its transformations, with a syncopated descending whole tone scale intervening (example 3).



Example 3

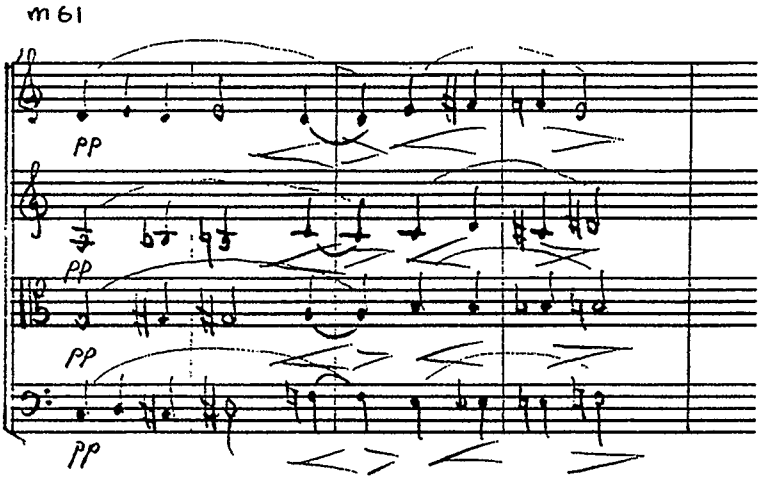
Theme A presents four canonic entries, which generate varied melodic material as counterpoints to the theme. These countermelodies are derived from the three-note motive as well (example 4).



Example 4

2. The chorale motive

A slow alternation stepwise up and down in a steady rhythm, this motive (0,2) mixes obliquely with the three-note motive (example 5).

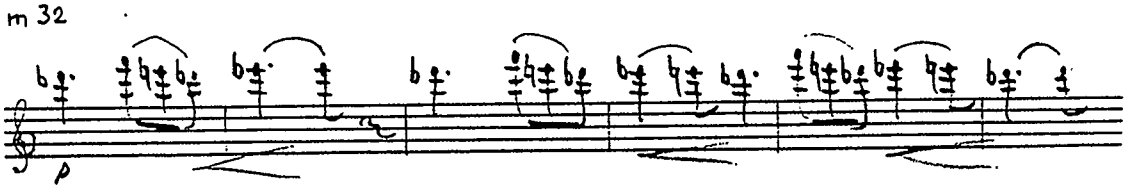


Example 5

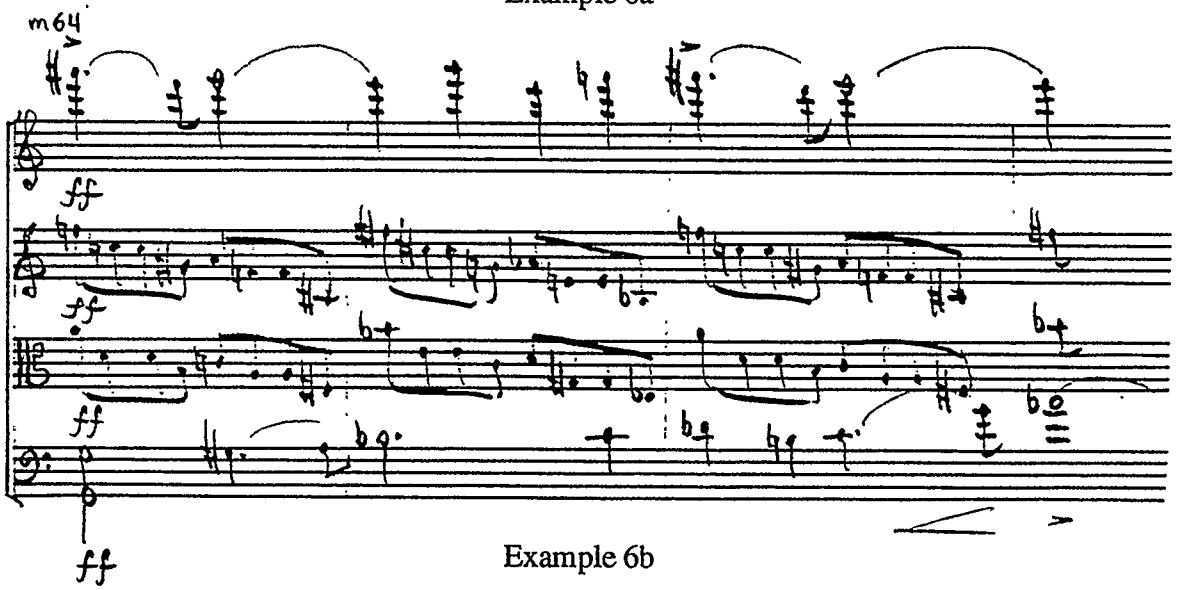
The chorale motive is set in the sustained style of religious vocal music, serving as a lament of deep sorrow and expectation. The motive repeats several times in the background of the new theme, Theme C and its repetition. It is also used to end of the first movement

3. The motive of Liberty

This motive came to me when I was visiting the Statue of Liberty in New York. It is the basis of the main theme, Theme G, in the second movement (example 6a). As a logical consequence of the programme, this motive reappears at the closing passages of the third movement, in triumphant brilliance, presented by first violin and 'cello overlapping (example 6b).



Example 6a



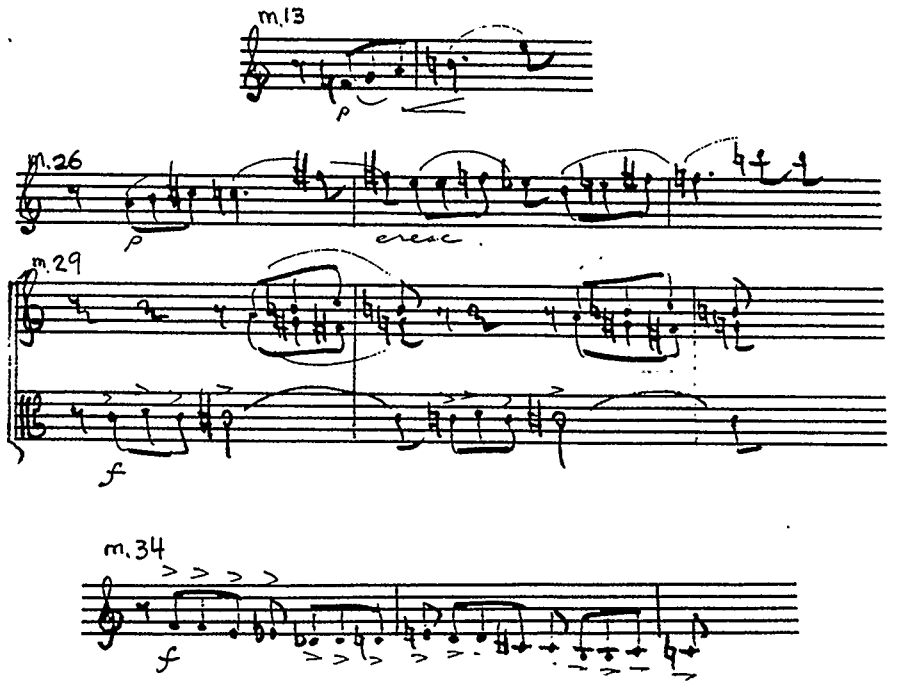
Example 6b

4. The essential motive

This is an ordinary motive which develops an extraordinary role in the third movement. The motive first appears in the linking passage before the repetition of the main subject. It consists of a series of ascending eighth notes up to a high pitch, accented, and follows an upward leaping of a fourth, (0,1,3,5,7) (example 7).

Example 7

As this motive reappears at the bridge between the two subjects, it is developed and then treated by imitation. Following this treatment it is dismembered and used to form a powerful passage which leads to a dynamic climax (example 8).



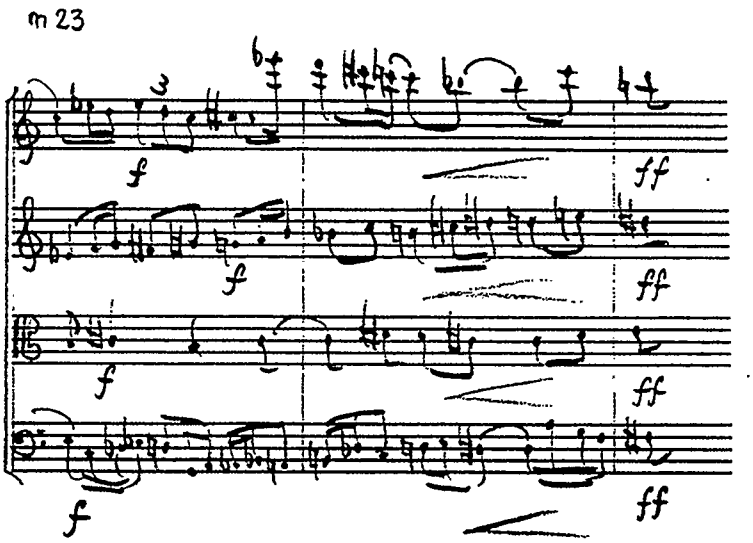
Example 8

The second subject of the third movement is somewhat assimilated by the essential motive (example 9).

Example 9

Chapter II - Harmony

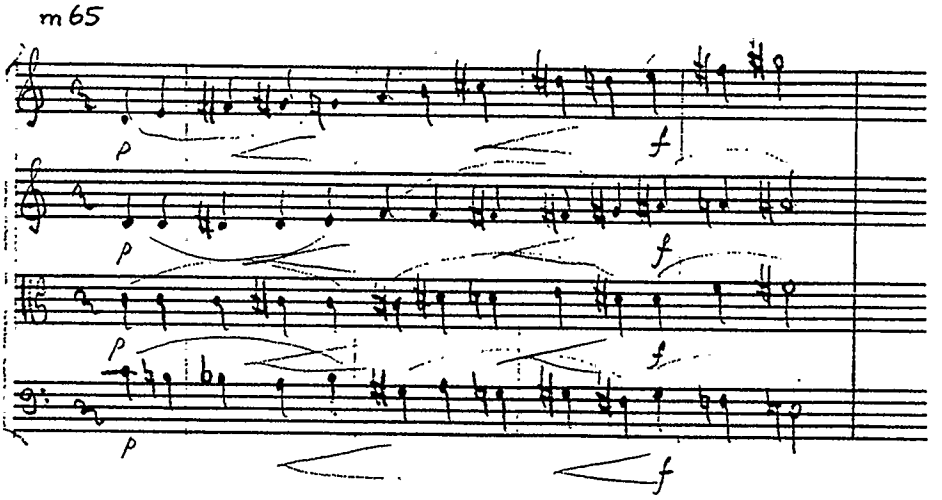
Because this piece, in particular the first and third movements, is meant to sound freely atonal, harmonic sectors like tonalities, functions and progressions are generally vague. Certain pitches, projected melodically, are fixed and achieve focus by the centripetal force of the 'double leading tone' inherent in the three-note motive. The music concentrates in them as a kind of centre, but not like the tonal centres of classical tonality. Because of the polyphonic style of writing several voices may sound simultaneously, and several distinct centres (concentrated and fixed by different voices) may occur at the same time, as demonstrated in the canonic entries at the beginning of the first movement (example 10).



Example 10

These multiple centres, though not specifically tonal centres, nevertheless result in a kind of polytonality.

Chords structure is ambiguous, with nearly every species of interval in use harmonically. Major and minor seconds are used to build tone clusters; thirds, fourths, fifths, sixths and sevenths are used for their emotional qualities, particularly in the chorale in the first movement (example 11).



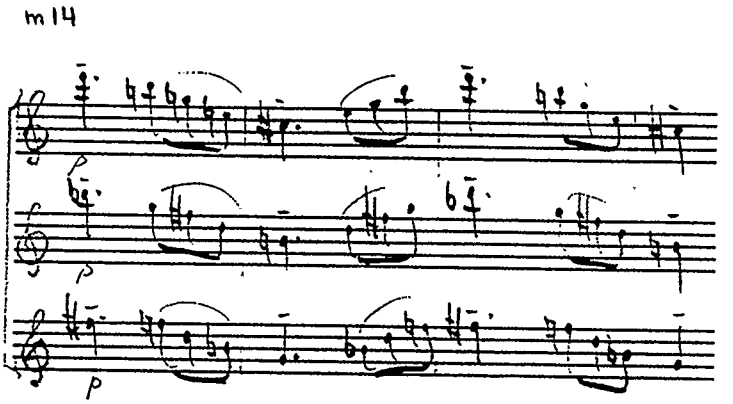
Example 11

The first and the third movements are freely atonal; no key centre is used and the music of these movements is not constructed on any specific mode or scale. Chords which are used in these movements are mainly all-interval tetrachords; they have no functional relationship, although the tendency inherent in the intervals is used to establish varied level of tension.

The second movement is closer to tonality than the first and third. There are key centres and non-traditional harmonic progressions in evidence throughout. Theme D (mm. 4-13, example 12) is dominated by the intervals of fourths and tritones in the 'cello part.

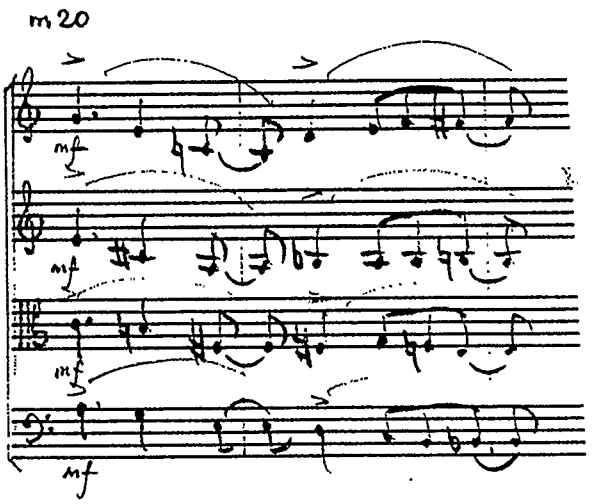
Example 12

Theme E is formed by the figure given in example 13 and its transformations. The key centre here is D, with sevenths and added notes colouring the chords (mm. 14-19).



Example 13

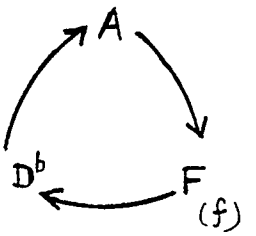
Theme F (mm. 20-30, example 14) shifts the centre to G; the texture embodies quite a number of chromatic inflections and colouristic seventh chords.



Example 14

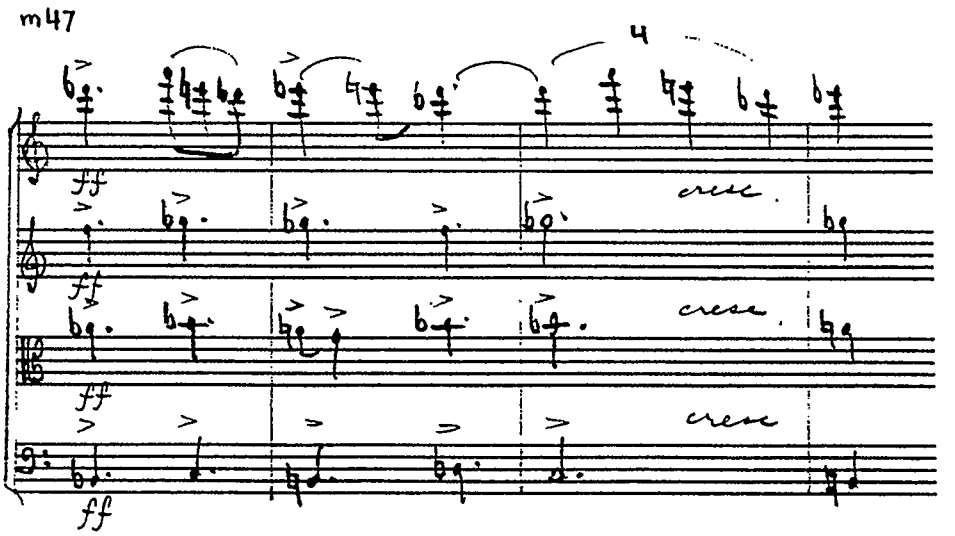
Theme G (mm 37-47, example 15) is in Db; it is followed by a transition passage which begins a shifting-key circle. It starts in A, enharmonically the ^{b}VI of D^{b}. The circle continues with the I -

^{b}VI formula: through the key of F, the ^{b}VI of A, and back to D^{b}, the ^{b}VI of F.



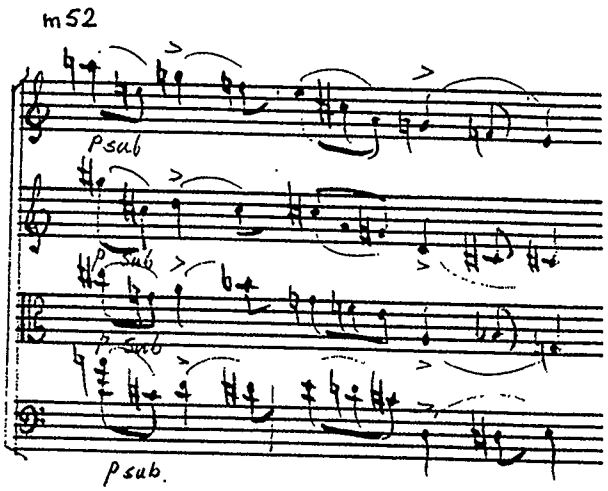
Example 15

The recapitulation of Theme G (mm. 47-52, example 16), in D^{b}, is the climax of the second movement. Note the use of the three-note motive in the 'cello part (example 16)



Example 16

The transition that follows (mm. 52-57, example 17), moves to A as tonal centre, with colouristic seventh chords suggesting the texture of theme F.



Example 17

The music then goes back to the beginning of the movement, however in a retrograde way, first the Theme F, then Theme E, and ends with Theme D.

Chapter III - Form

Because of the nature of the piece, many elements contribute to the clarity of the form which cannot be discussed under the heading of motivic relations or harmony. Chief among these are texture and imagery. For this reason, the discussion of form will refer to the motives described in chapter I and the harmony described in chapter II, but with an emphasis on elements of texture and imagery which have been ignored up to now.

1. The first movement

The first movement is a condensed sonata form; it relies on contrasts between the themes which are resolved by simultaneous presentation.

Theme A is a canon-subject initiated by the solo viola with the violins obligato (mm. 1-7). The second entry of the canon is played by the 'cello, with the countermelody in the viola (mm. 8-14). The third entry is played by the second violin with the countermelodies in the viola, the first violin and the 'cello (mm. 15-21). The last entry of the canon is by the first violin with countermelodies in the other strings, leading to a climax and ending (mm. 21-25).

The transition begins with a duo played by the second violin and viola, the material of which is taken from Theme A (mm. 25-42). The first violin and 'cello join in at the end of the duo, and push up to another climax (mm. 43-59).

The second theme, Theme B, consists of a chorale with four phrases, homophonic in texture (mm. 61-78).

A more complex passage follows, corresponding to development, although it does contain new ideas. Theme C is given by the 'cello, while the other strings continue playing the material of Theme B as the accompaniment (mm. 79-102). This is followed by retransition passage (mm. 104-141), based on material from Theme C transformed into a rather rhythmic figure It starts in the second violin, viola and 'cello; later the first violin joins in and leads to a climax. Finally, Theme C returns to the viola, which is also accompanied by the material of the chorale (Theme B) in the violins, with the support of 'cello by pizzicato.

The recapitulation is combined; the 'cello recapitulates Theme A, supported by the material of the chorale theme in the violins and viola.

2. The second movement

The second movement has a nested three-part design; it is meant to be visual, almost scenic, and to lead the listener to pleasing and deep musical impressions.

The A section presents three new ideas (Themes D, E and F). Theme D (mm. 3 - 13) serves as an introduction; it consists of symmetrical monologue-like phrases given out by the 'cello. An air of tranquillity is lent by the overtones in the violins and the fingered-tremolos by viola, serving as a foil to the theme. In Theme E (mm. 14-19), trichords in similar motion are deployed in the violins and viola like a breeze, twisting and floating in the air. Theme F (mm. 20-24) poses a tight succession of four-part seventh chords, some with secondary function, organised in syncopated rhythm; the image is the shape of draughty turbid white clouds.

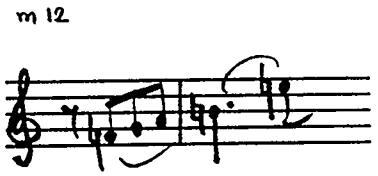
The B section is concerned with only one new theme, Theme G, which is given in three different transpositions. It is first given in D^{b} by the first violin, against a texture of harmonics in the viola, fingered-tremolos passage in the second violin, and a double stop of a minor sixth as the sustained bass in the 'cello (mm. 30-37). The minor sixth sustained bass betokens the tonal shifting circle which yet to come. Following the statement of this theme is a transition, built on material from Theme G (mm. 37-46); this transition goes through a shifting circle of implied key centres, patterned on I - ^{b}VI in several keys, and prepares the recapitulation of Theme G (mm. 47-52). This recapitulation is full of colour and very vigorous, and it serves a dramatic climax of the musical sensations.

The A section returns the material from the beginning of the movement in a retrograde order. Theme F (mm. 52-63) extends a bridge from a high range to a very low one, and leads to the reprise of Theme E. Theme E (mm. 64-71) reappears as the shape it had before, except now it is leading to Theme D (mm. 72-84), which had started the movement as an introduction; now it serves as a closing section at the end of the movement, as a codetta .

3. The third movement

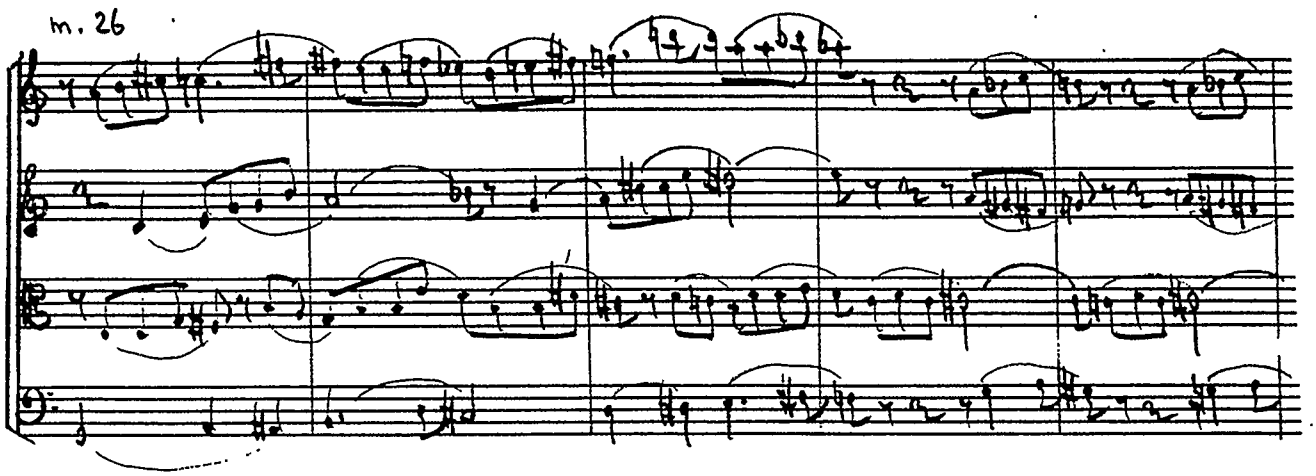
The third movement follows the design of sonata form more strictly than did the first movement.

The exposition begins with a sustained interval of a tritone projected by the viola and the 'cello; this interval serves both as an introduction and a background to the theme. The main subject, Theme H (mm. 3-10), is a long-line melody with a progressions of thirds, fourths, fifths, tritones and sevenths by the violins. Initially, it consists of a figure two bars in length, followed by its imitation and dissolution. Before the main subject is repeated an important idea--the essential motive (see p. 5)--is given out by the first violin (mm. 12-13, example 18), which plays a substantial key role in developing the entire movement.

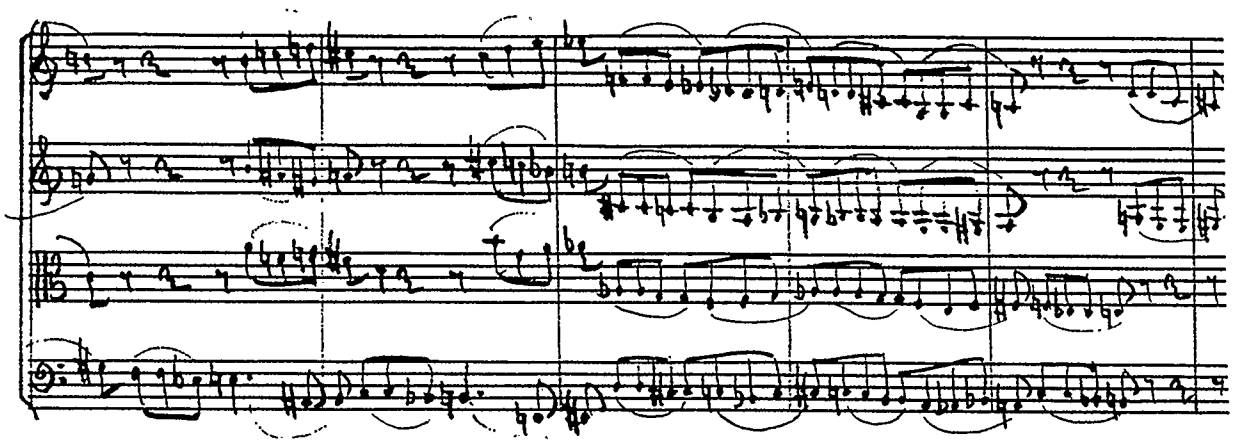


Example 18

The transition (mm. 26-36, example 19) between the two subjects (Themes H and I) shows how the essential motive is intensely involved in developing the musical texture.



Example 19 (beginning)

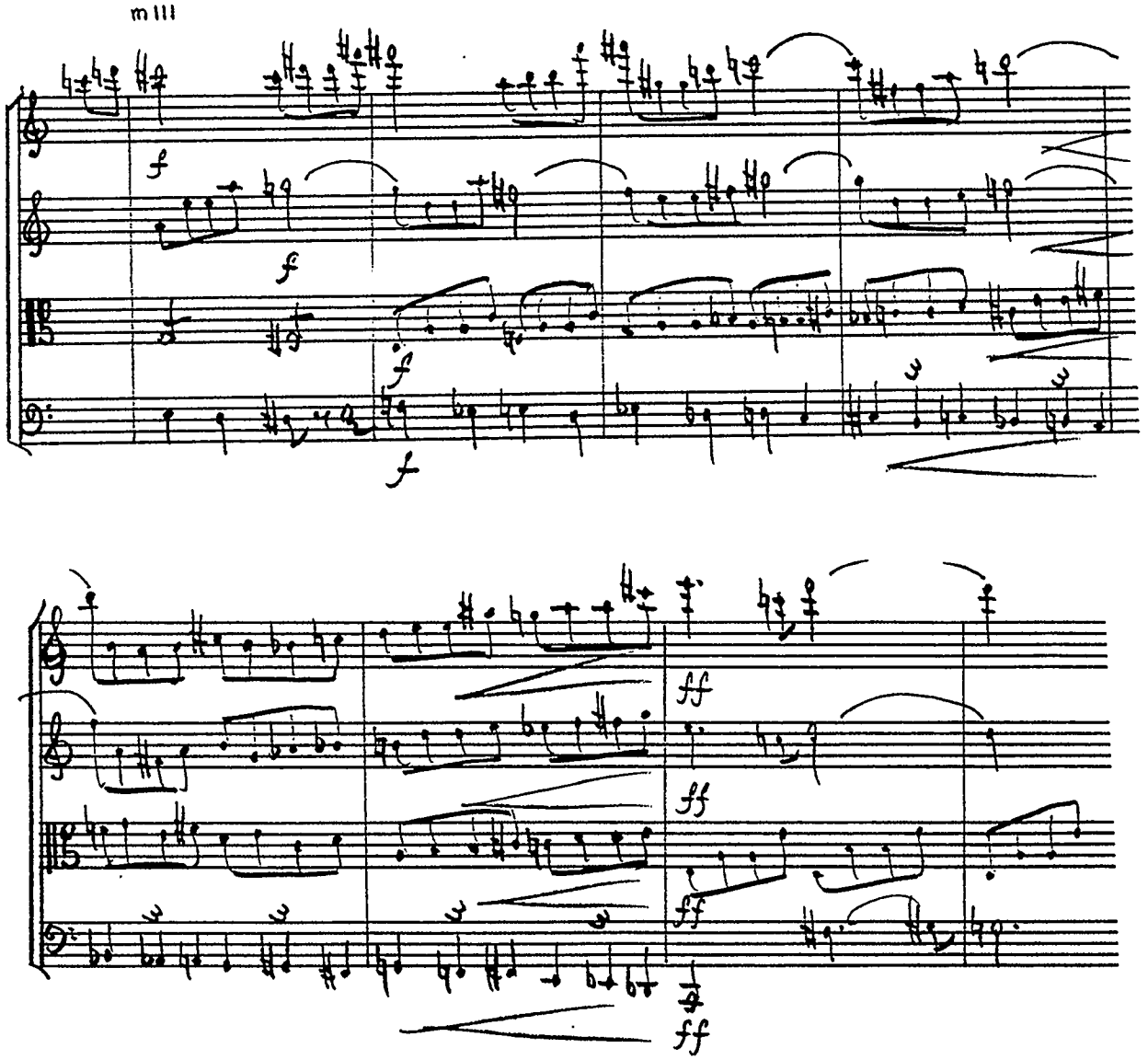


Example 19 (conclusion)

Theme I (mm.39-47), the second subject, traces back to the emotional motivation of the piece. It connects with the essential motive. It is sentimental, but also contains a feeling of secret anguish, sighing and panting; the texture has the first violin leading to the other strings in smooth motions.The repetition of Theme I leads to a broadening, which signals the closing section (mm. 58-71). With the further evolution of the essential motive, the closing section accumulates with power and climbs up to a high peak decisively.

The development begins with material from Theme H in the 'cello, followed in canon by the viola one beat later (mm. 72-81). Following this the material of Theme I and the essential motive climb together to another climax, serves as the retransition (mm. 81-98).

The recapitulation (mm. 99-128), is truncated compared to the exposition. The main subject is followed by the second subject immediately, the bridge is omitted. The music moves straight ahead to a climax in the closing section featuring transformations of the essential motive in the first violin, and of the three-note motive in the 'cello. This passage is designed to provide a striking climax out of materials presented in contrary motion (example 20).



Example 20

There is a coda (mm. 129-150), which is formed out of a final return of Theme A from the first movement, which was based on the three-note motive, the main idea of the work. In the coda the material is presented in retrograde order, like the respective passage at the end of the second movement. It begins with what had been the third entry of the canon subject in the second violin, and continues to what had been the first entry by viola. The piece ends in a mood of silent obscurity.

APPENDIX

Outline of Motivic and Formal Structure

I. First Movement

A. Motivic Structure

1. Theme A

a. motive 1 - cell "a", (0,1,2), changing direction

b. scale-mode: chromatic

c.texture: polyphonic

2. Theme B

a. motive 2 - slow trill, (0,2)

b. scale-mode: whole tone

c. texture: chorale, harmonic language: m2, M2, m7,M7, tritone

3. Theme C

a. motive 3 - (0, 2,7)

b. scale-mode: whole tone

c. texture: solo voice ('cello), with the harmonic background of Theme B

B. First Movement--Form

1. (Theme A, mm. 1-25) + transition and development section (mm. 25-59)
2. (Theme B, mm. 60 -79)
3. (Theme C, mm. 79 - 102) + transition and development section (mm. 103-141)
4. Coda (Theme A, mm. 141-156)

II. Second Movement

A. Motivic Structure

1. Introduction

a. motive 4 (0,2,6)

b. motive 5 (0,2,3,5,8)

c. motive 6 (0,4,7)

2. Theme G (0,2,3,4)

B. Form

1. Introduction

a. Theme D (mm. 1-13)

b. Theme E (mm. 14-20)

c. Theme F (mm. 20-30)

2. Theme G

a. Theme G (mm. 32-37)

b. Theme G' (mm. 37-46)

c. Theme G'' (mm. 47-58)

3. Presents motives from Introduction (II.B.1) in retrograde order

a. Theme F (mm. 58-64)

b. Theme E (mm. 64-70)

c. Theme D (mm. 70-84)

III. Third Movement

A. Motivic Structure

1. Theme H (0,1,4,7,9)

2. Theme I (0,1,2,3,4,7)

B. Form

1. Exposition

a. Theme H (mm. 3-21)

b. transition (mm. 21-38)

c. Theme I (mm. 39-64)

d. Closing section (mm. 64-71)

2. Development: (mm. 71-97)

3. Recapitulation

a. Theme H (mm. 99-106)

b. Theme I (mm. 106-117)

c. Closing section (mm 117- 128)

4. Coda -Theme A (mm. 128-150)

String Quartet No. 2

Paul Zicheng Fu

© 1994

Full Score

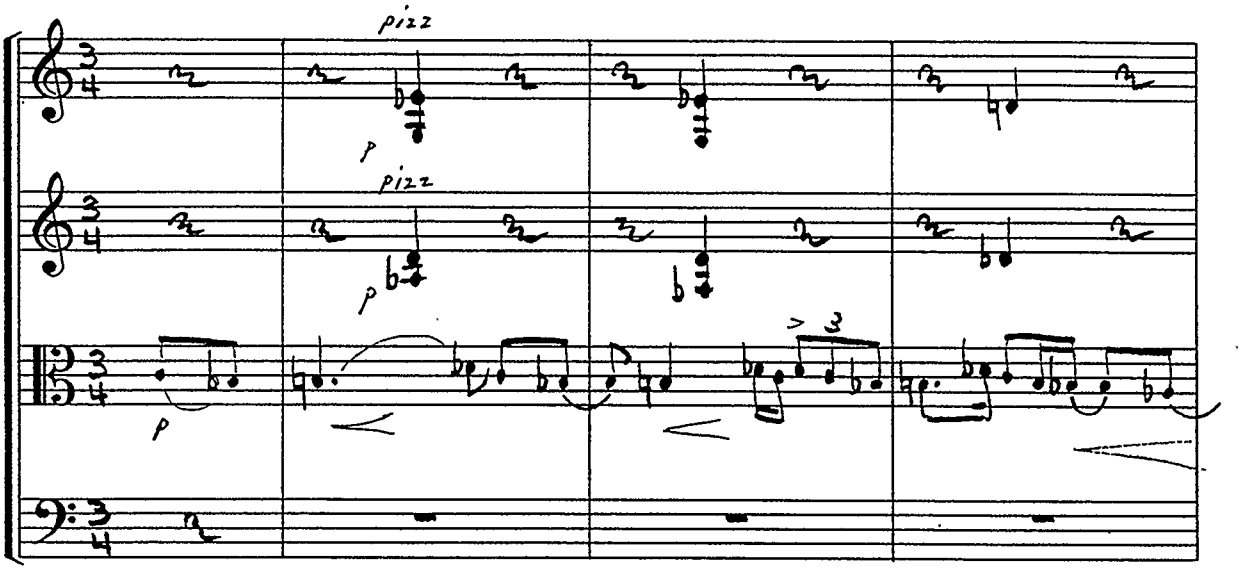
... to the Lady of Liberty

String Quartet No. 2

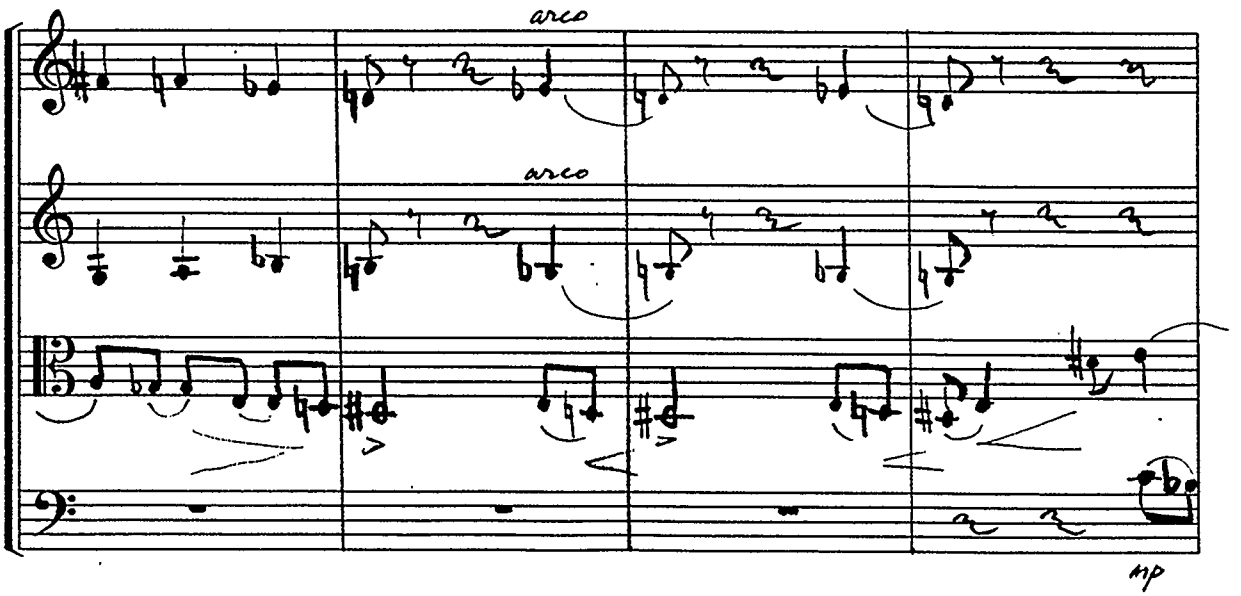
Paul Z. Fu
1993. 4

I

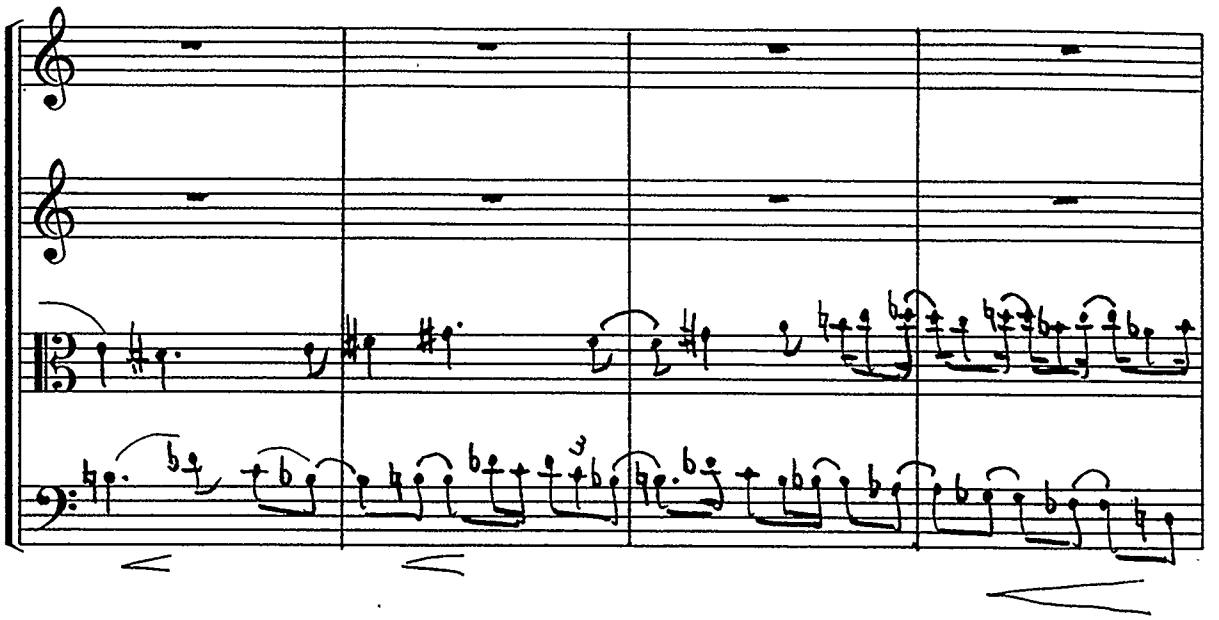
Adagio doloroso ♩ = 60



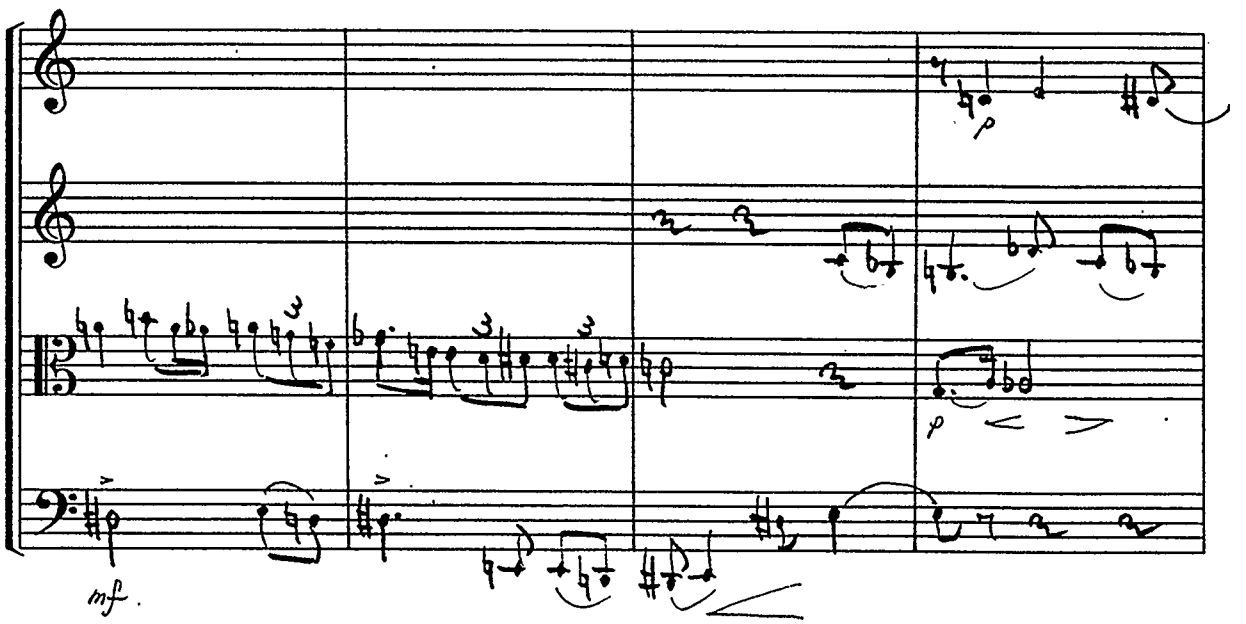
5

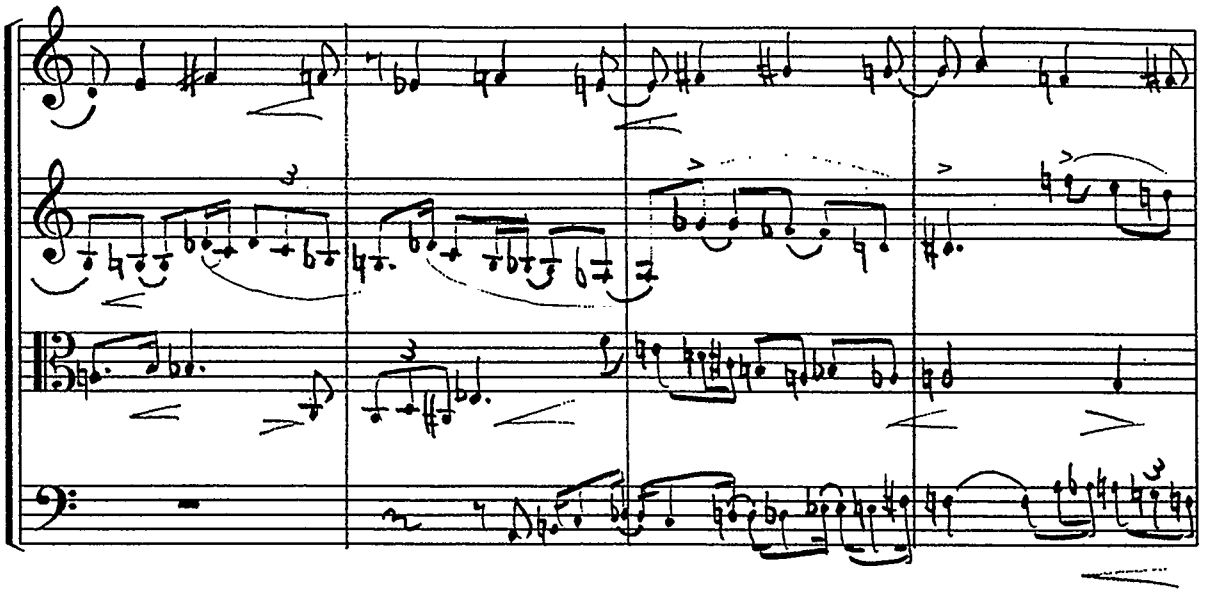


10

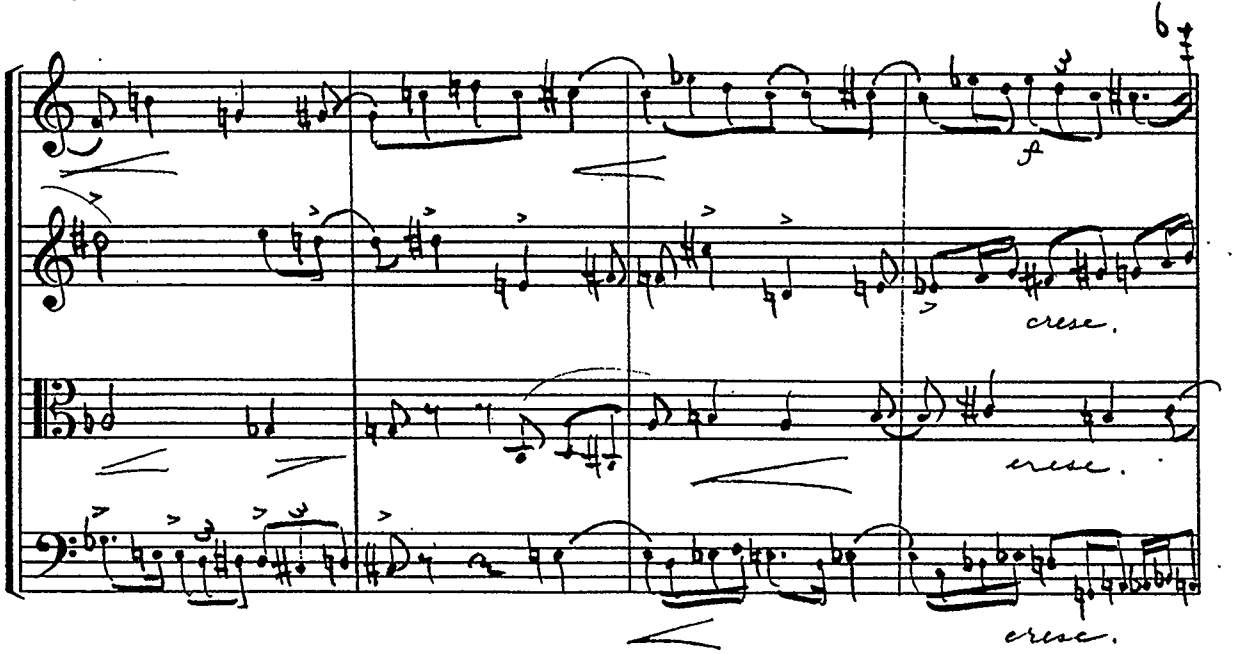


15

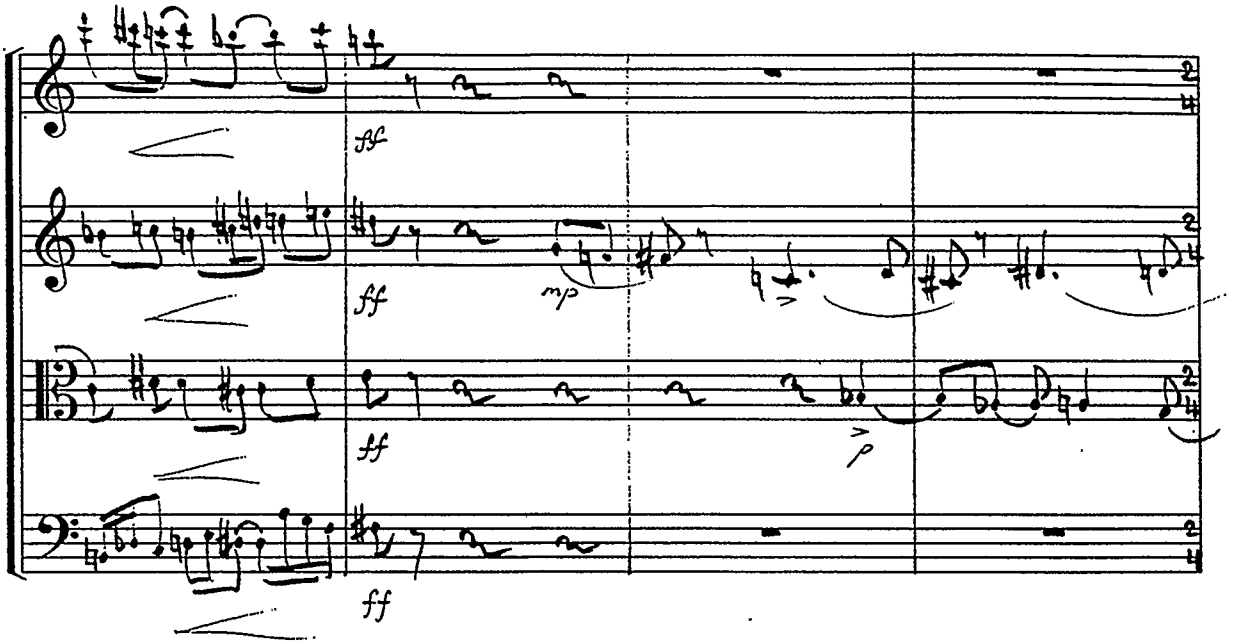




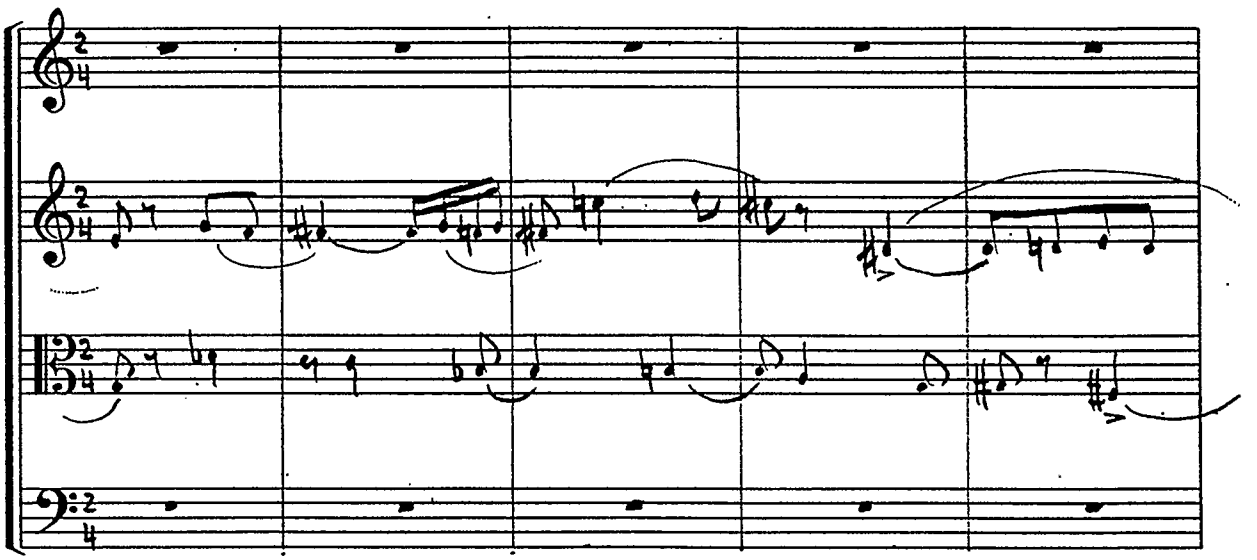
20



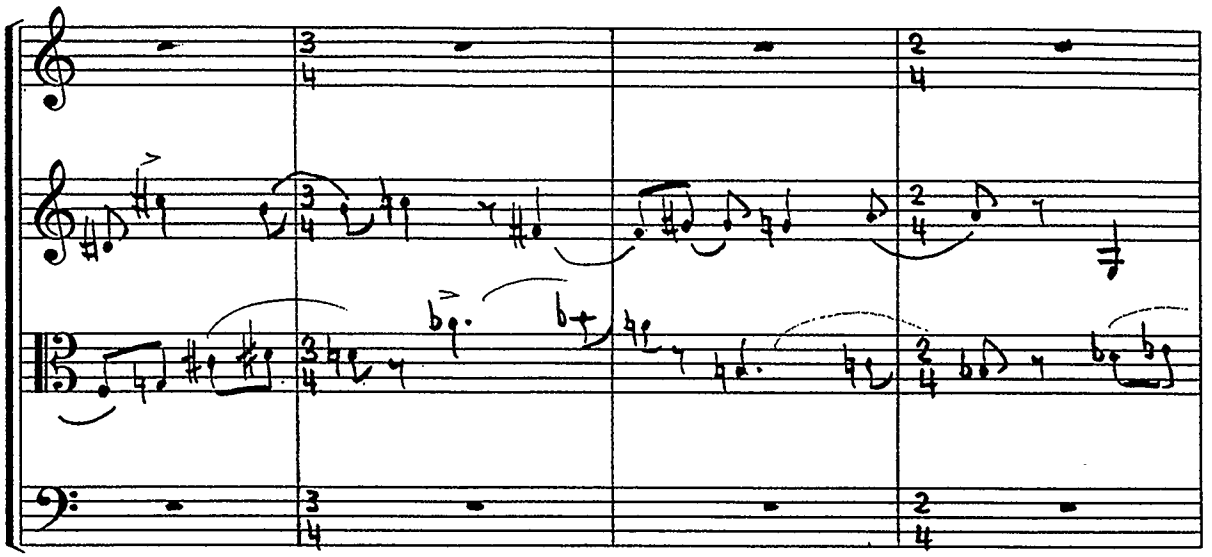
25



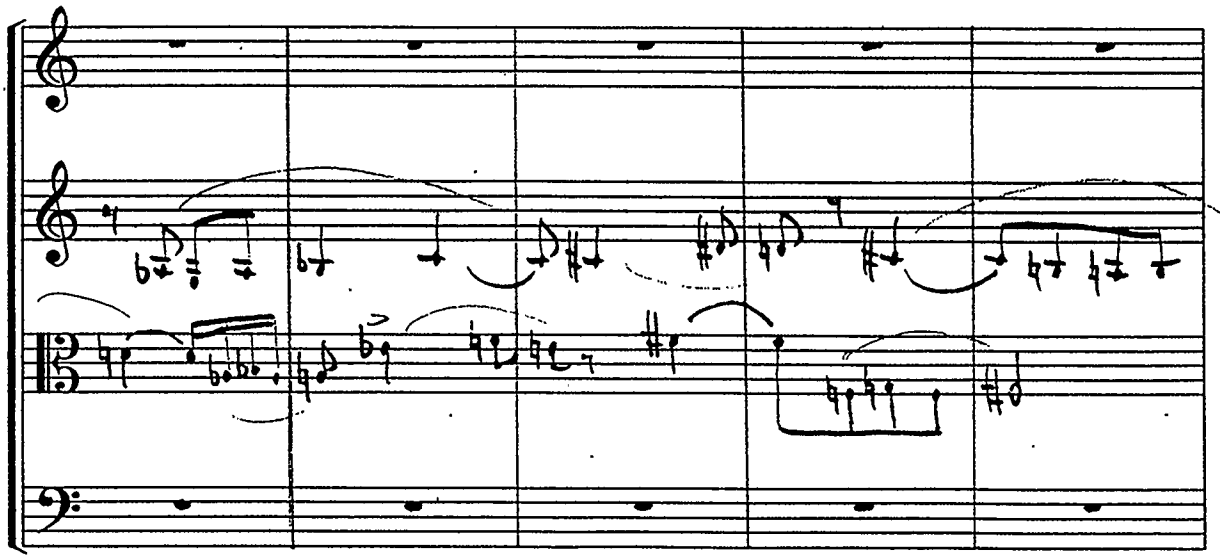
30

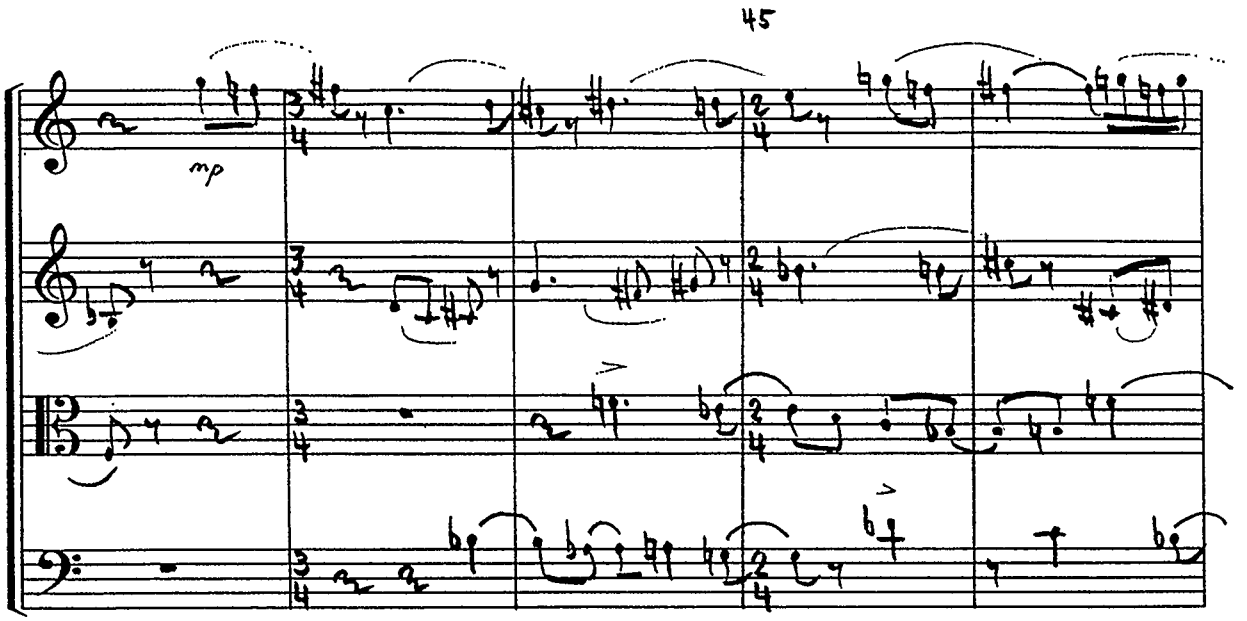


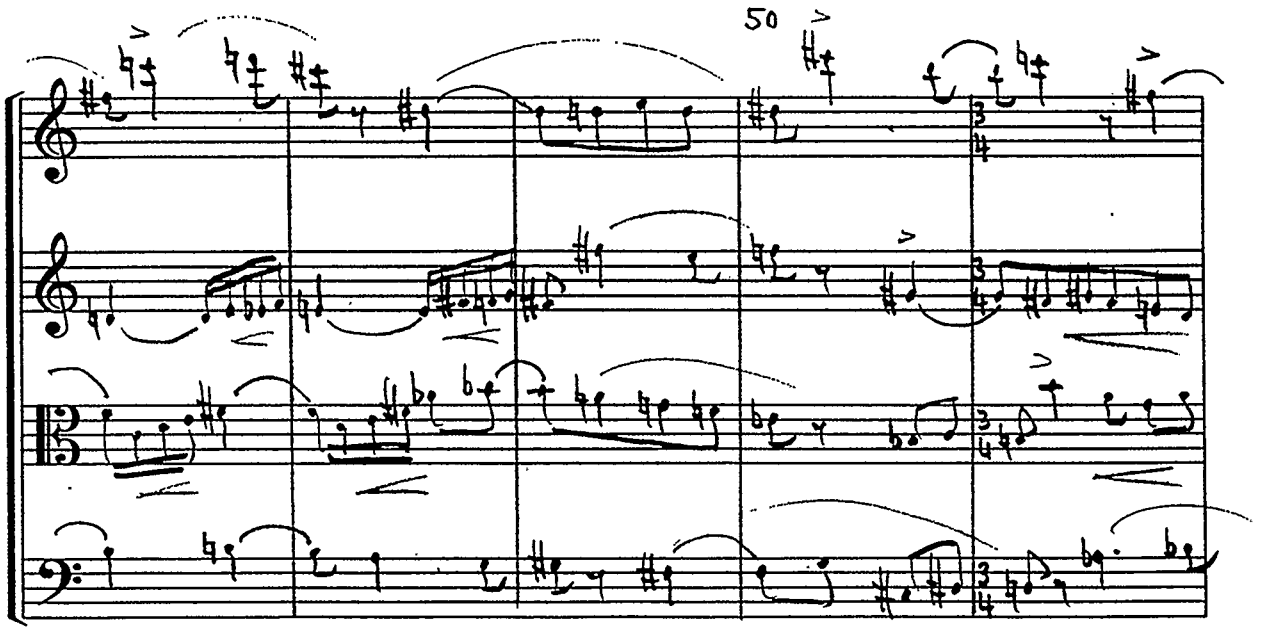
35



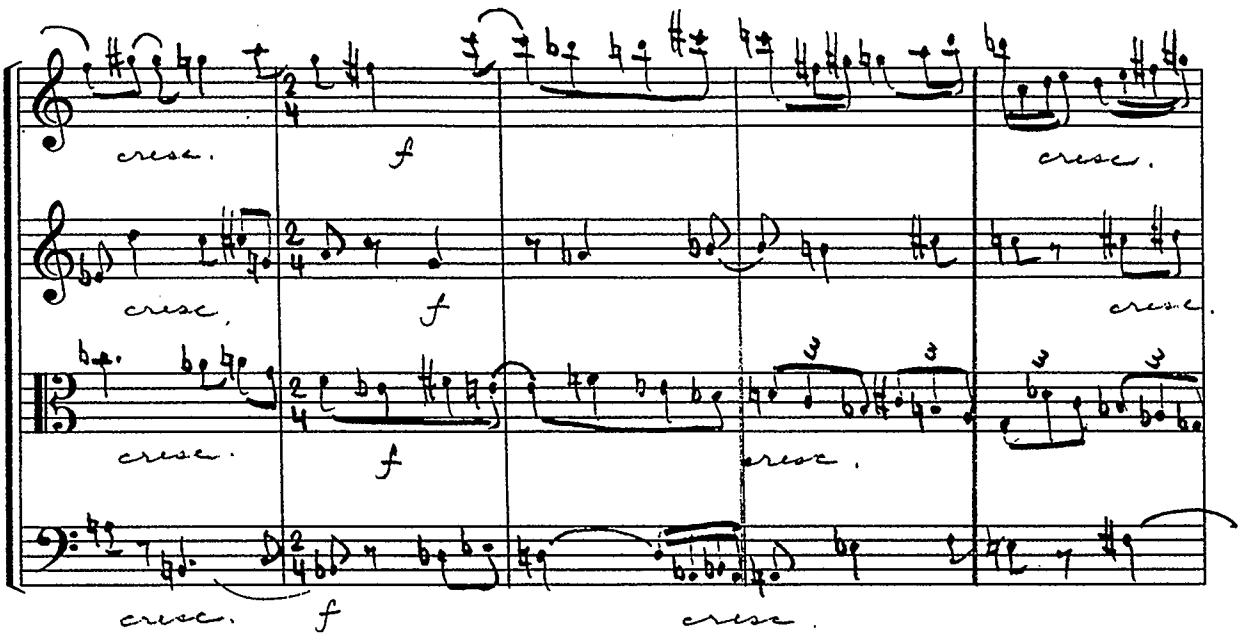
40



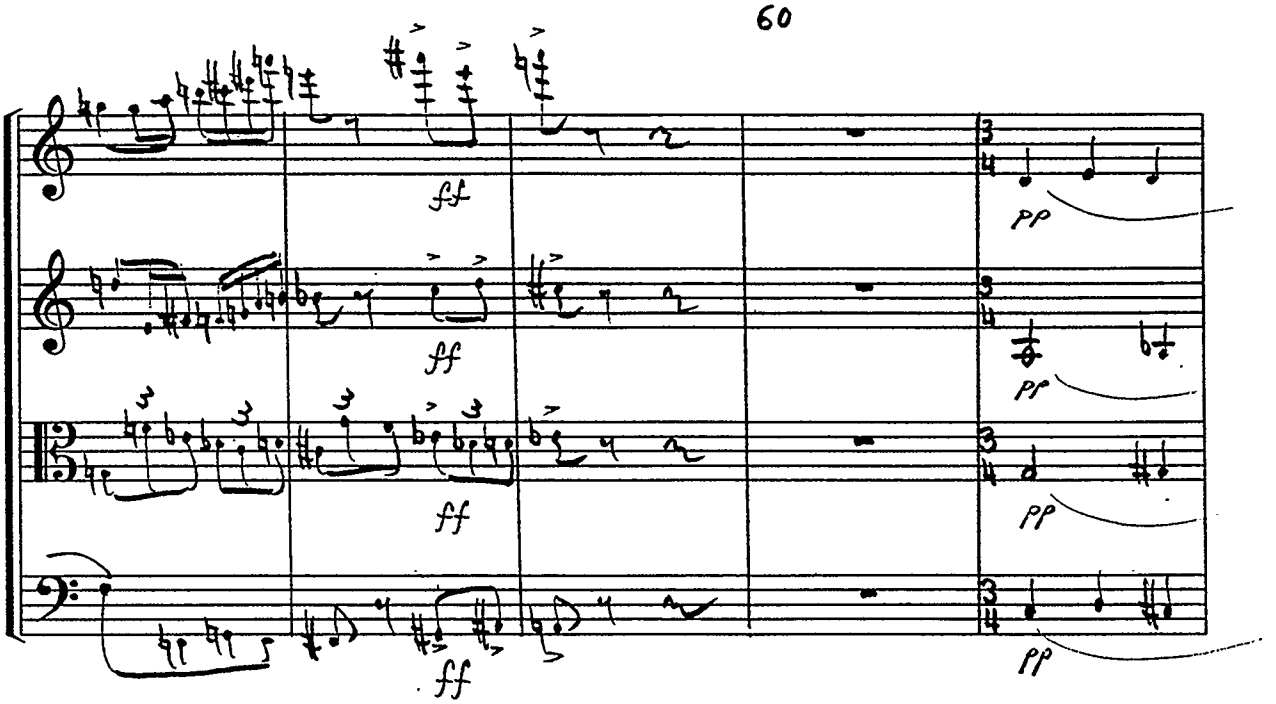

45
mp


50

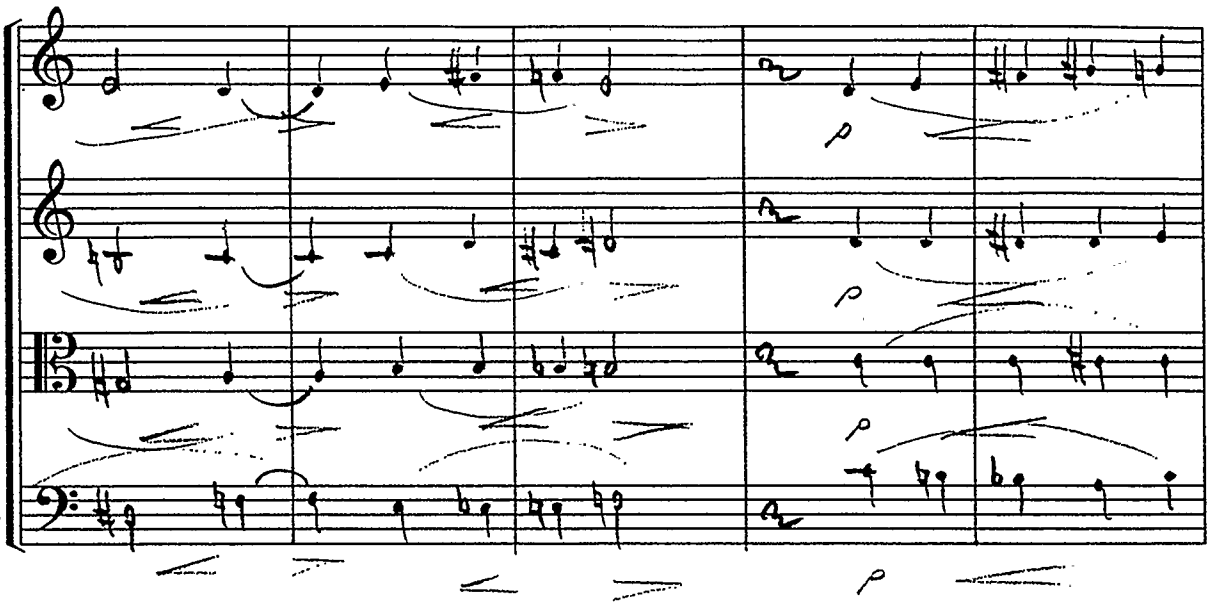
55


cresc.
f
cresc.
cresc.
f
cresc.
cresc.
f
cresc.
cresc.
f
cresc.

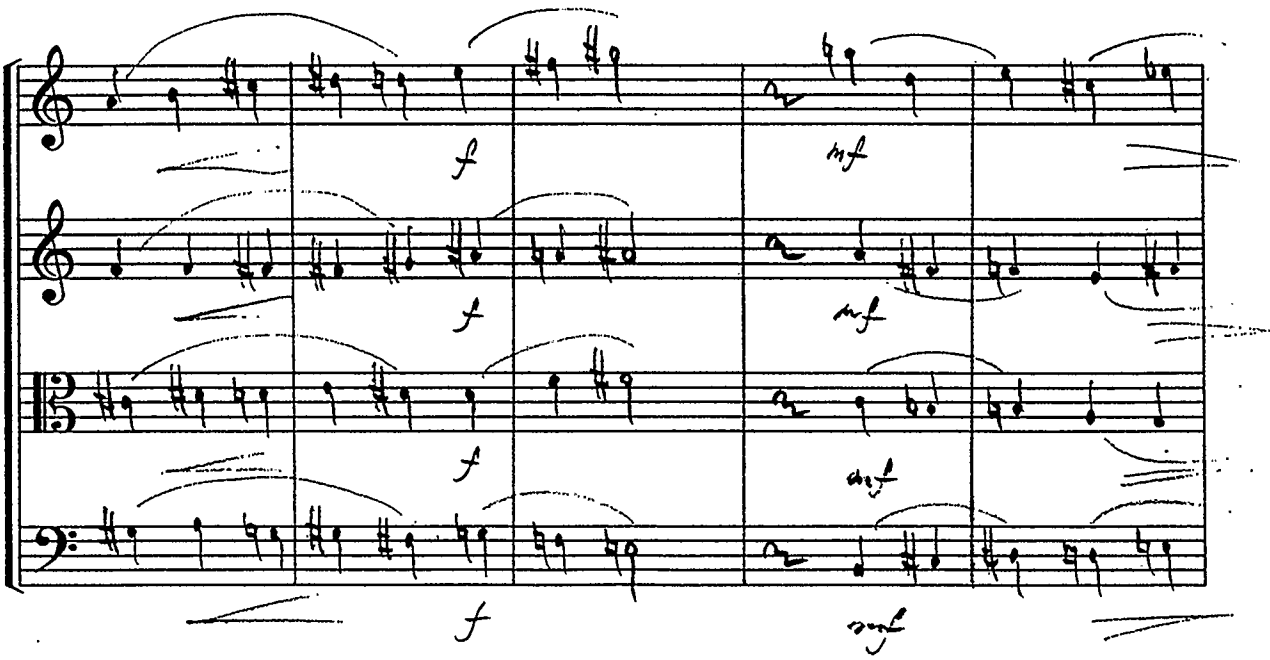
60


ff
pp
ff
pp
ff
pp
ff
pp

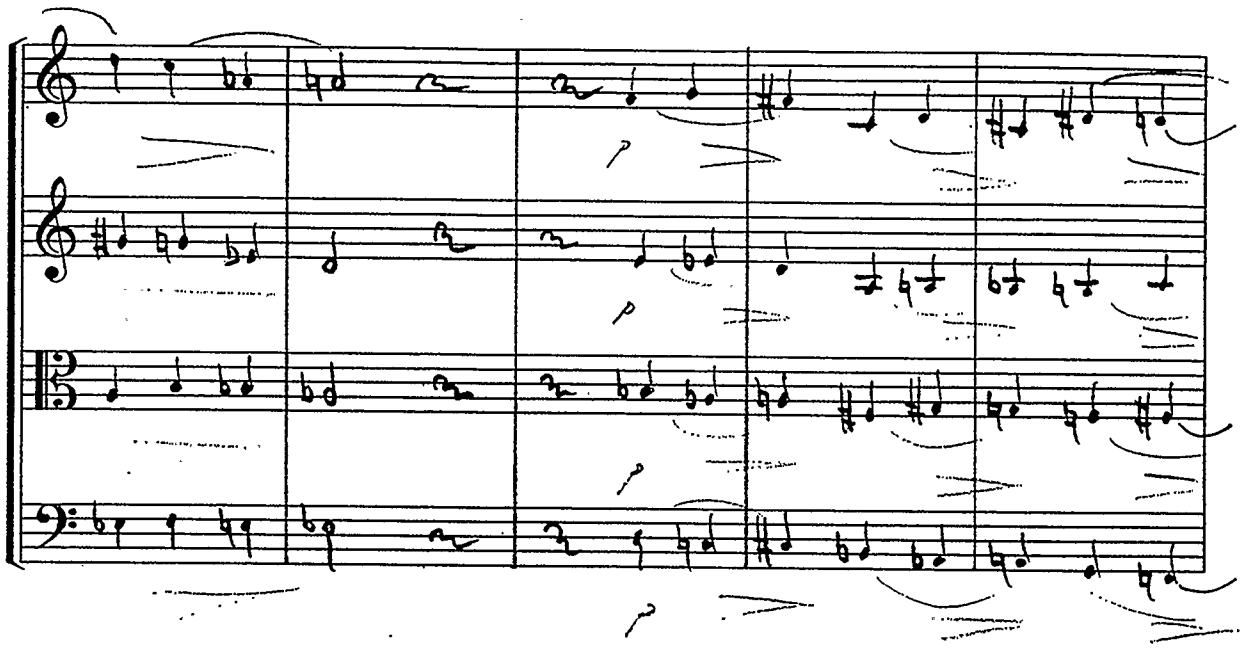
65



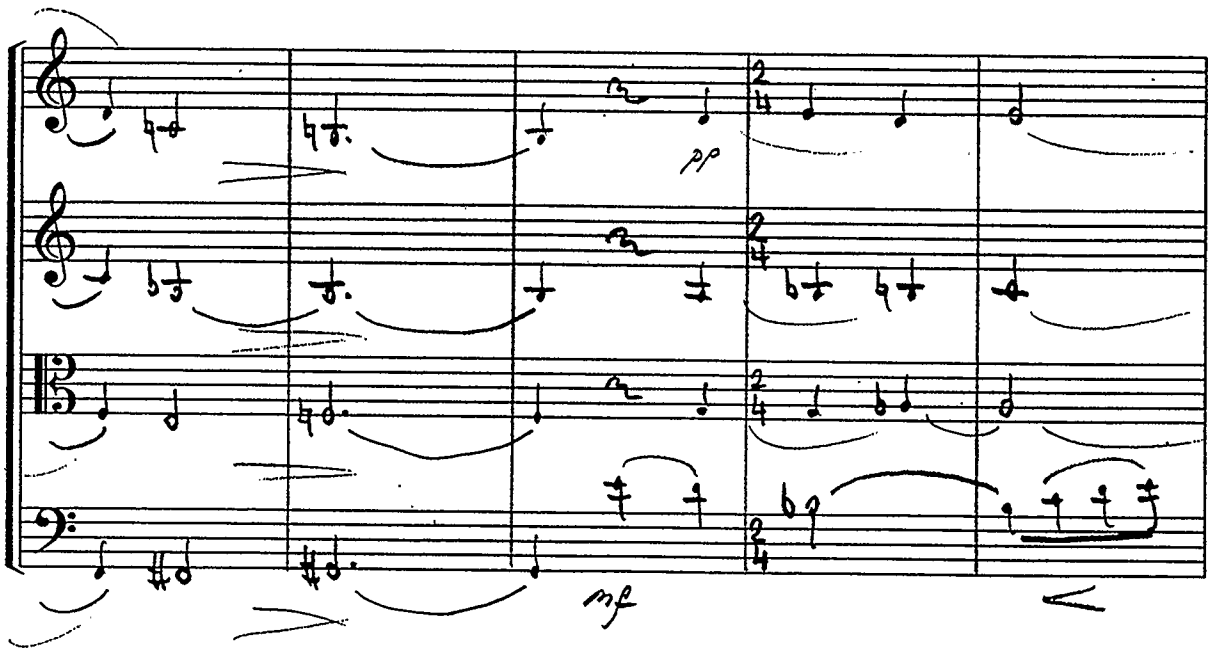
70



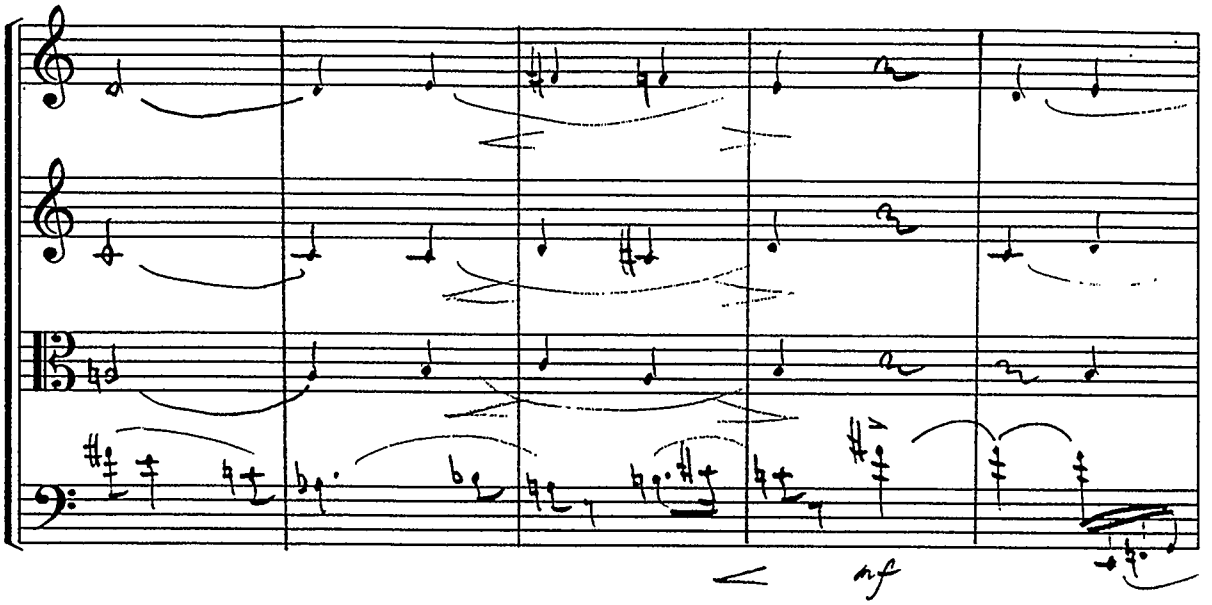
75



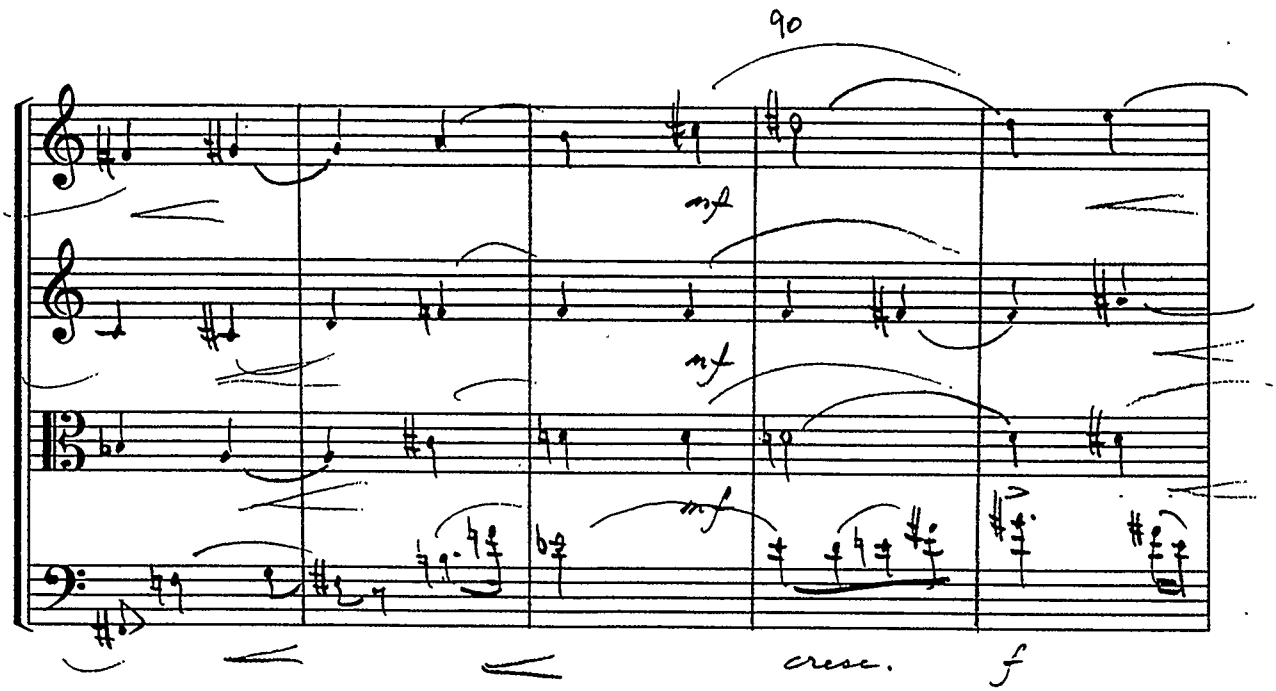
80



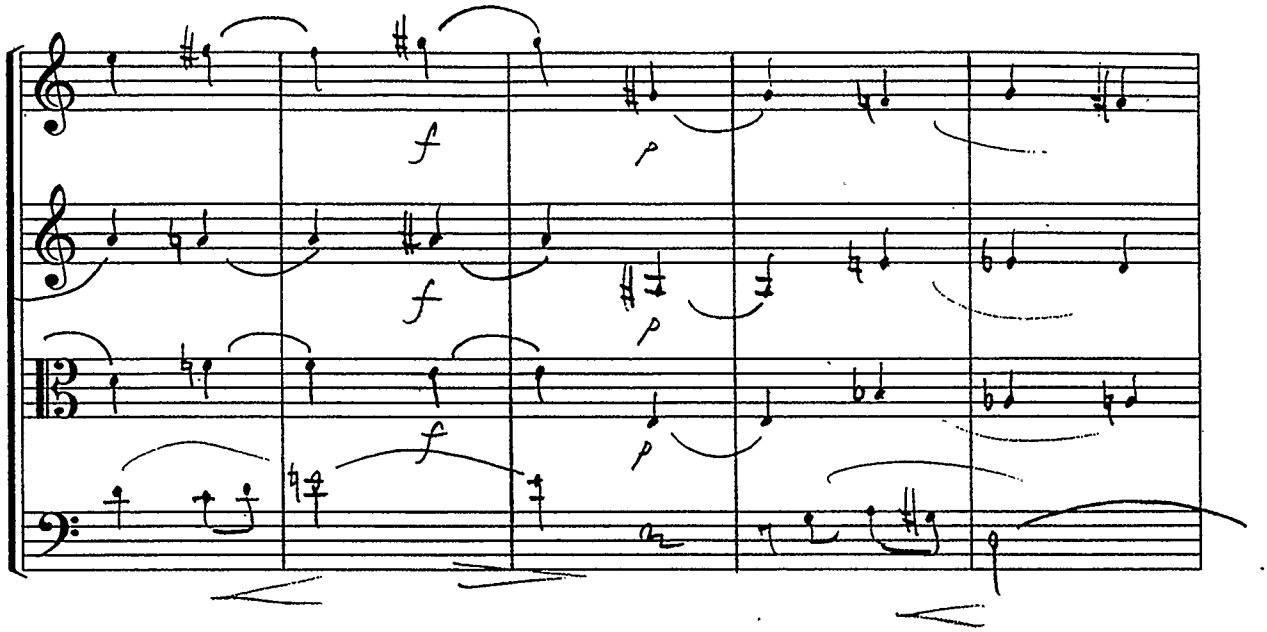
85



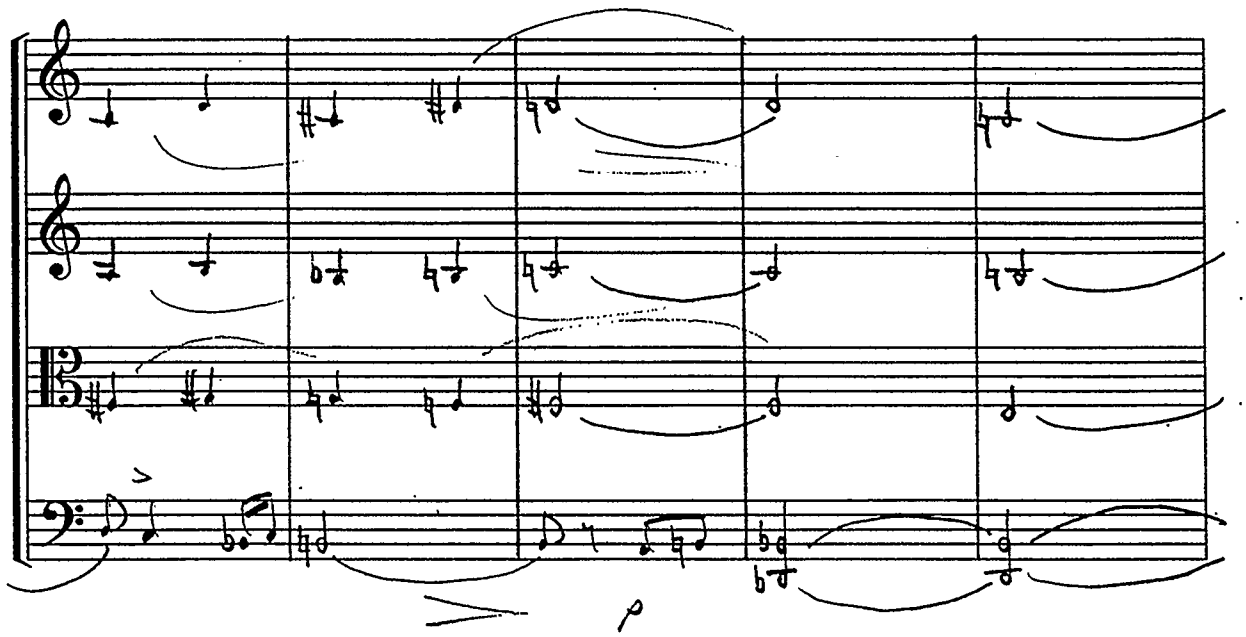
90



95

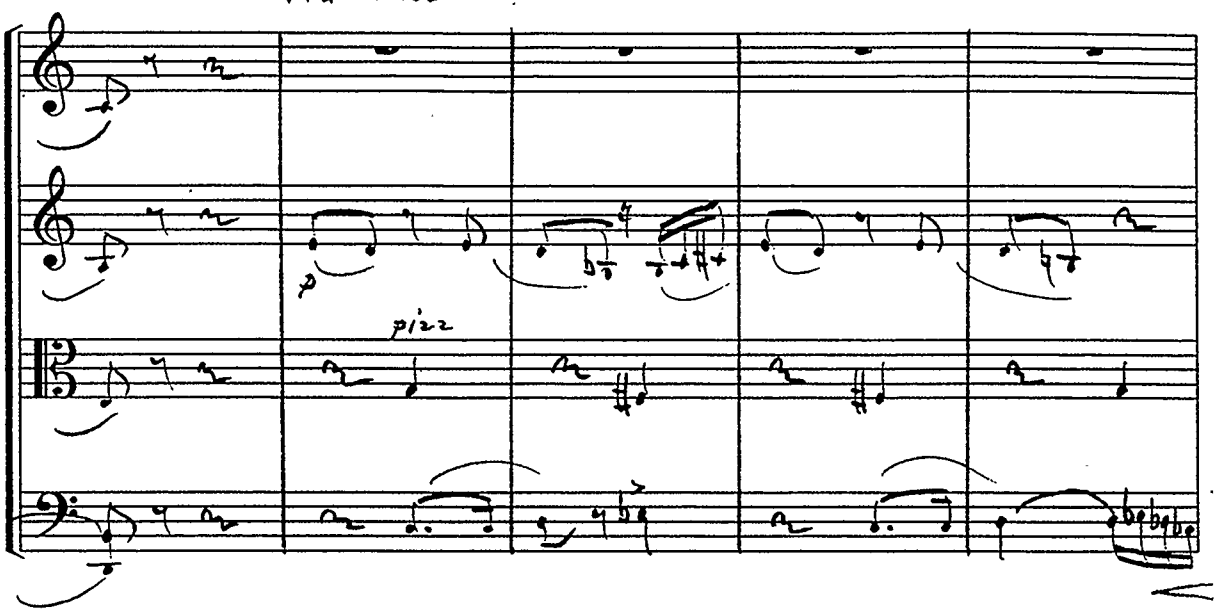


100

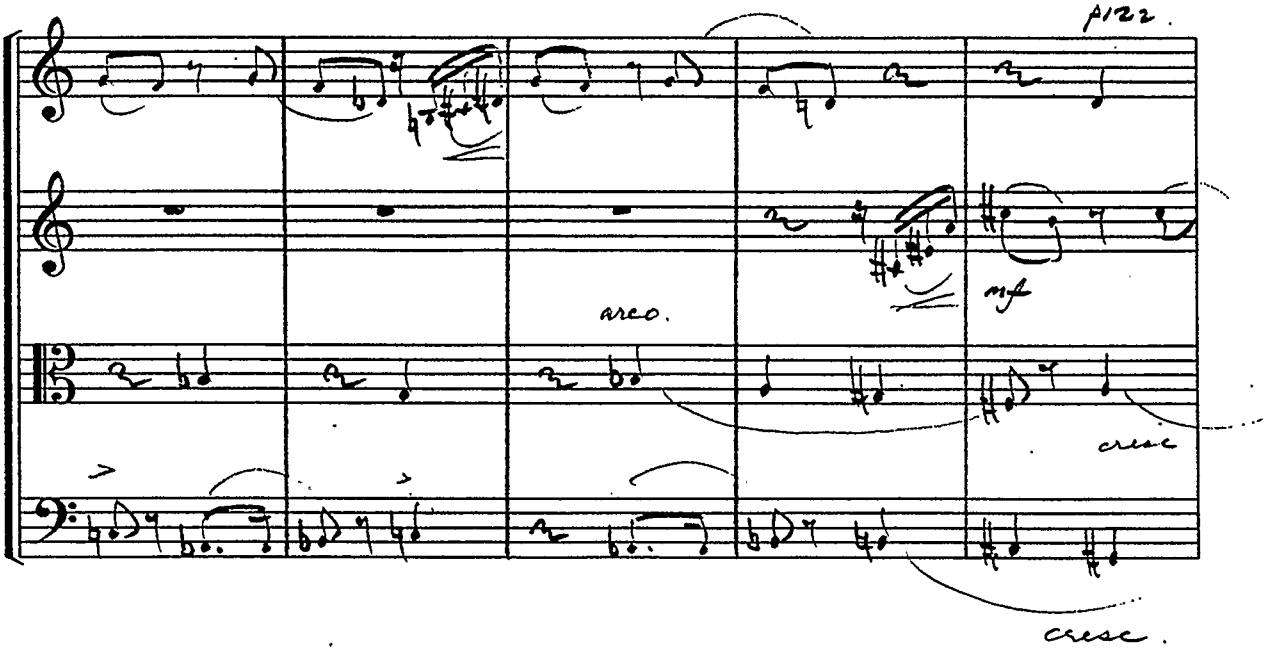


105

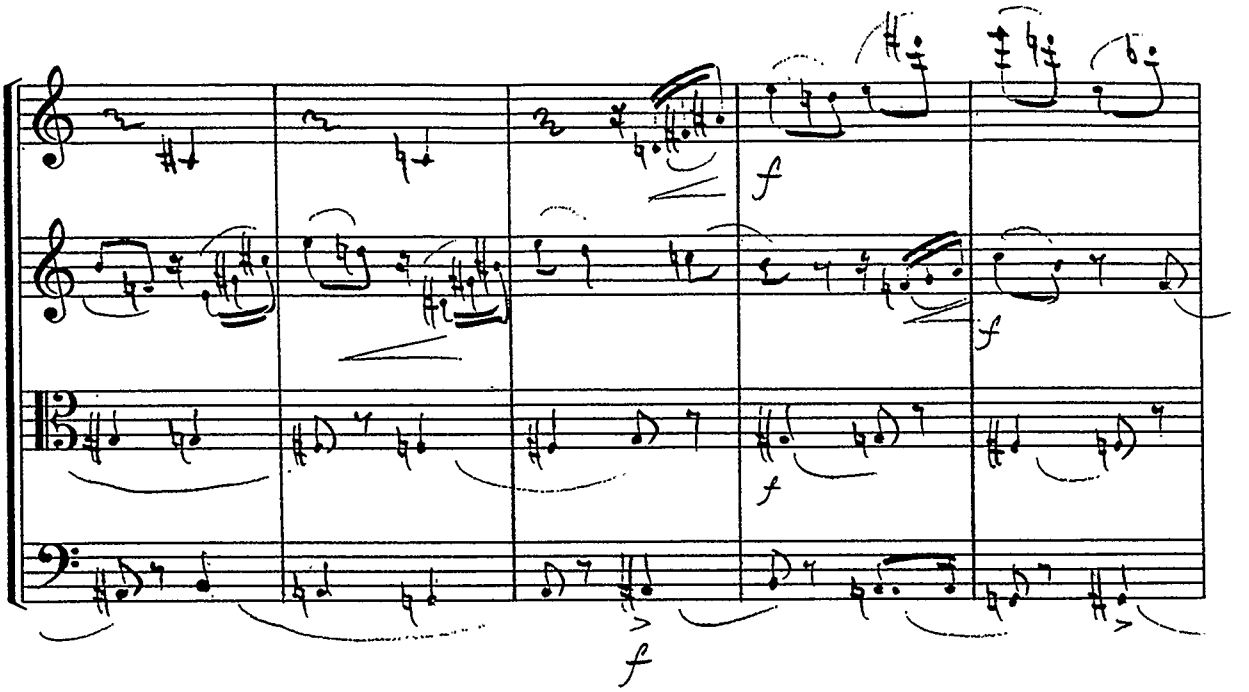
Più mosso



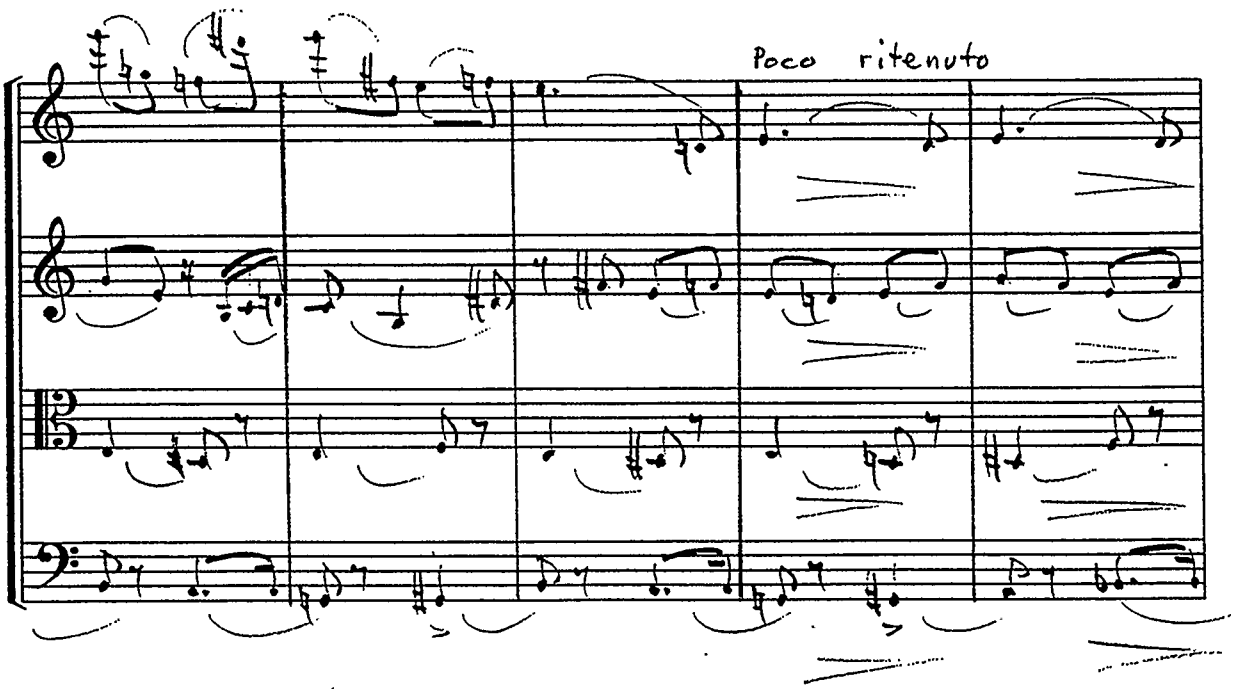
110

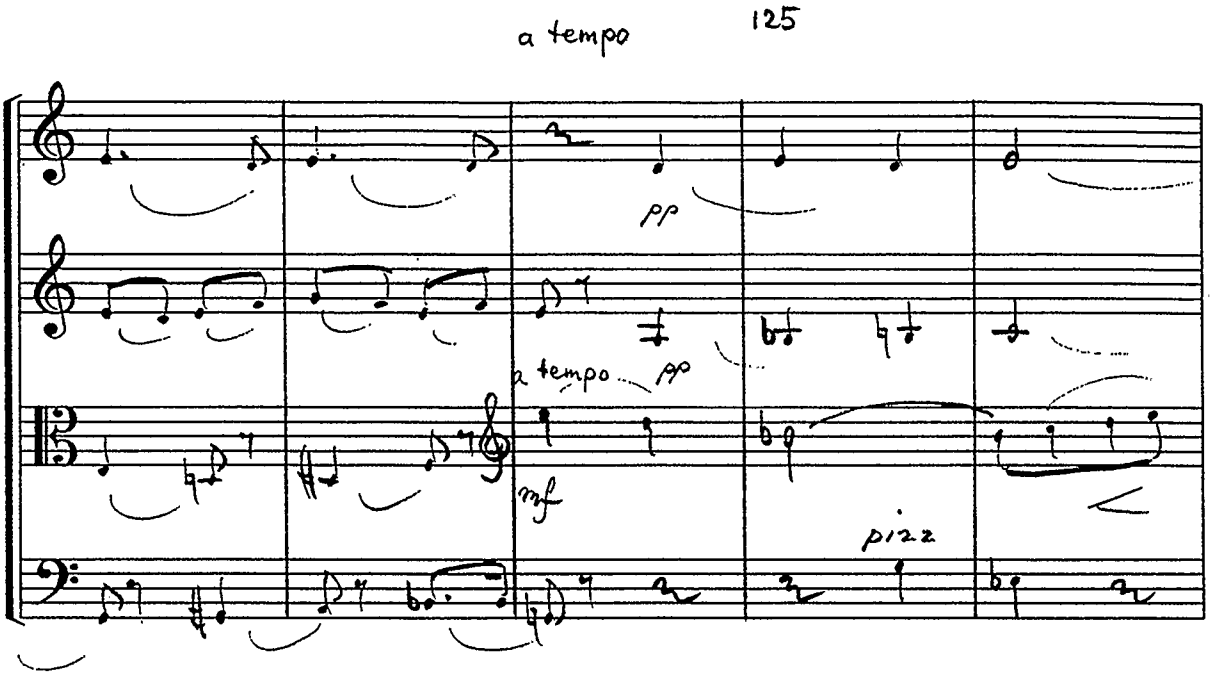


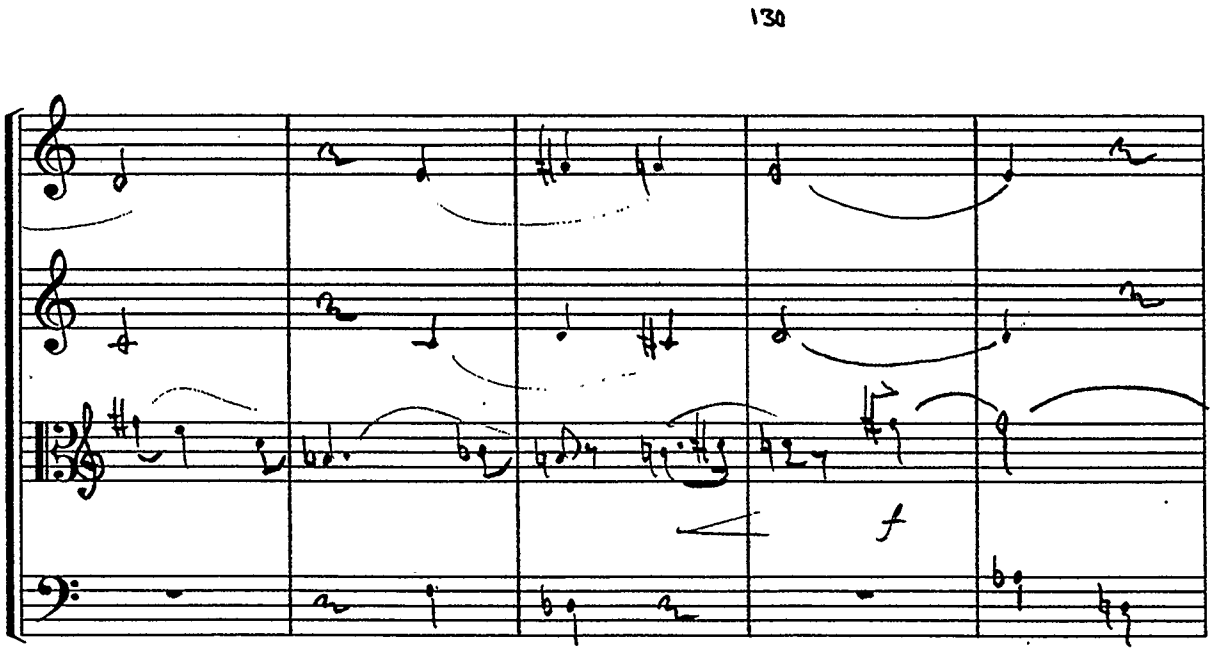
115



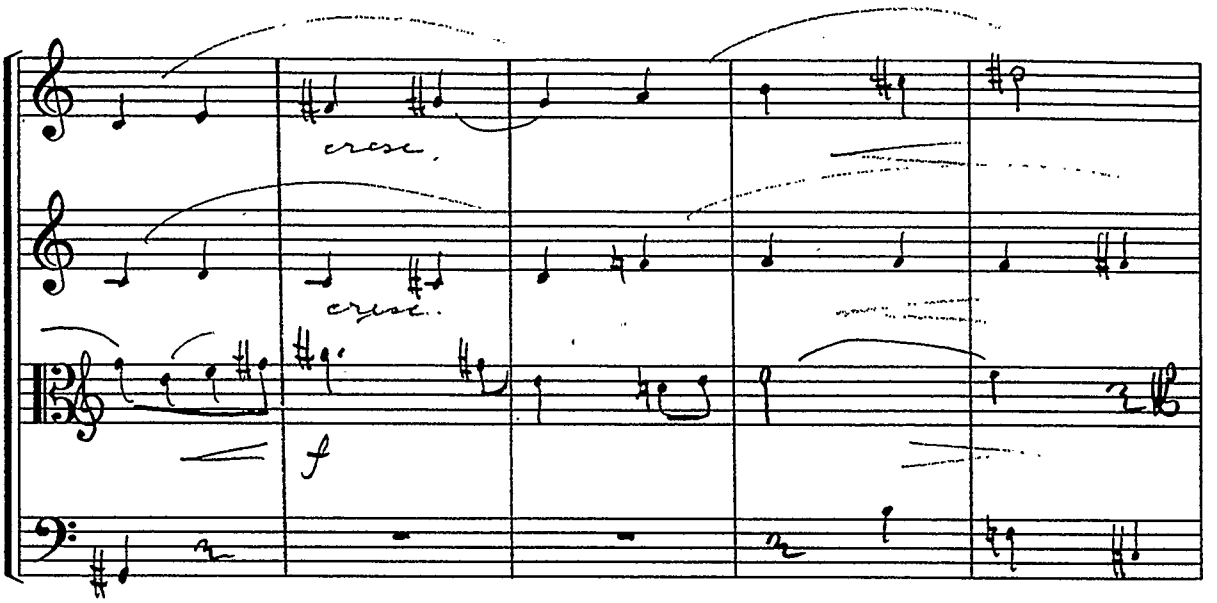
120



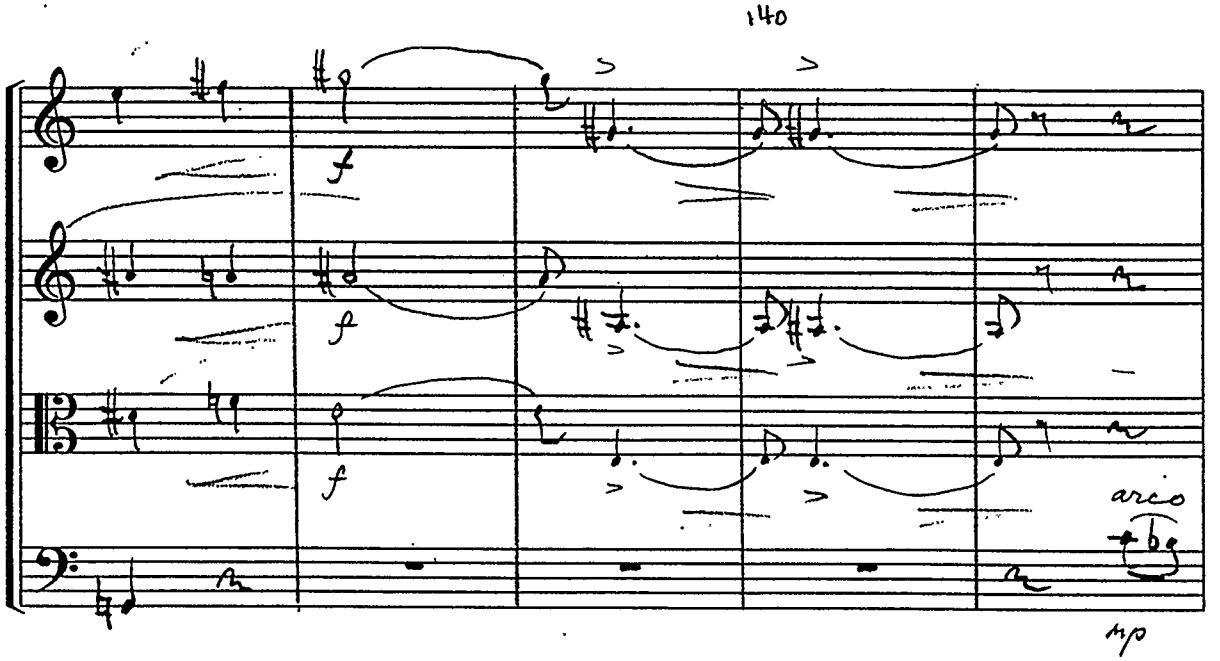

a tempo
125
pp
a tempo pp
mf
pizz


130
f

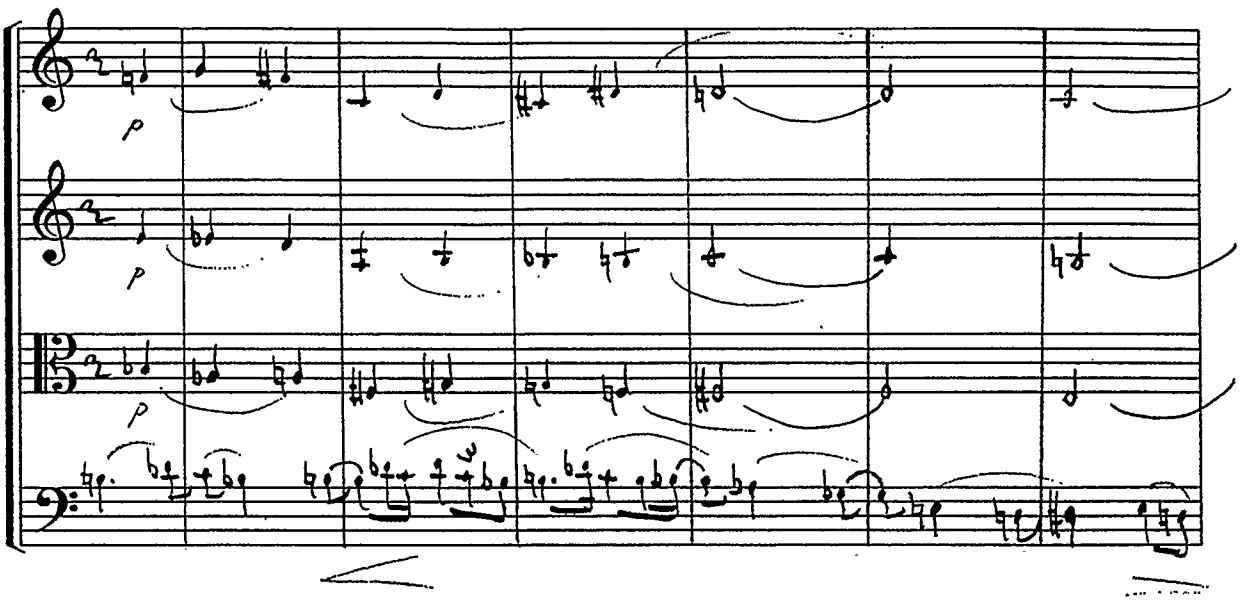
135



140

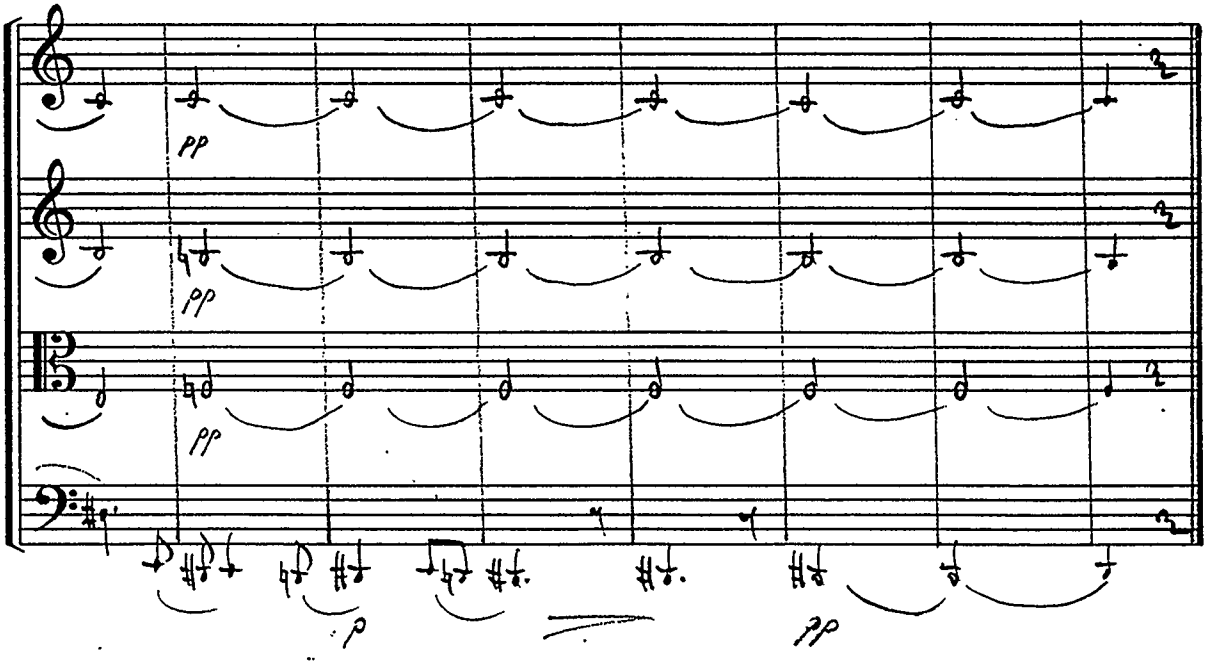


145



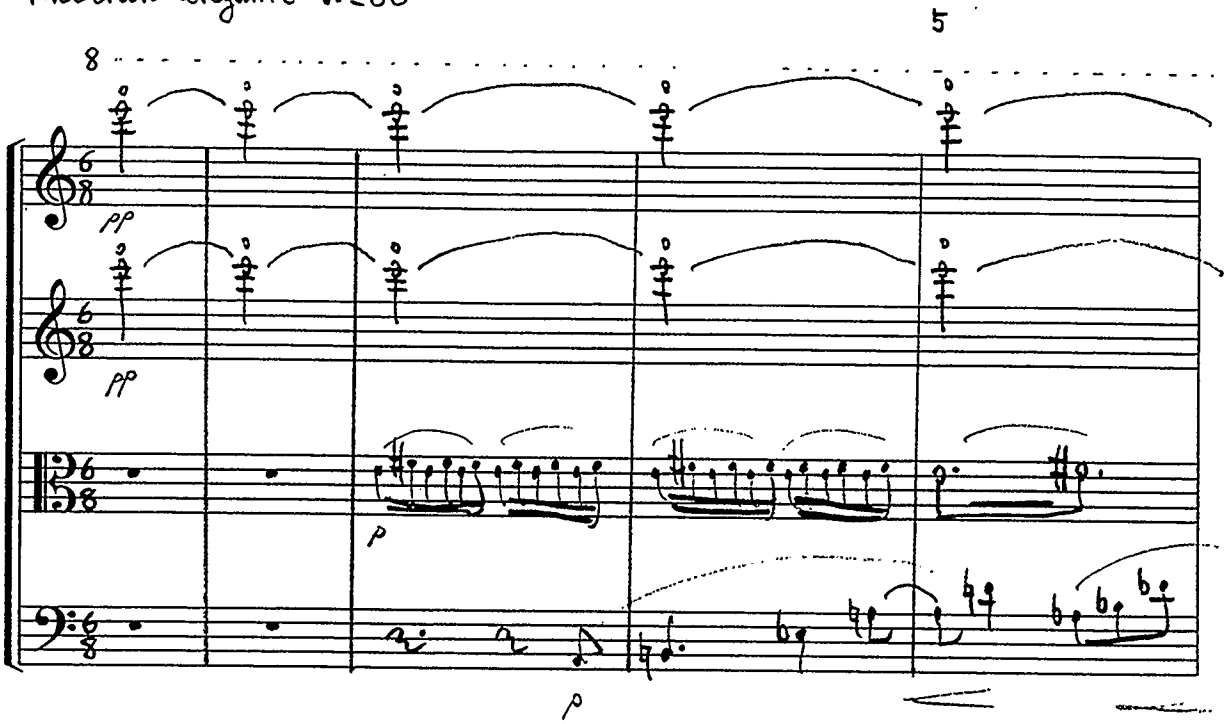
150

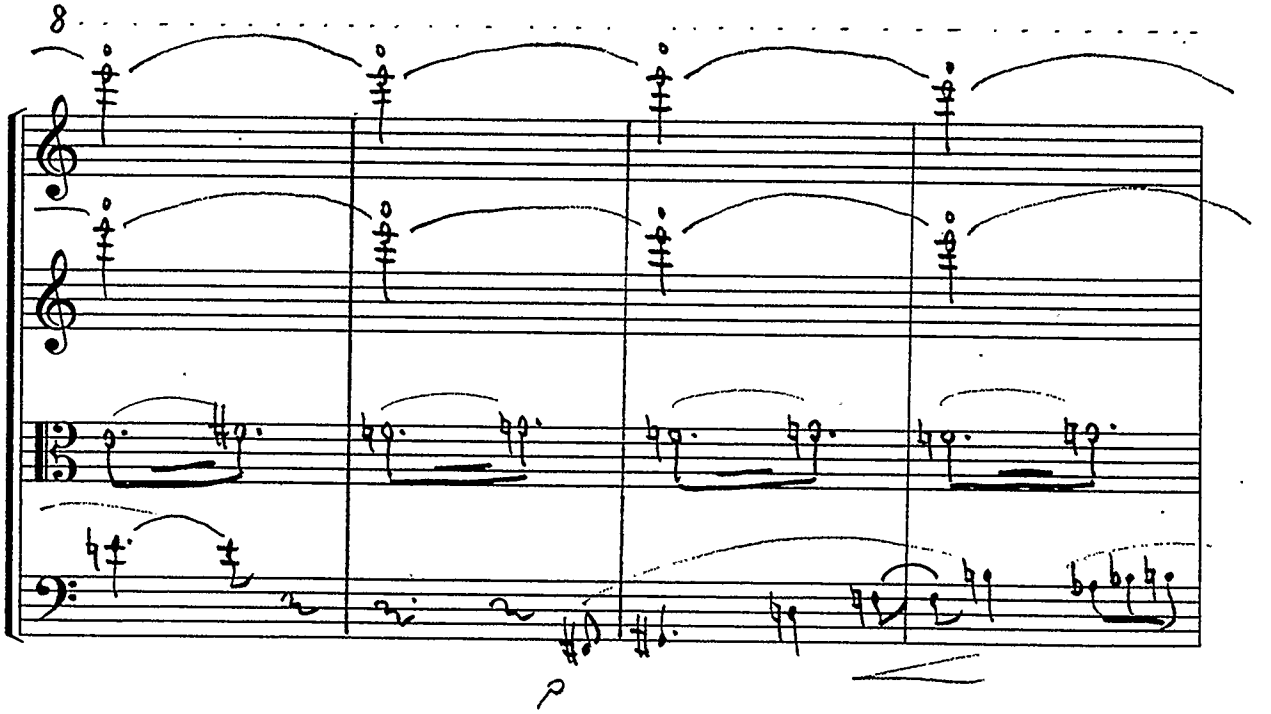
155



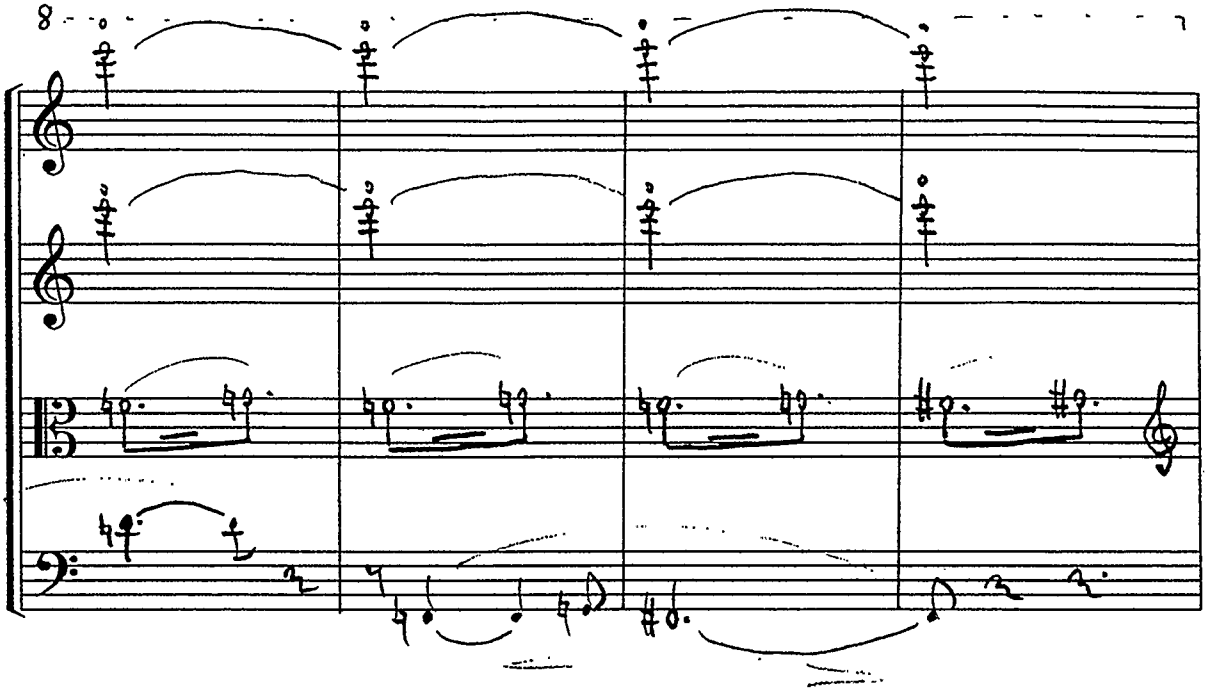
II

Moderato elegante ♩.=56

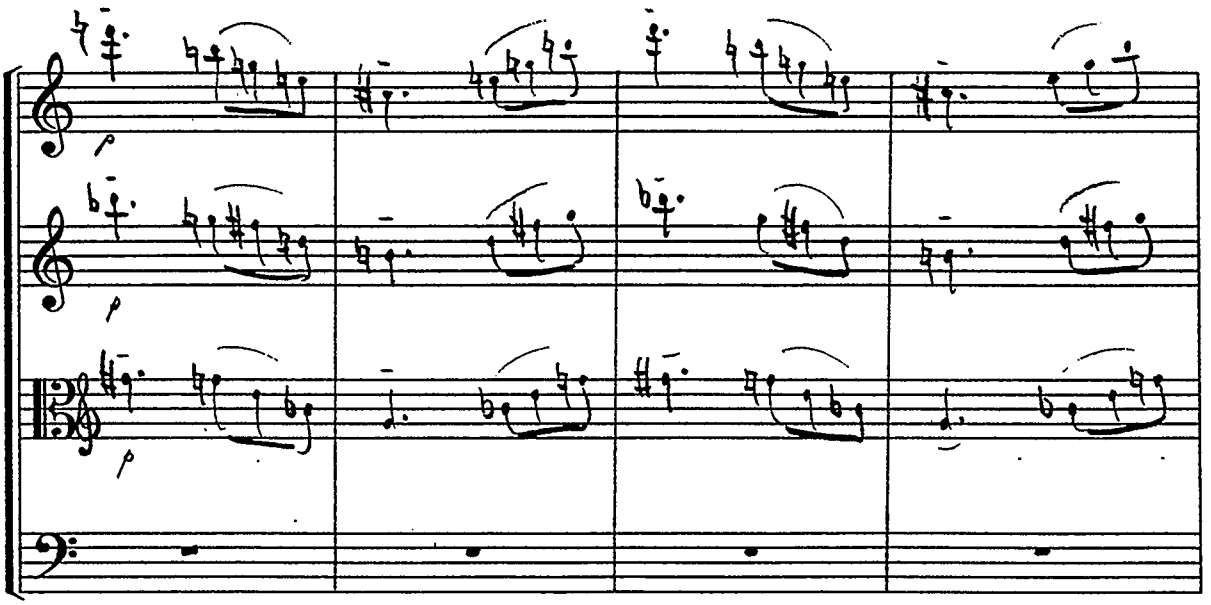


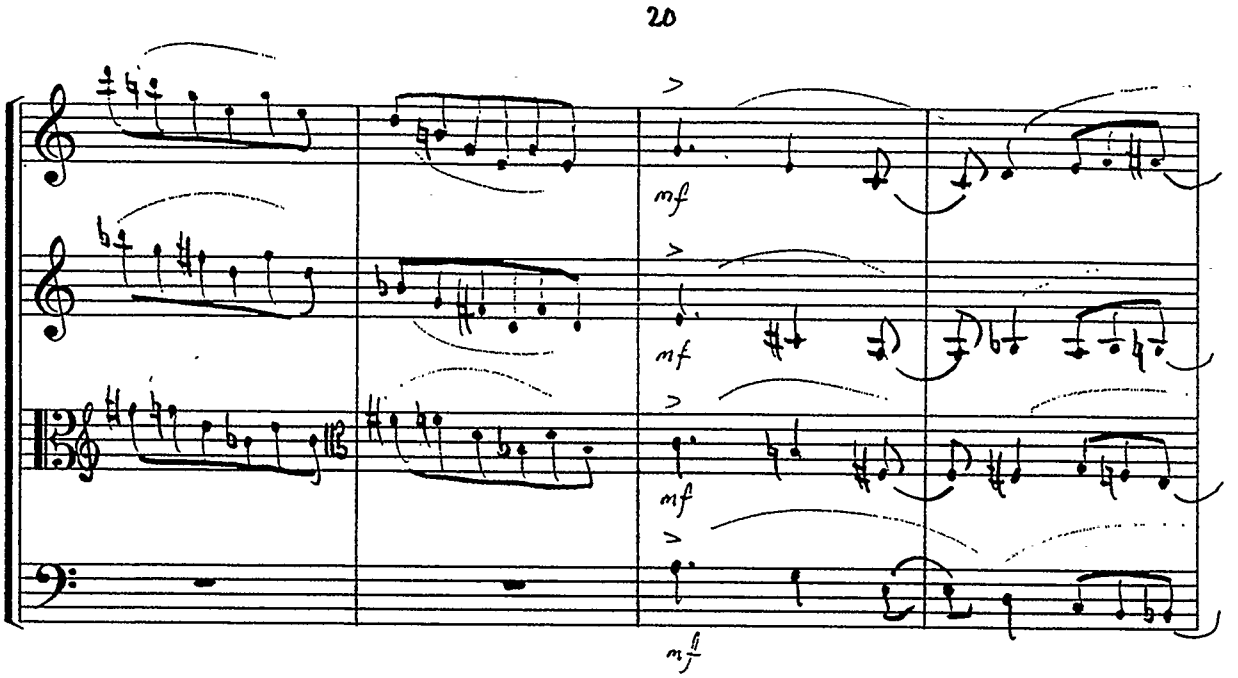


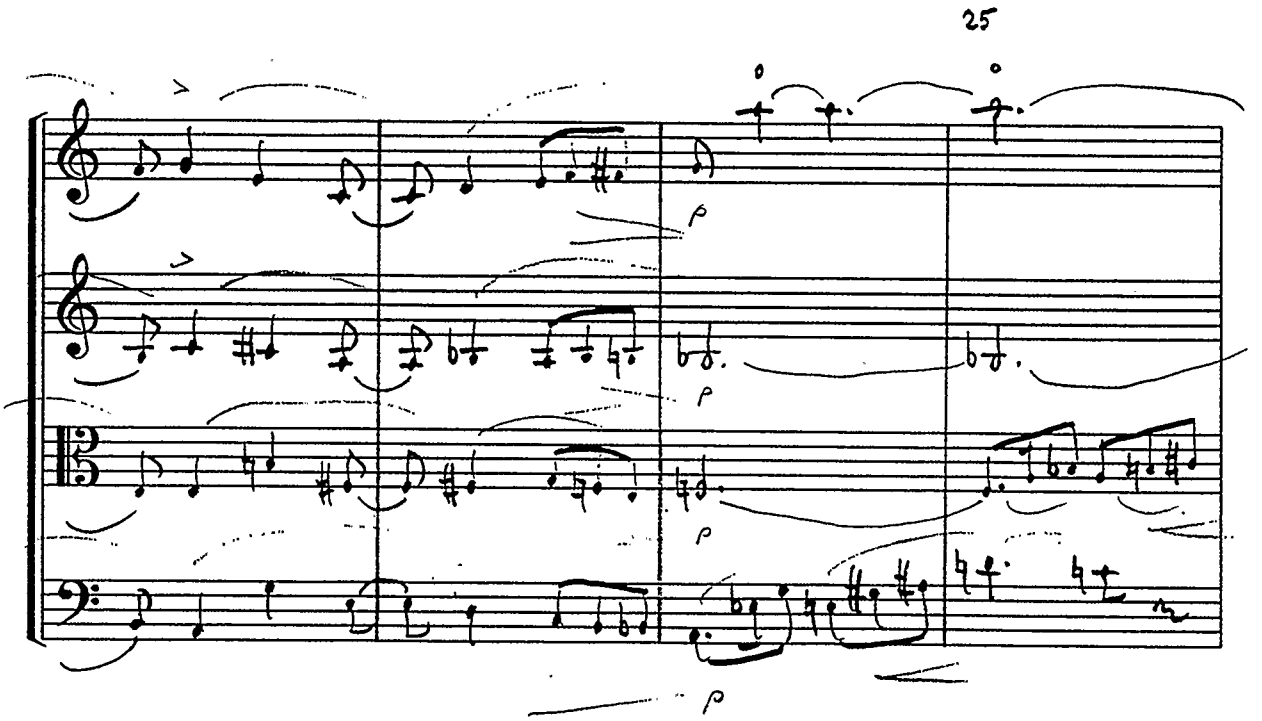
10

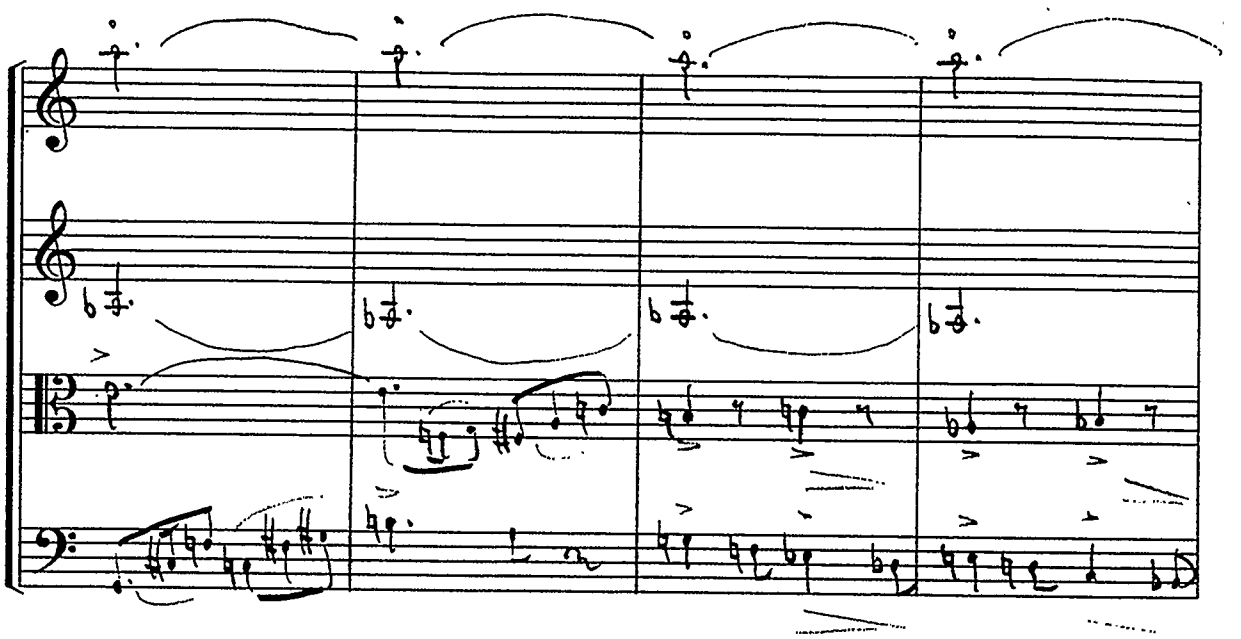


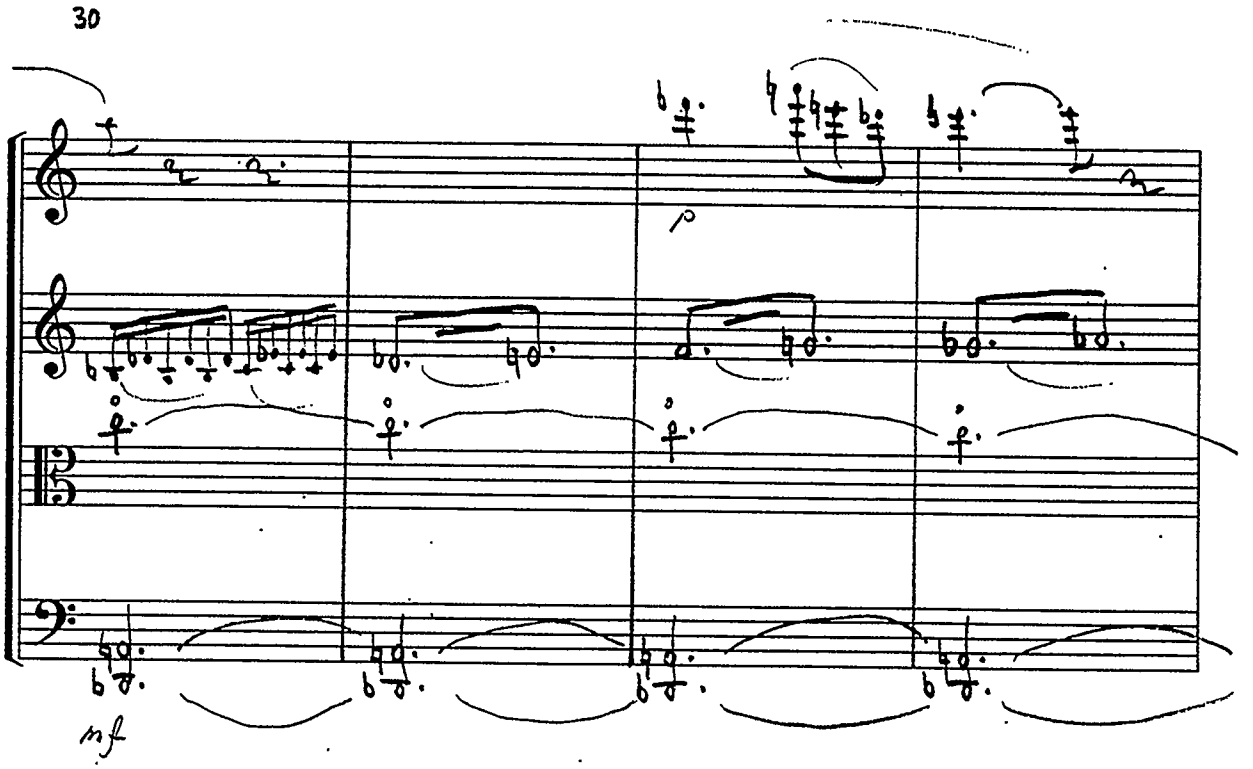
15



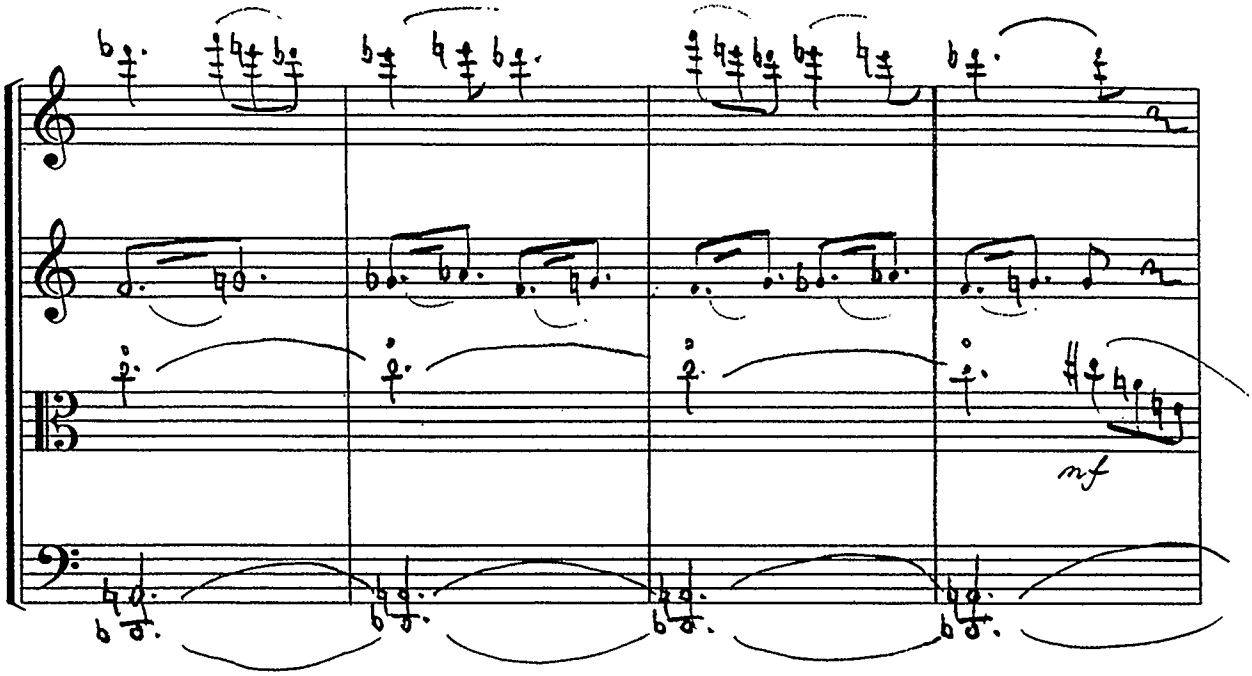

20
mf
mf
mf
mf


25
p
p
p
p

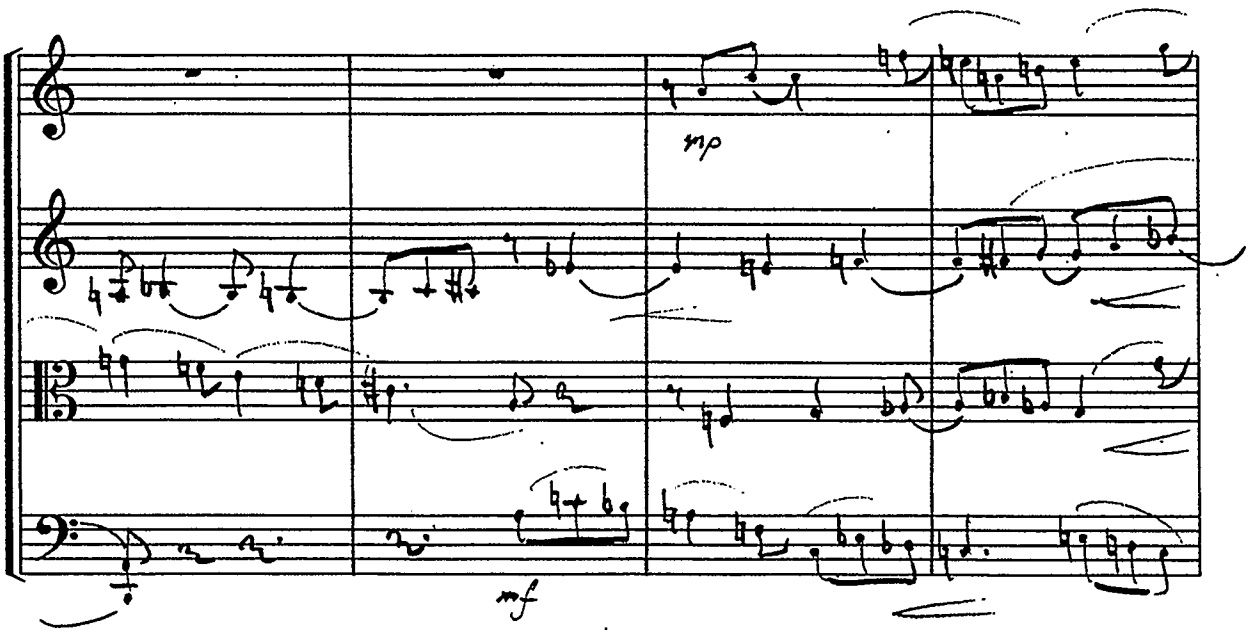


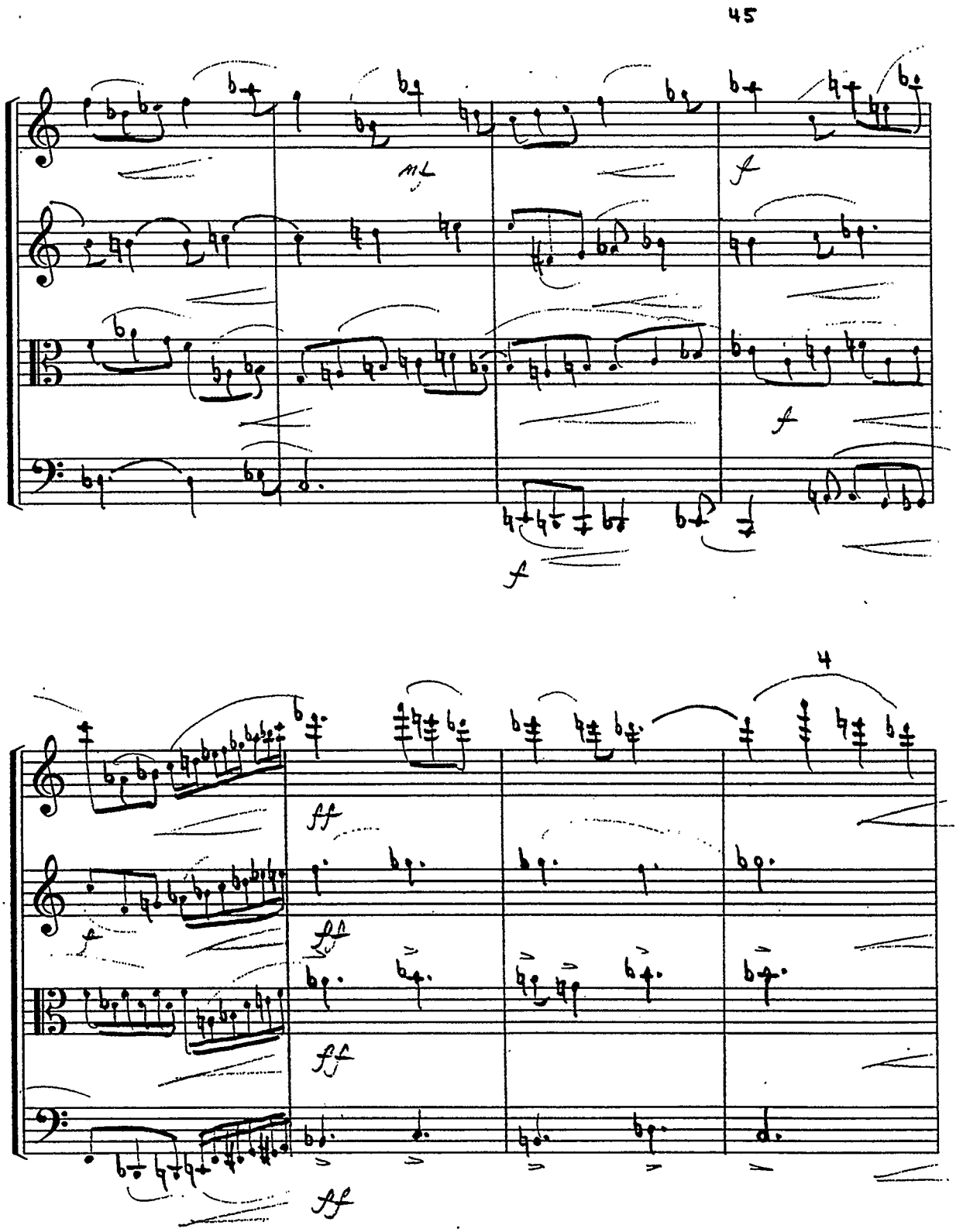

30
p
mf

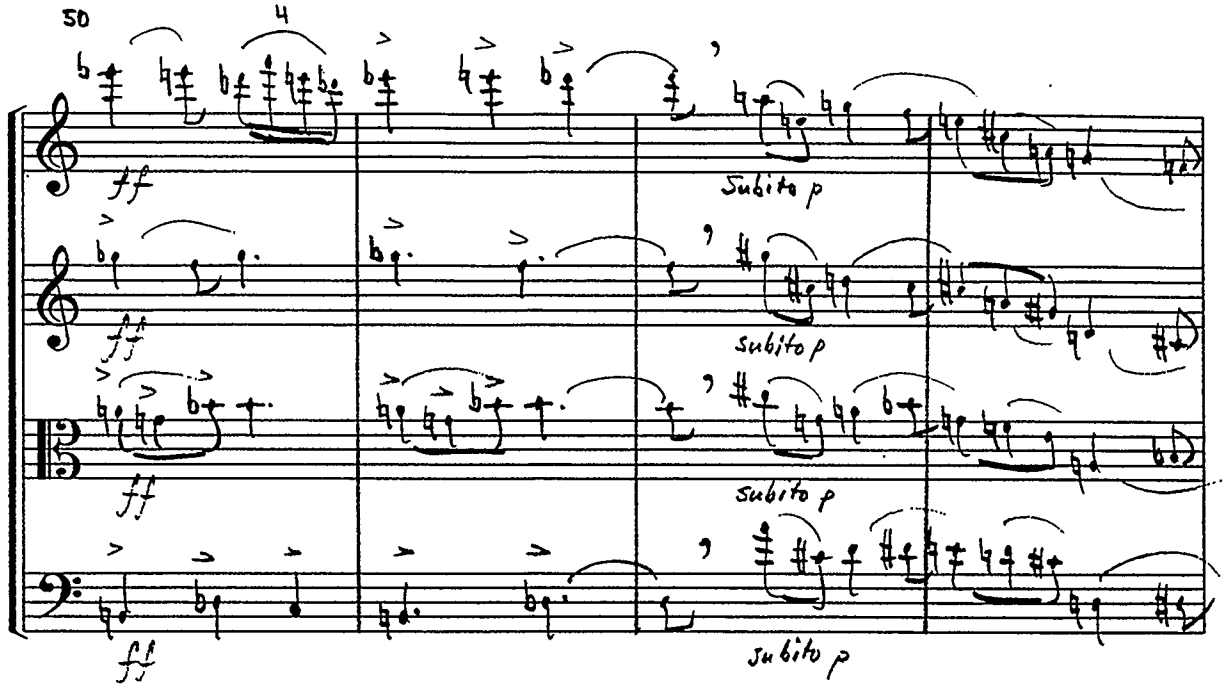
35

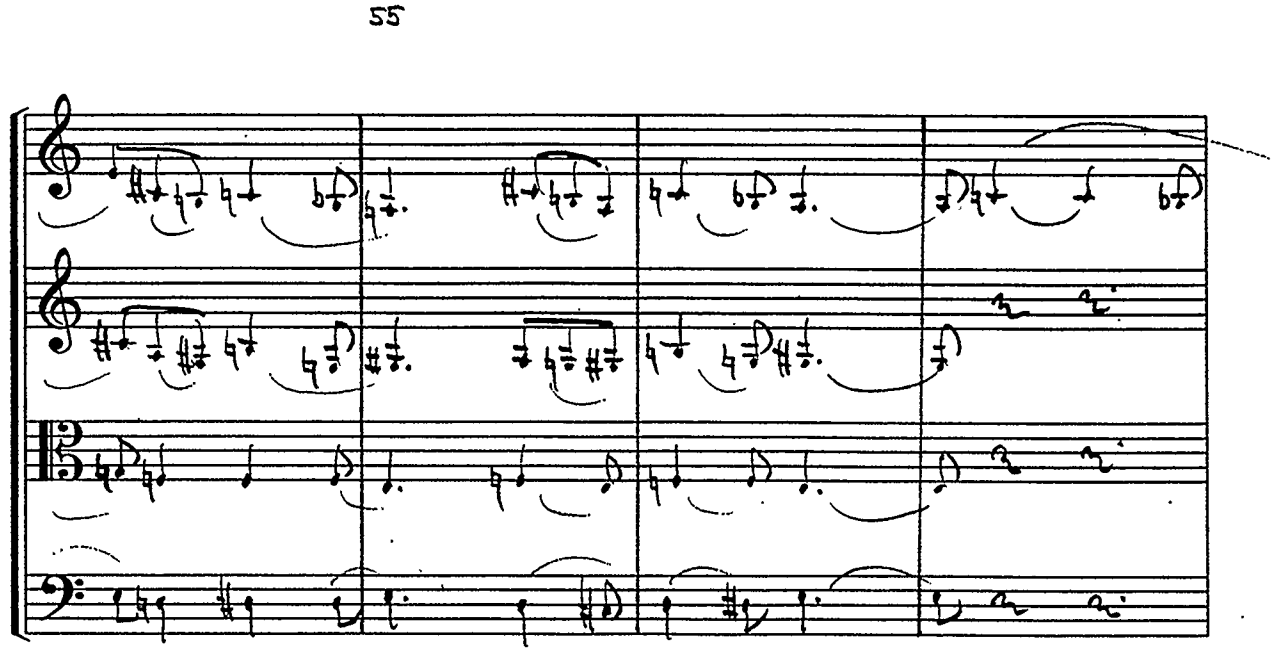


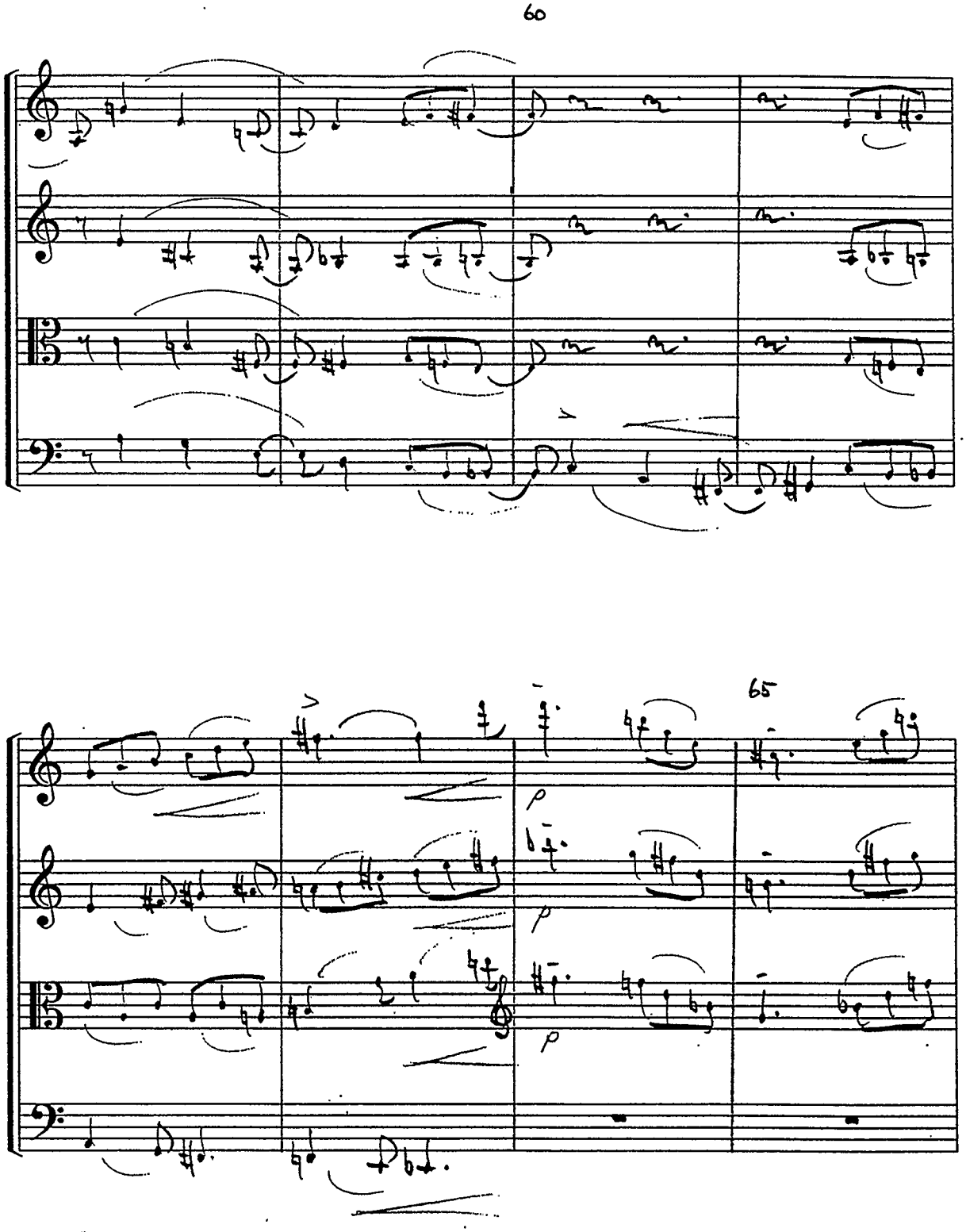
40

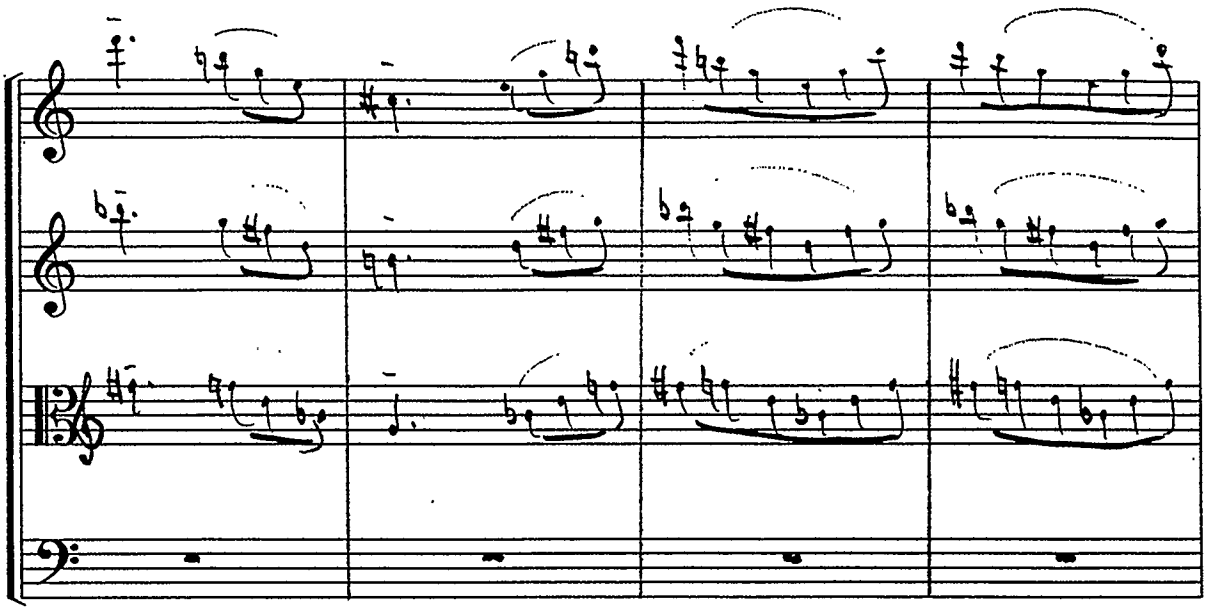


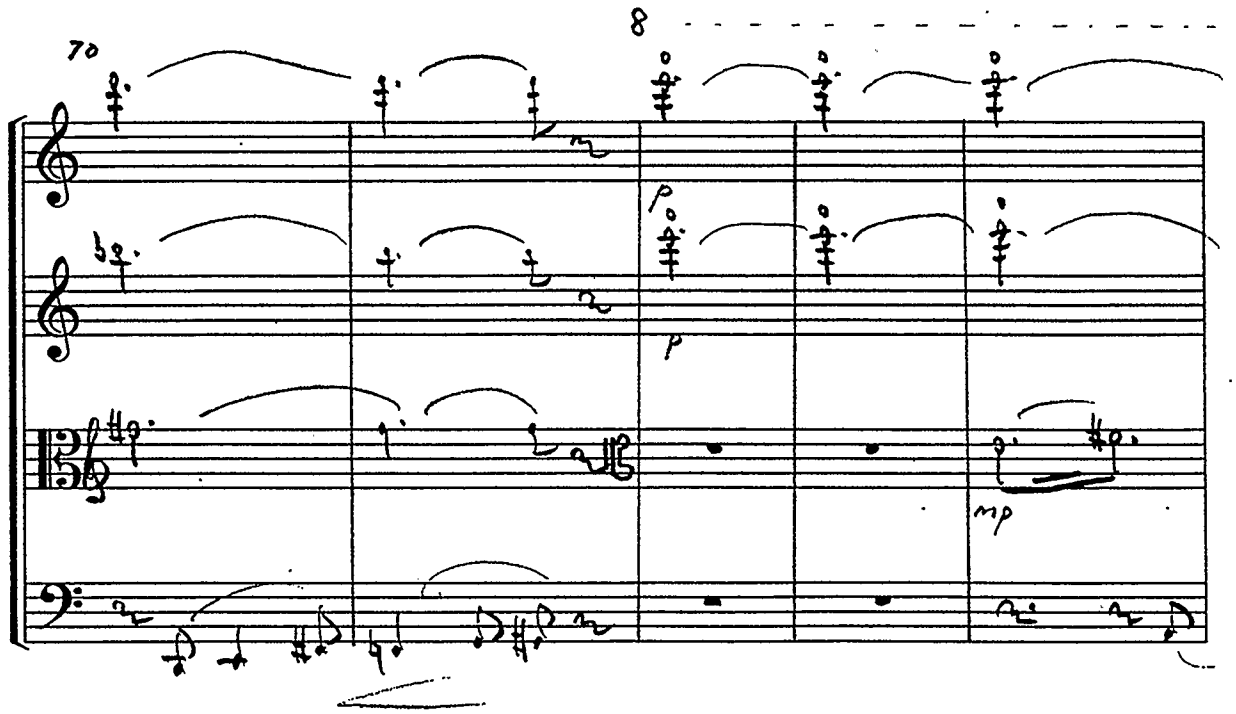

45
4

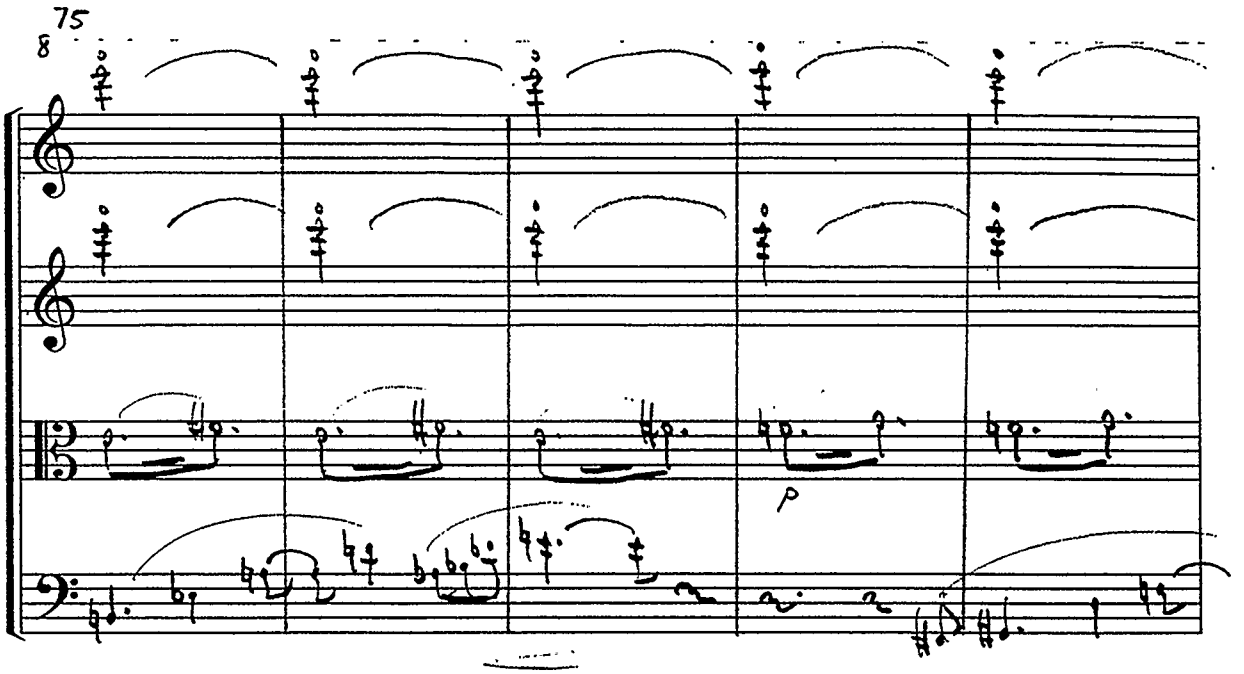

50
4
ff
Subito p
ff
subito p
ff
subito p
ff
subito p

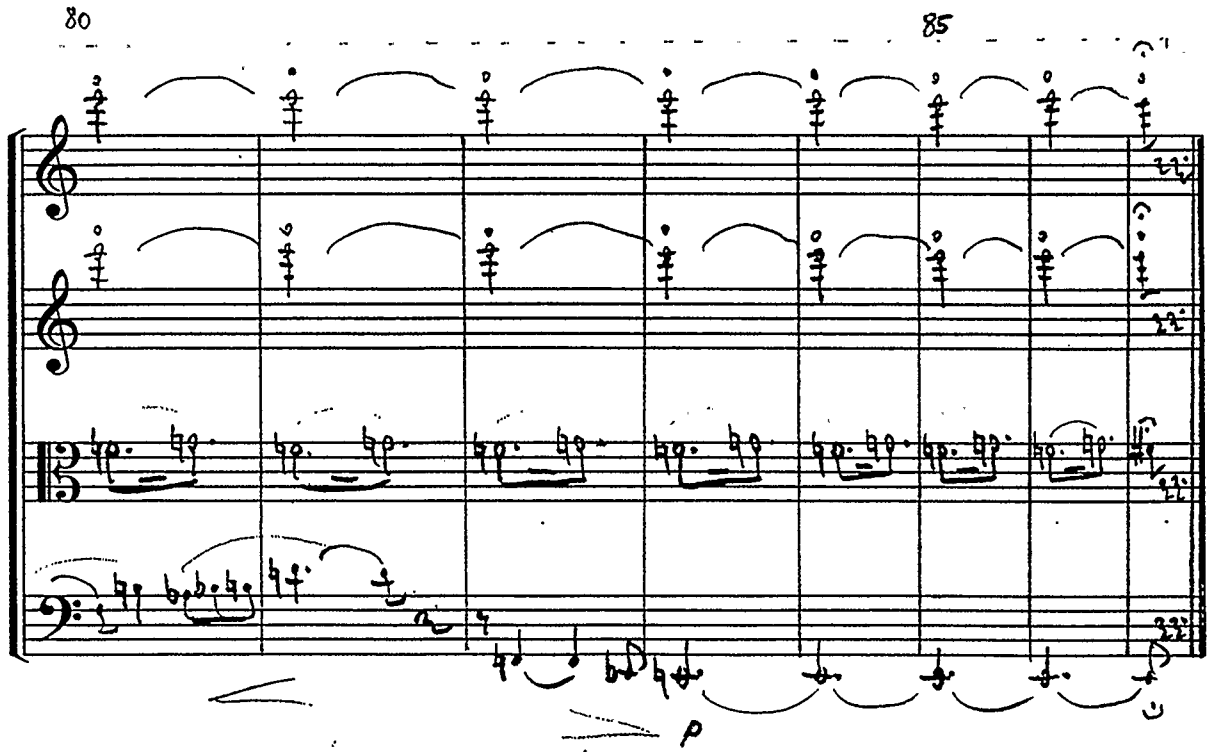

55


60
65
p
p
p



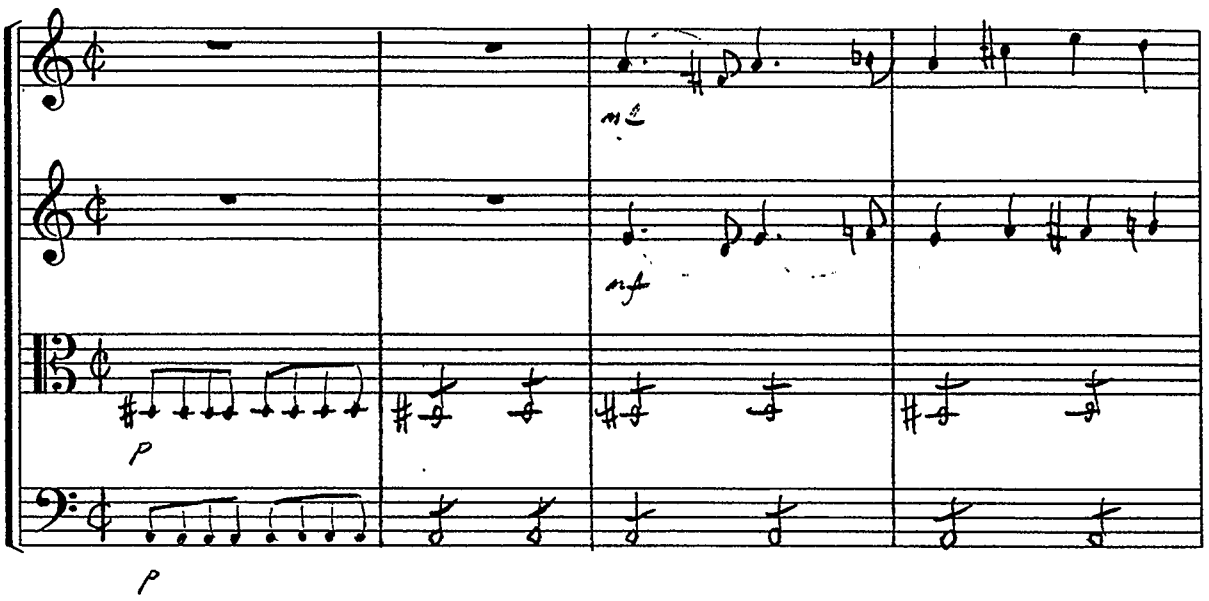

70
8
p
p
mp


75
8
p

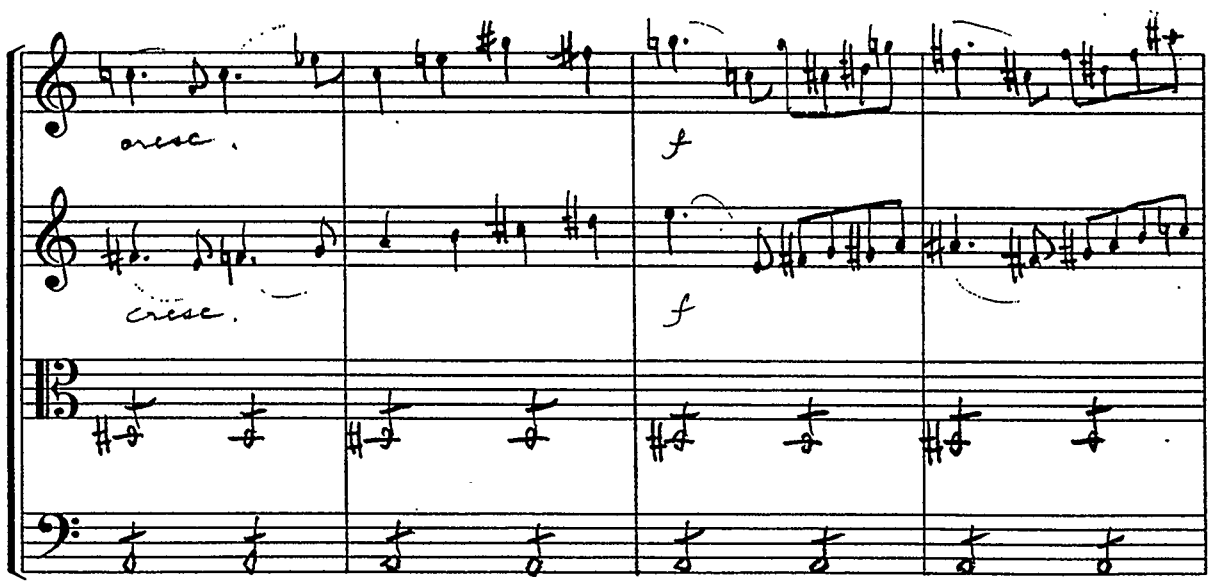

80
85
p

III

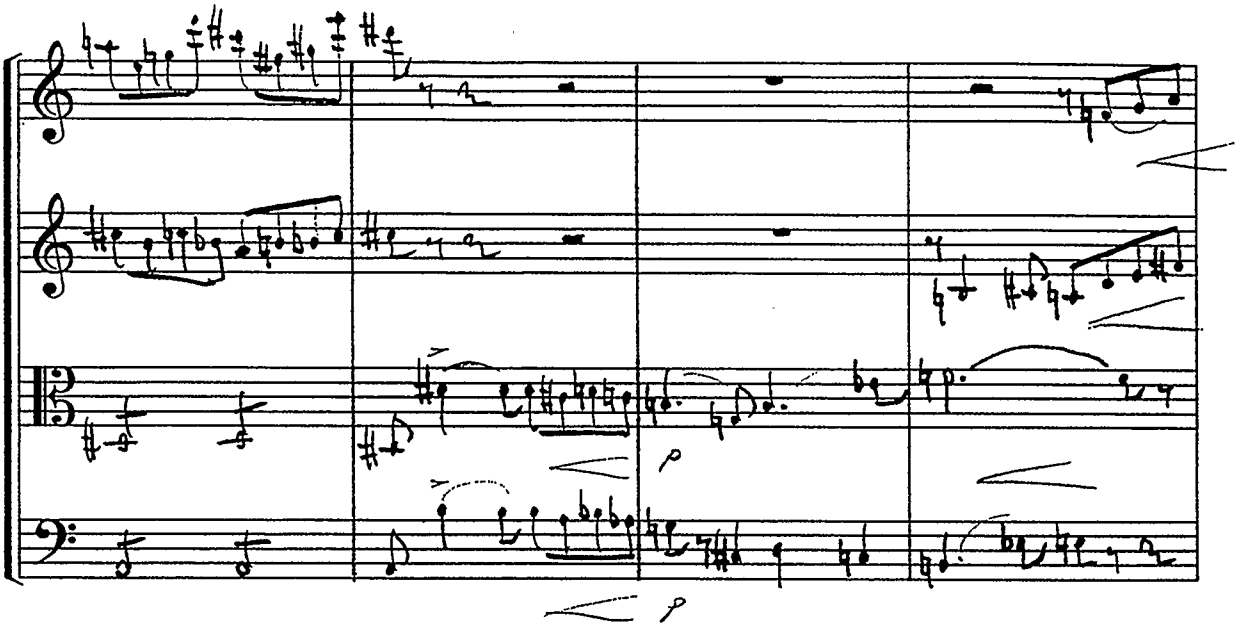
Allegro con fuoco ♩= 72



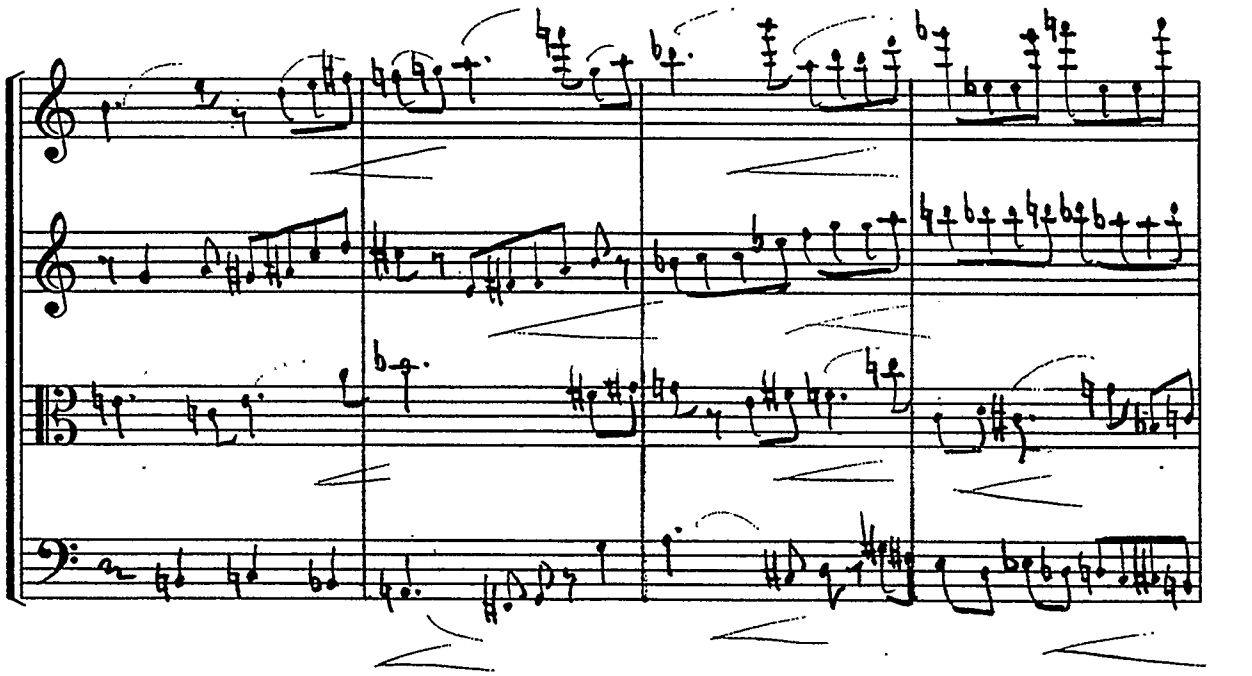
5

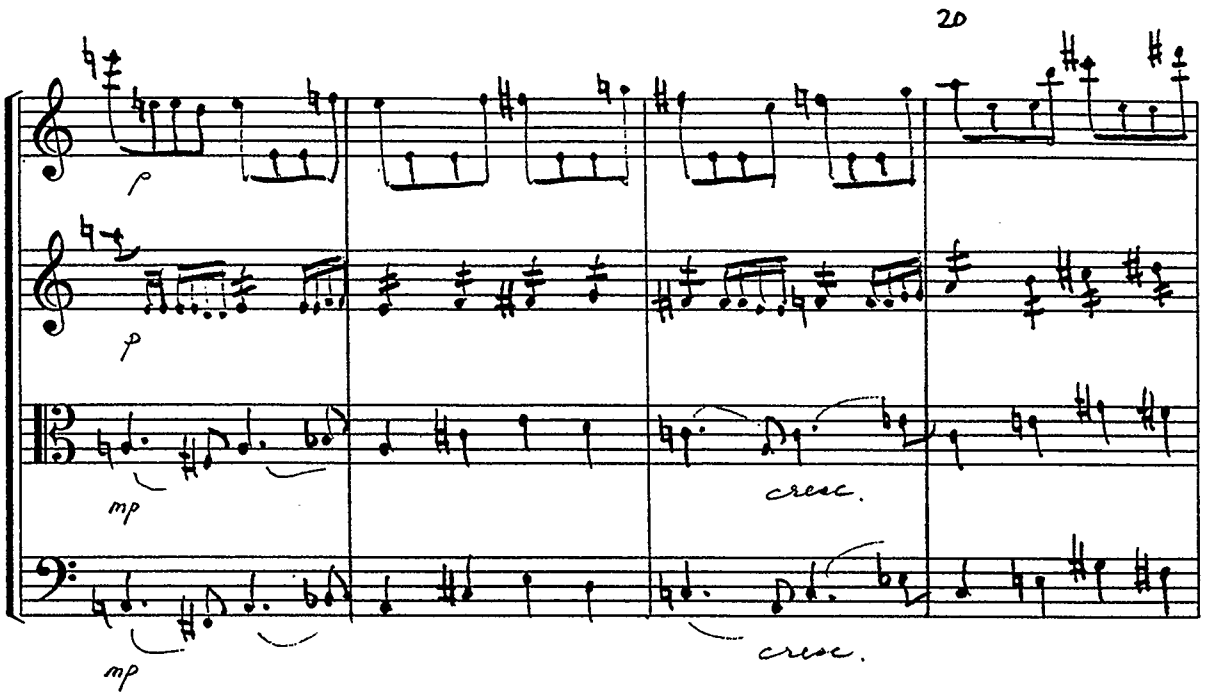


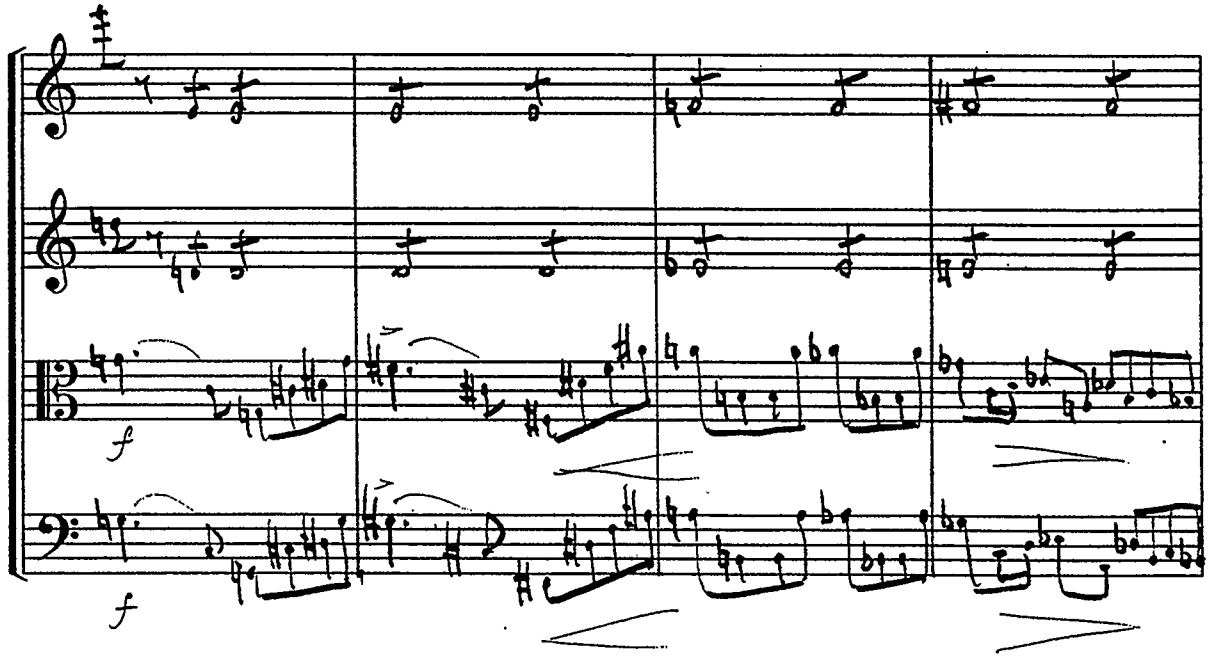
10



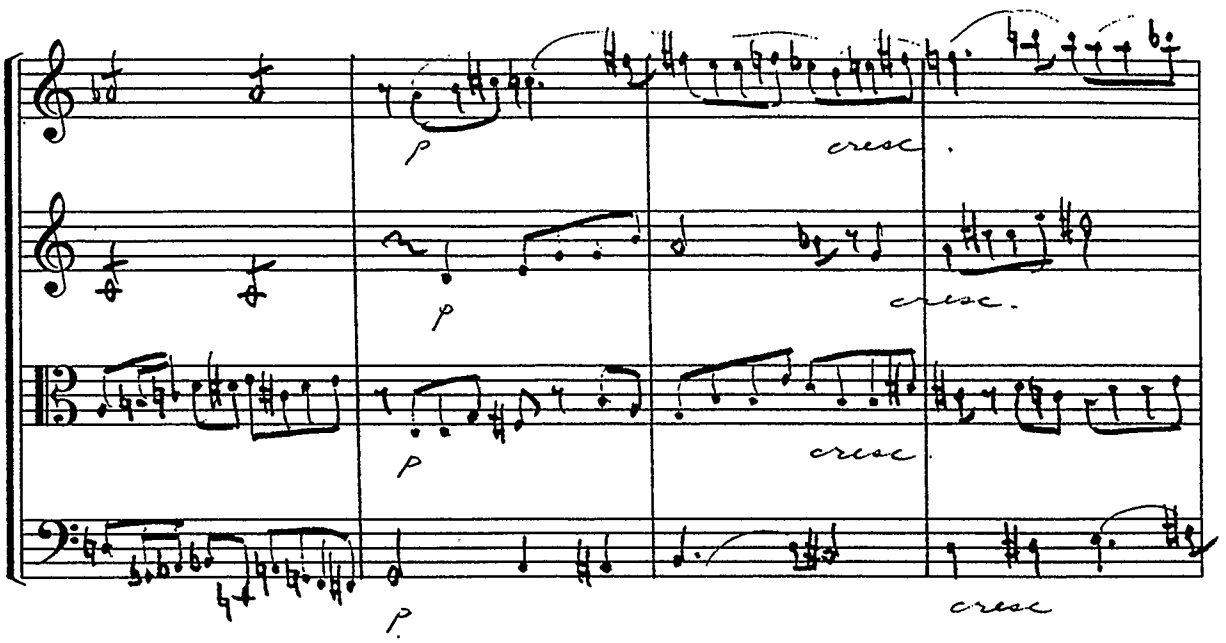
15



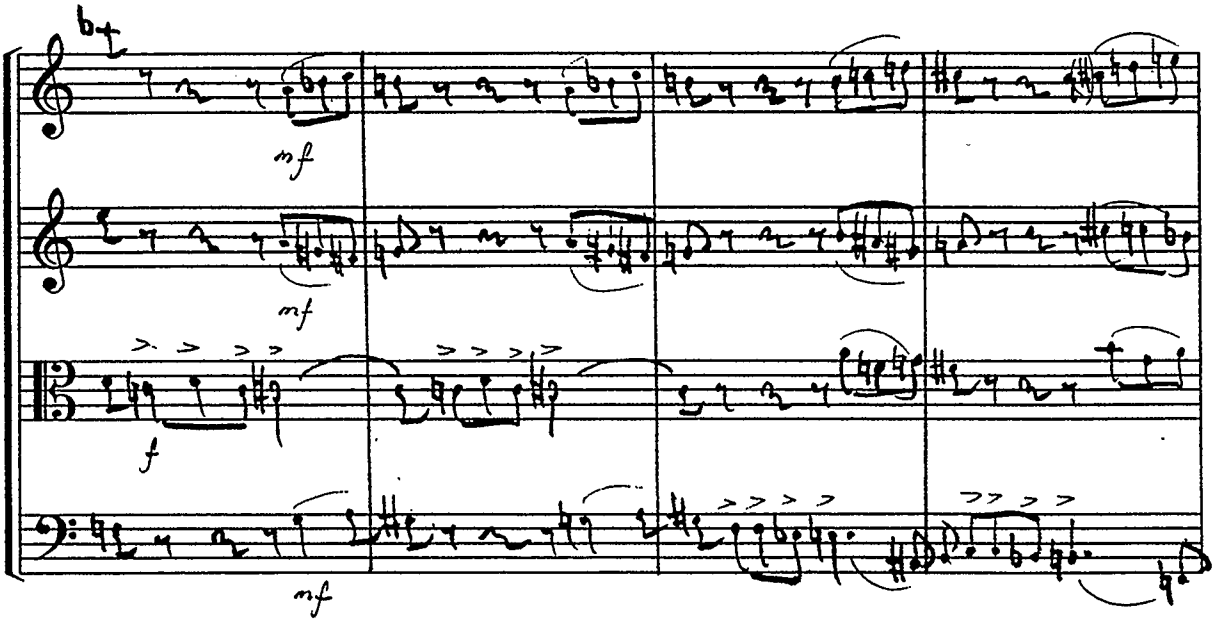

20
p
p
mp
cresc.
mp
cresc.


f
f

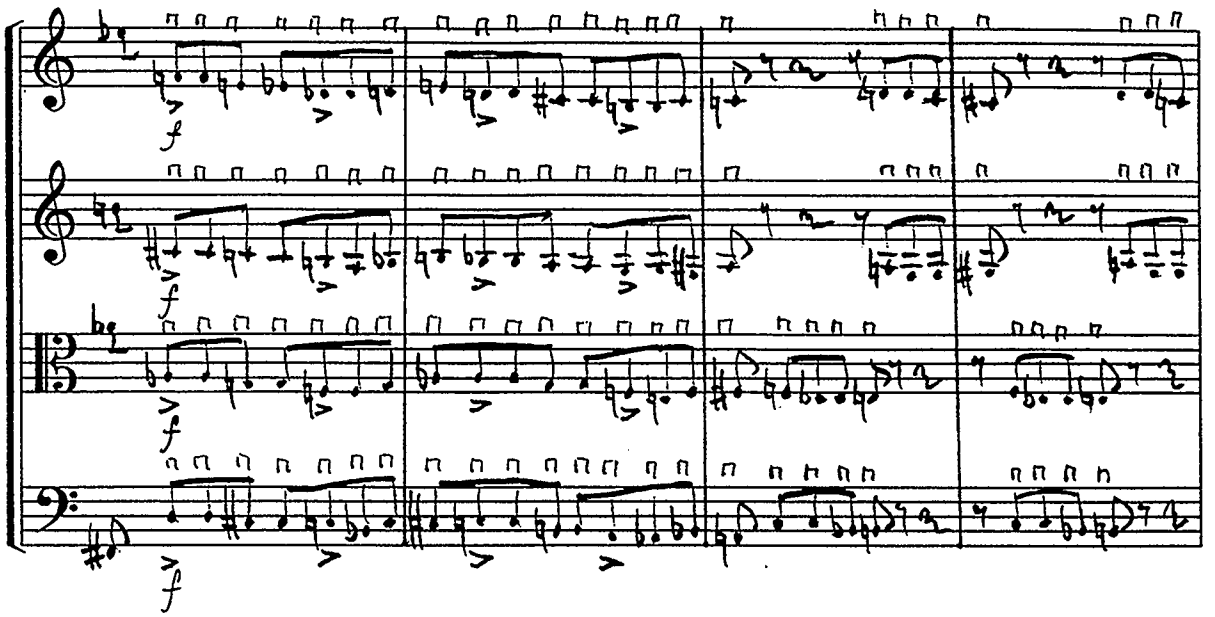
25



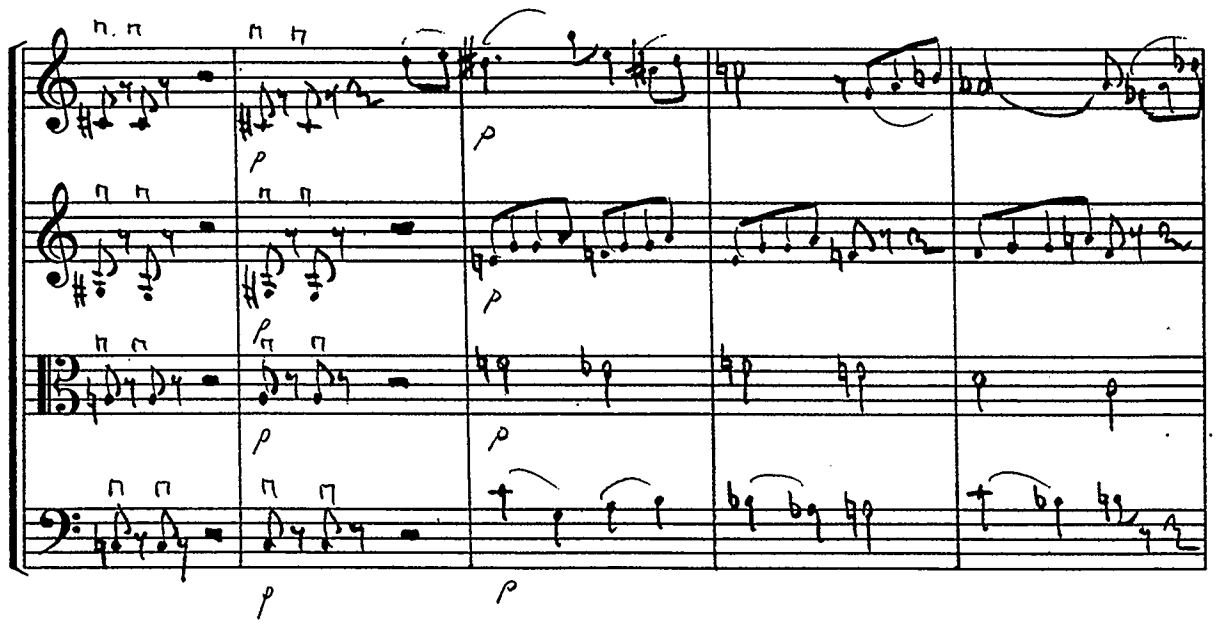
30

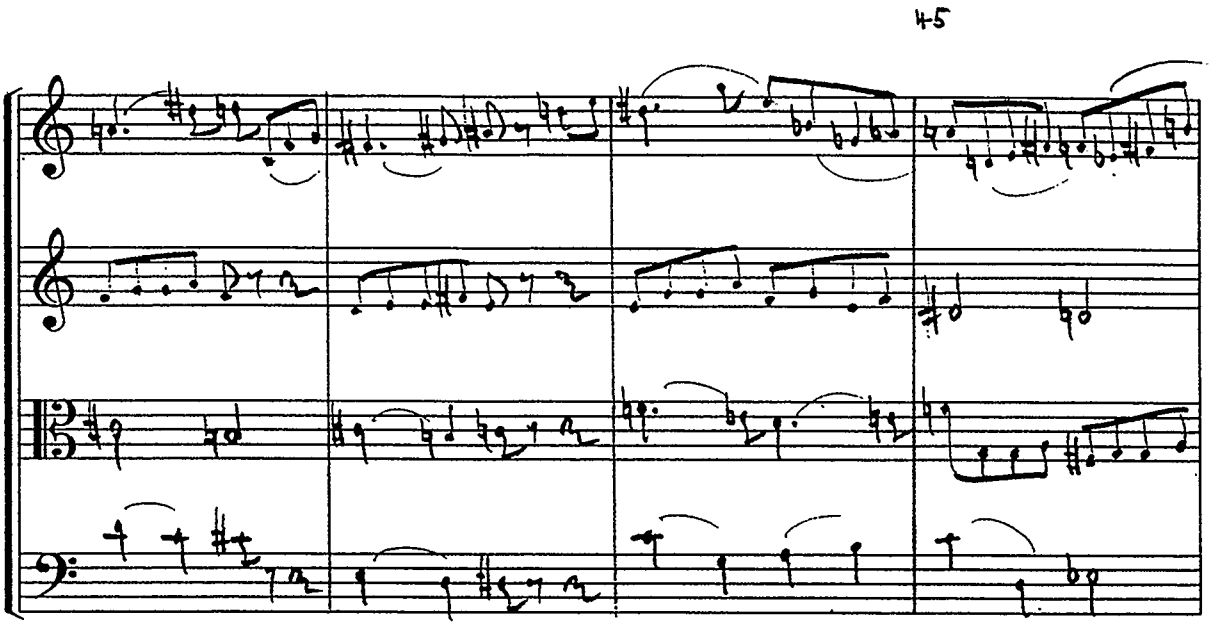


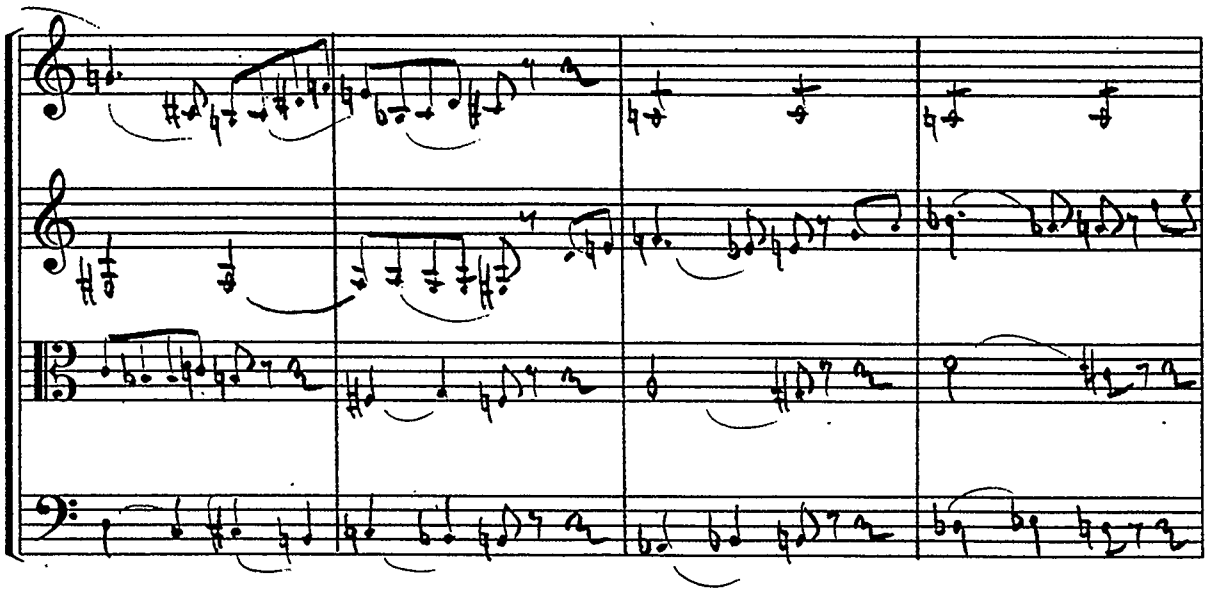
35



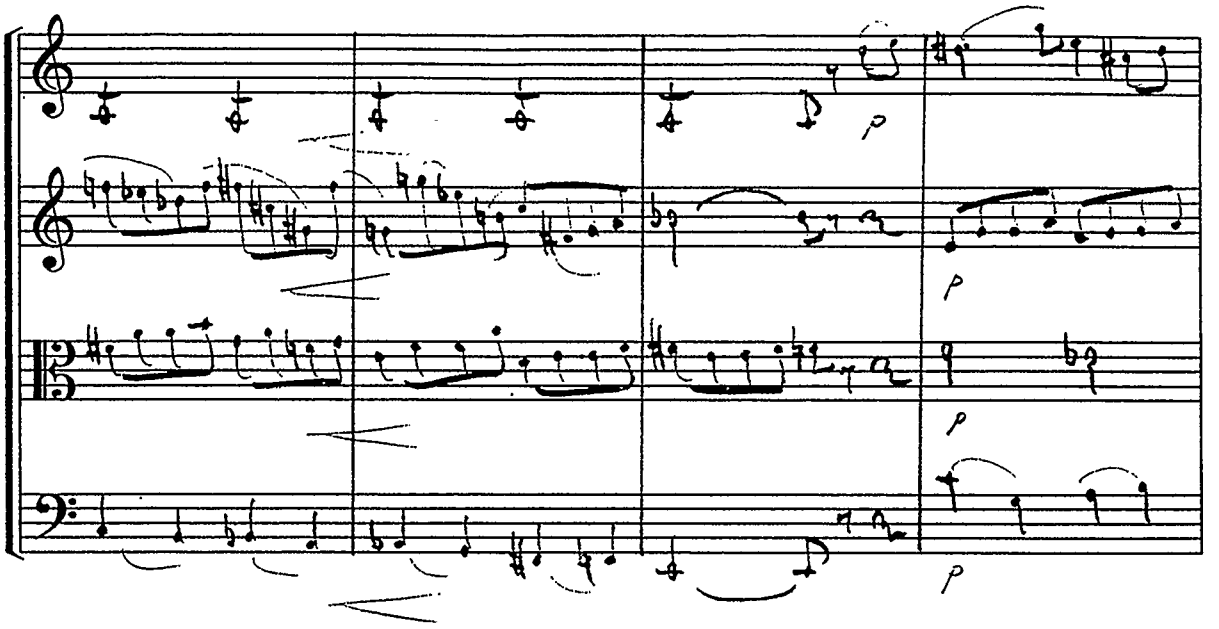
40



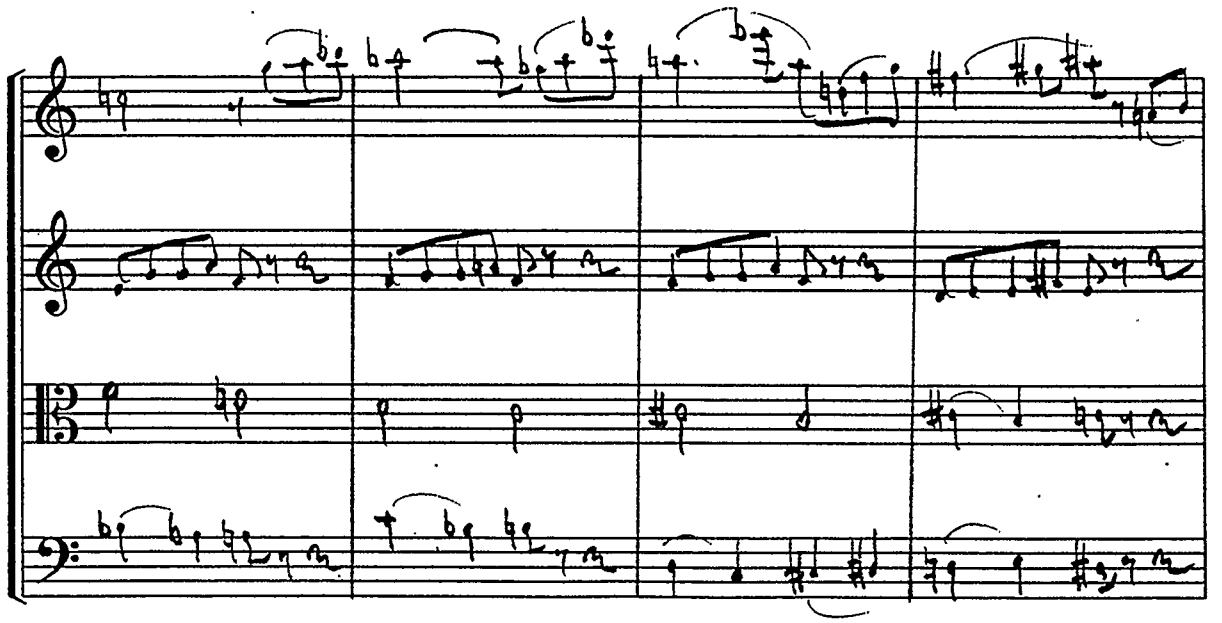

4-5

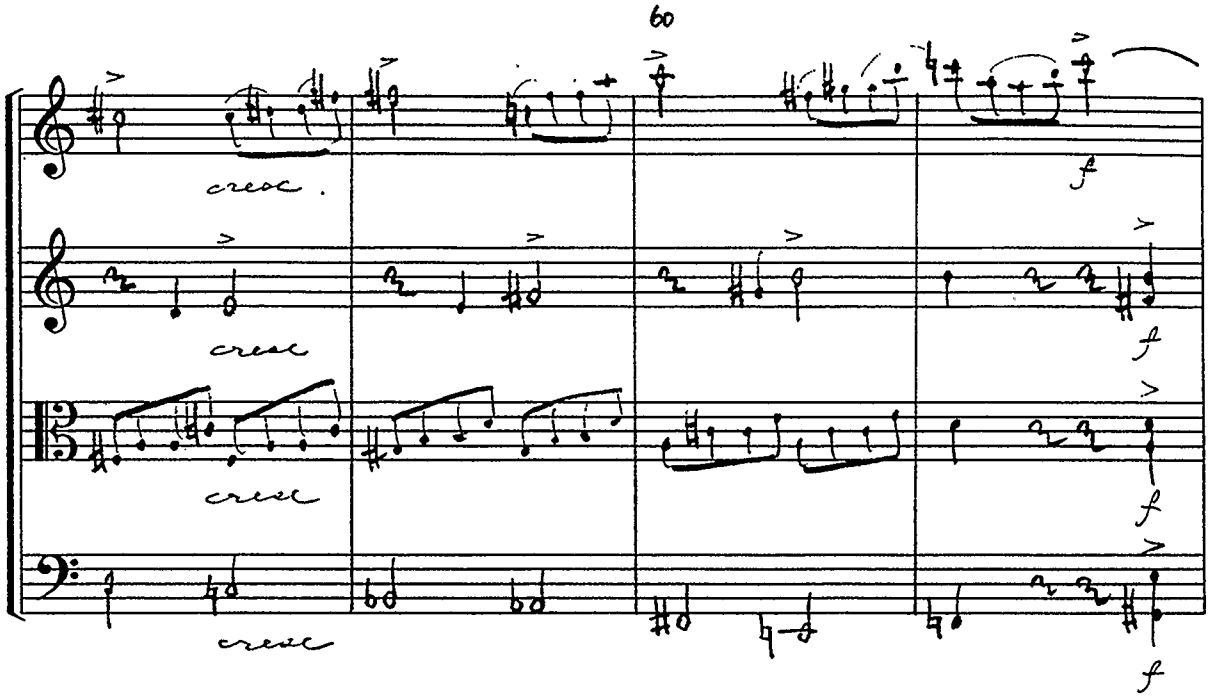


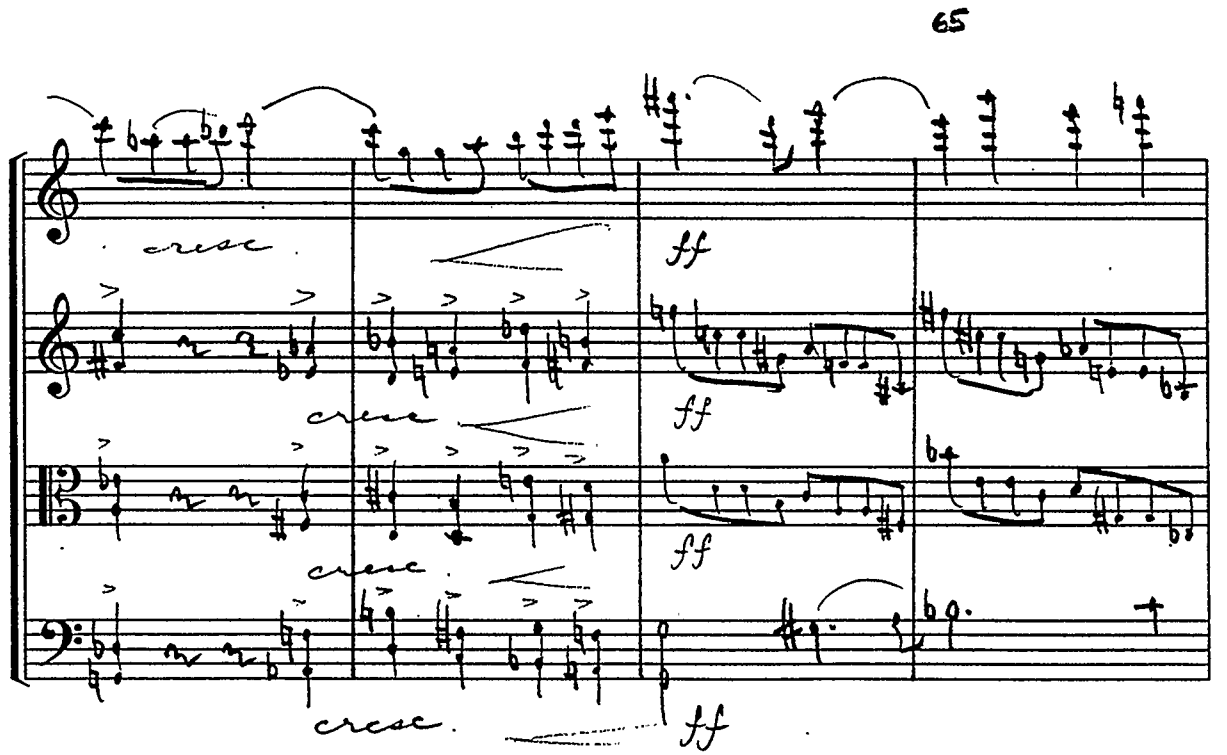
50

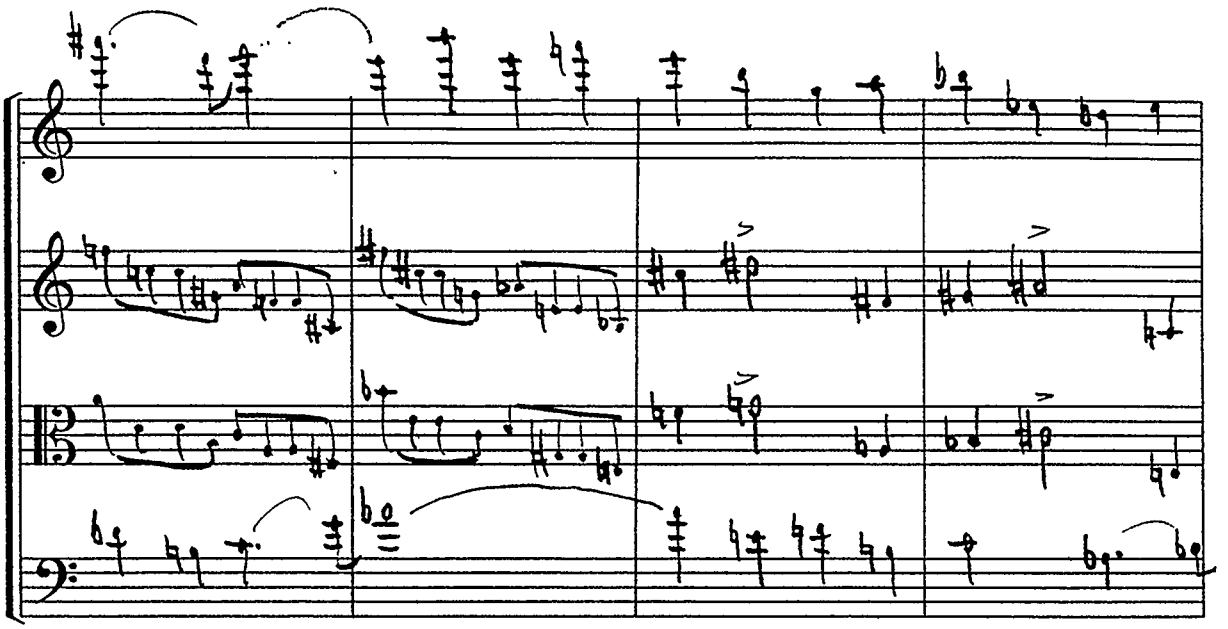


55

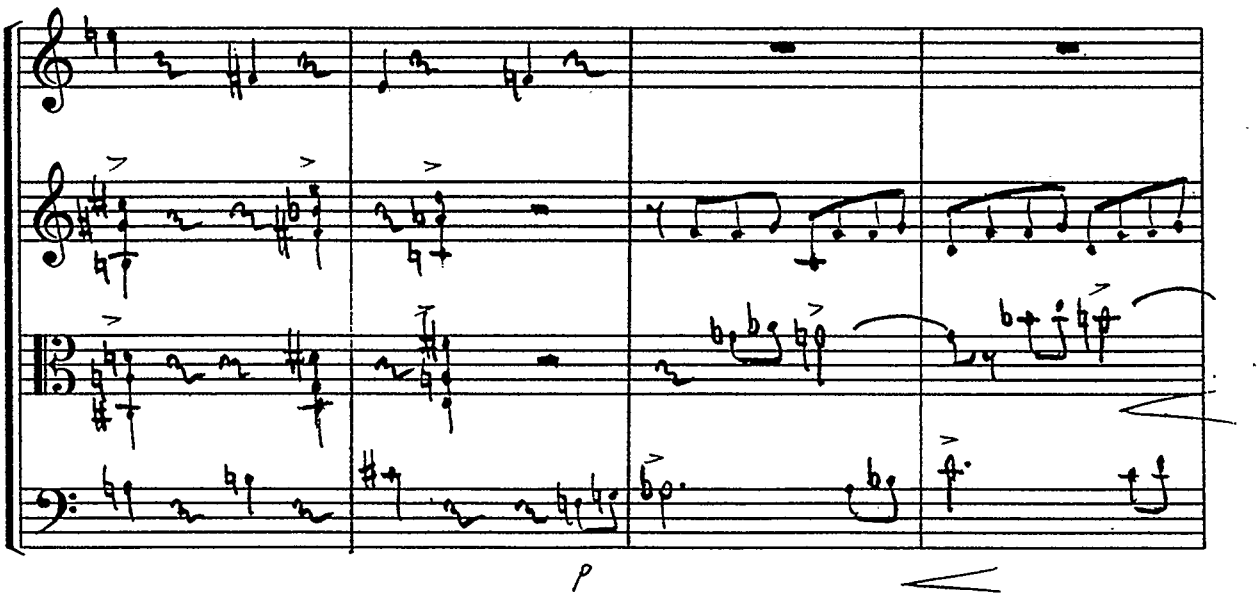



60
cresc.
cresc
cresc
cresc
f
f
f
f

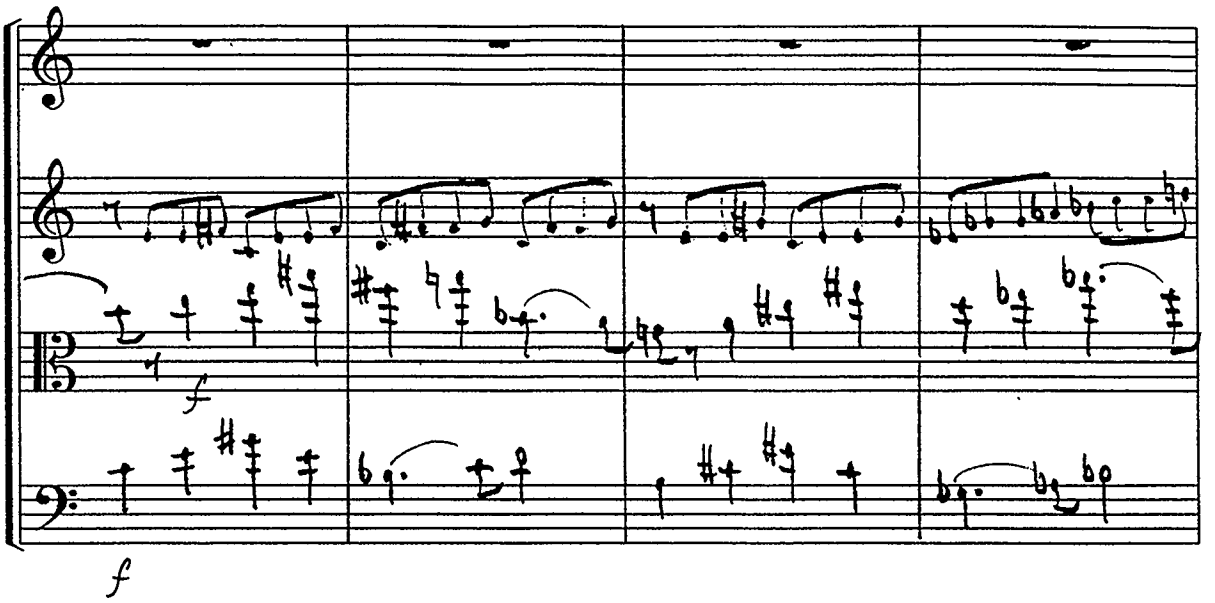

65
cresc.
cresc
cresc.
cresc.
ff
ff
ff
ff



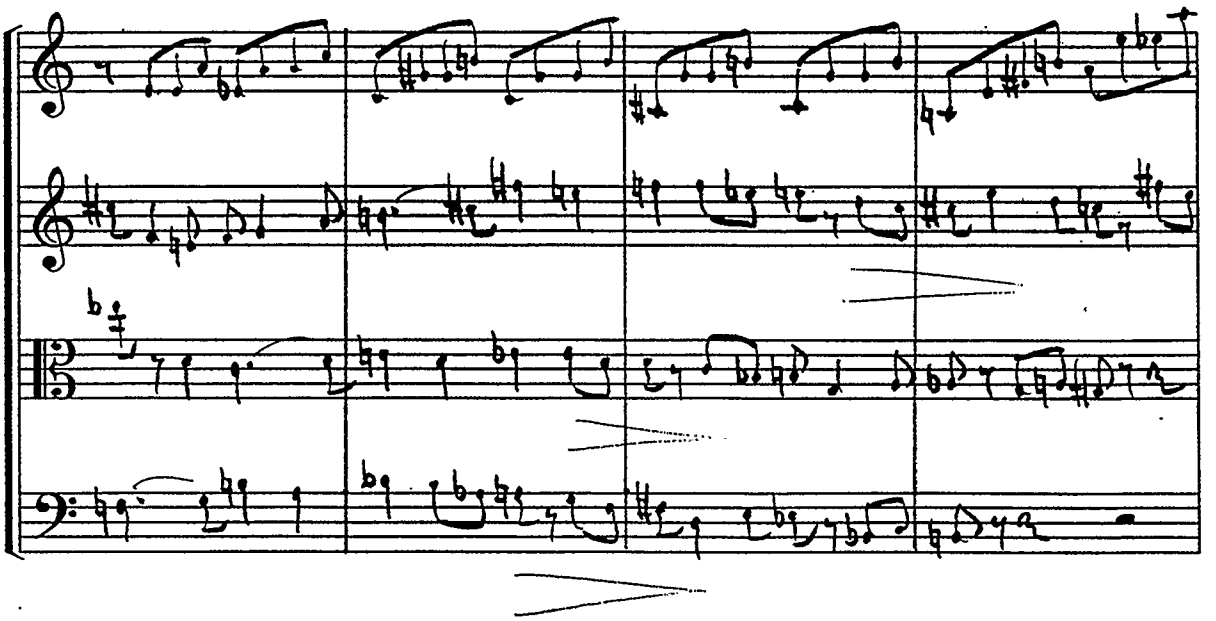
70

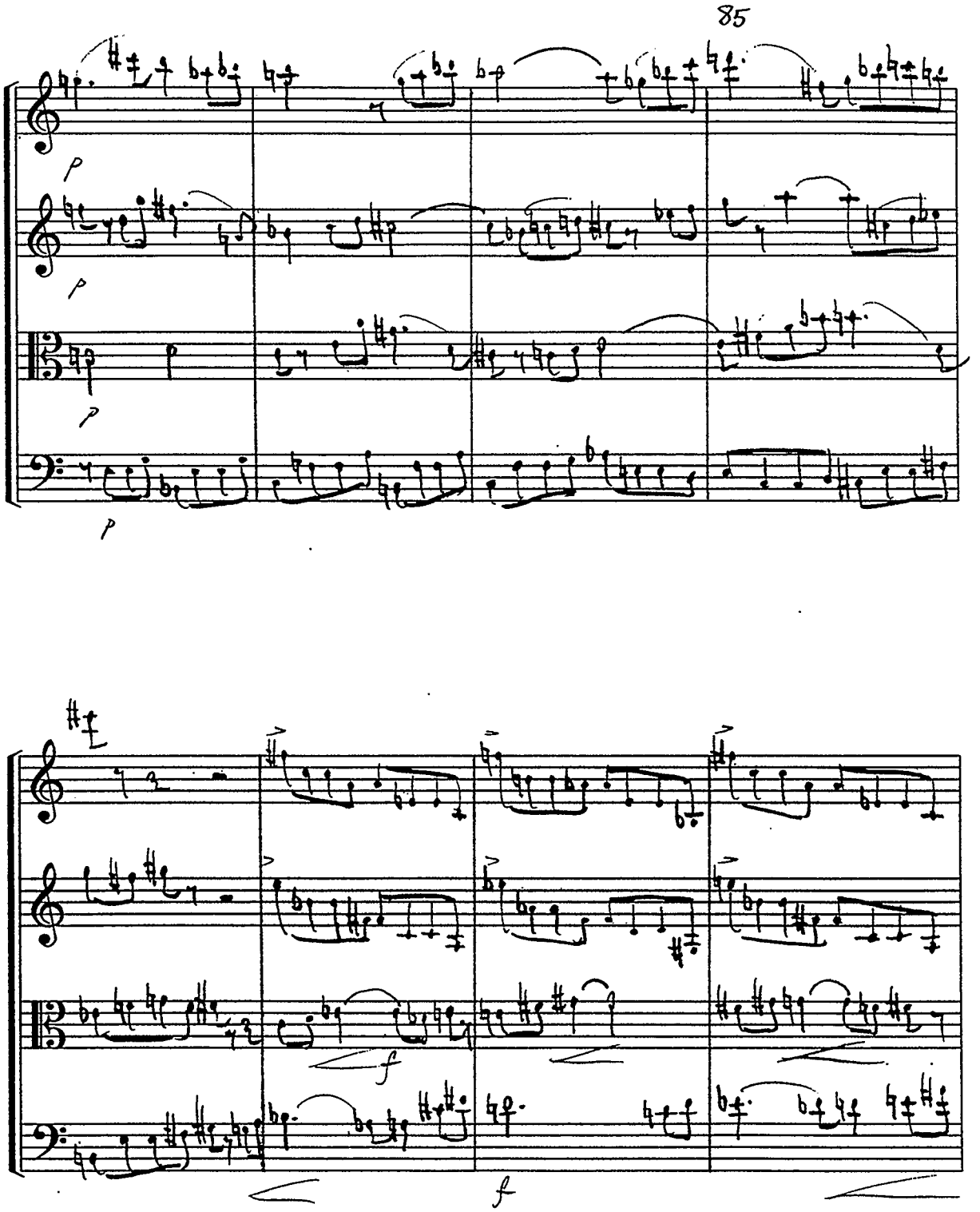


75

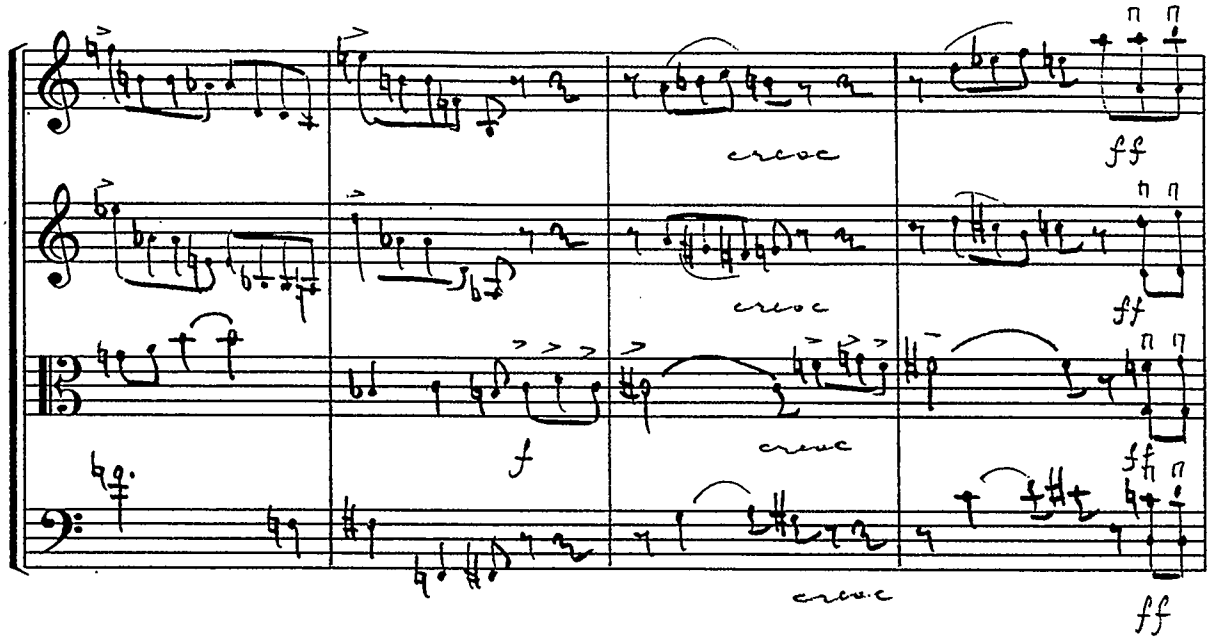


80

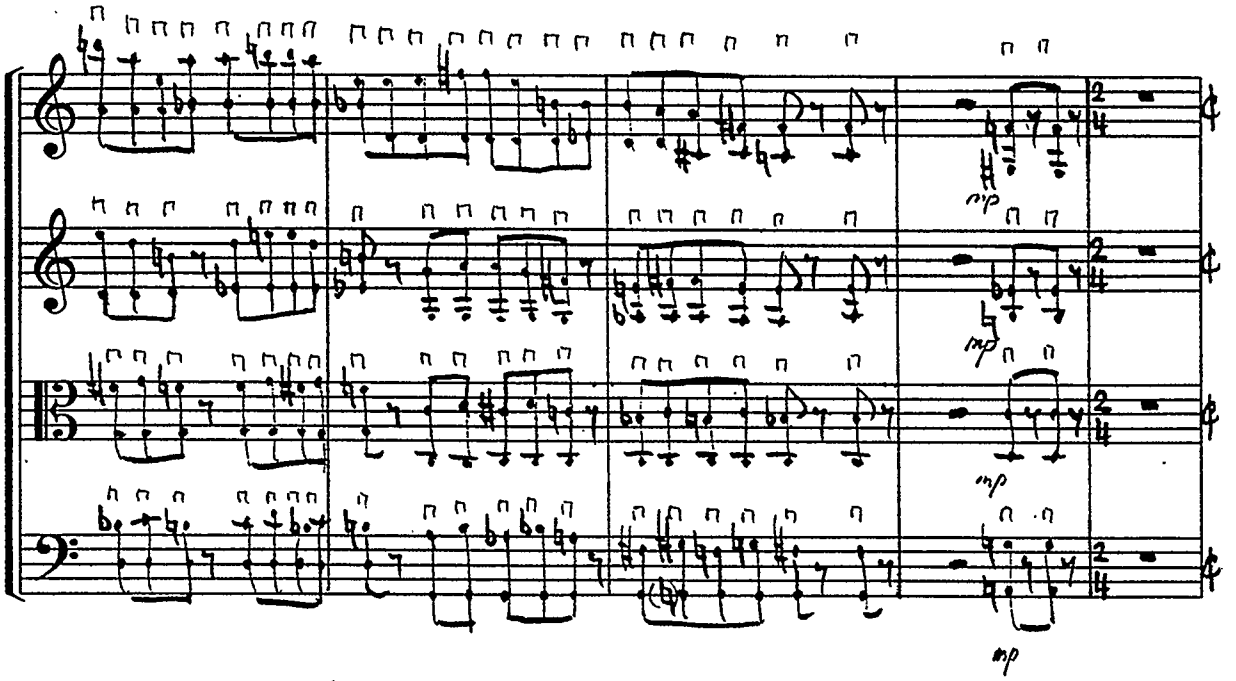


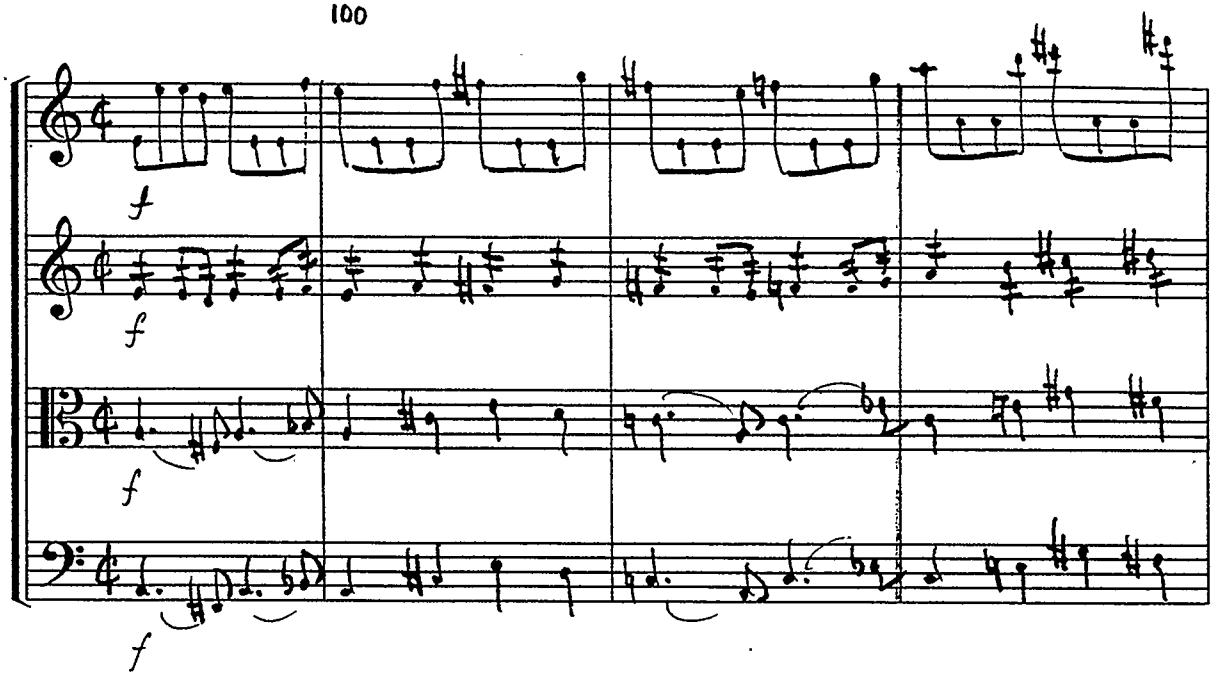

85
p
p
p
p
f
f

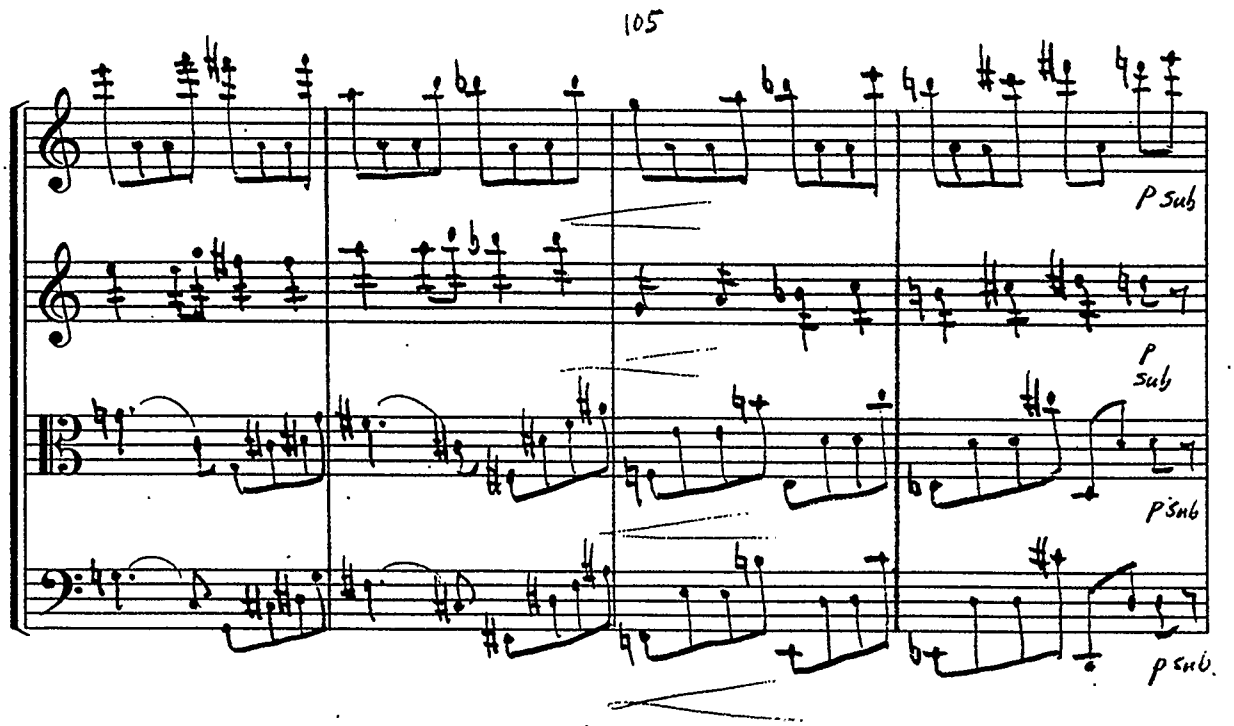
90



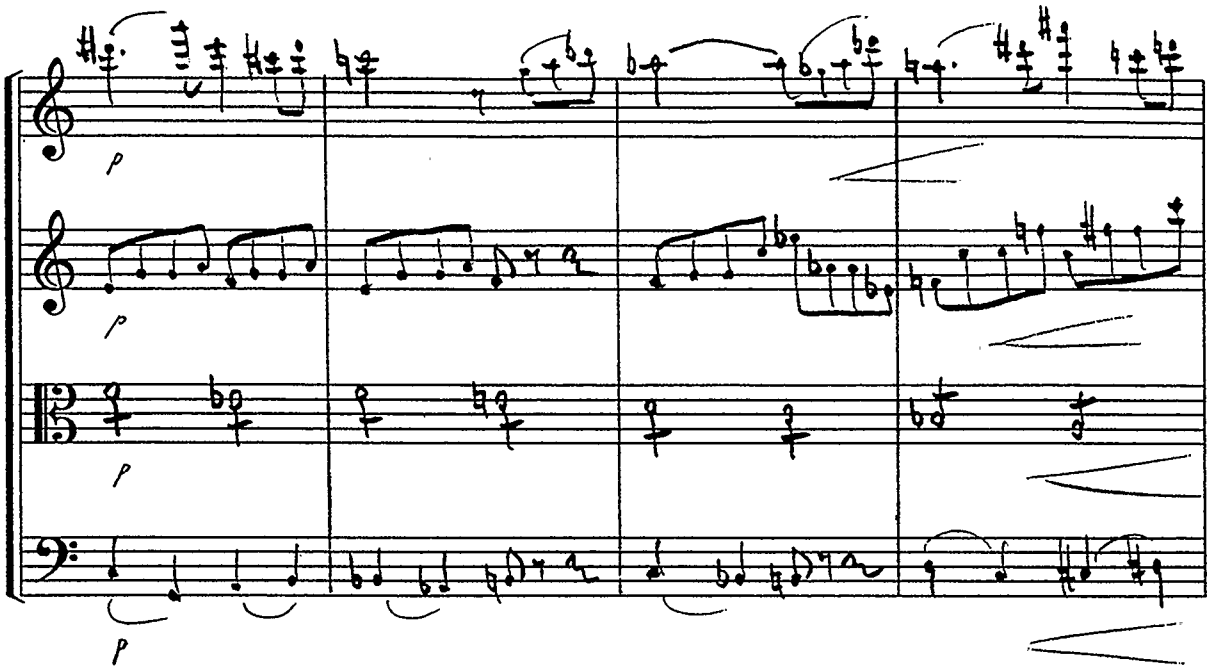
95

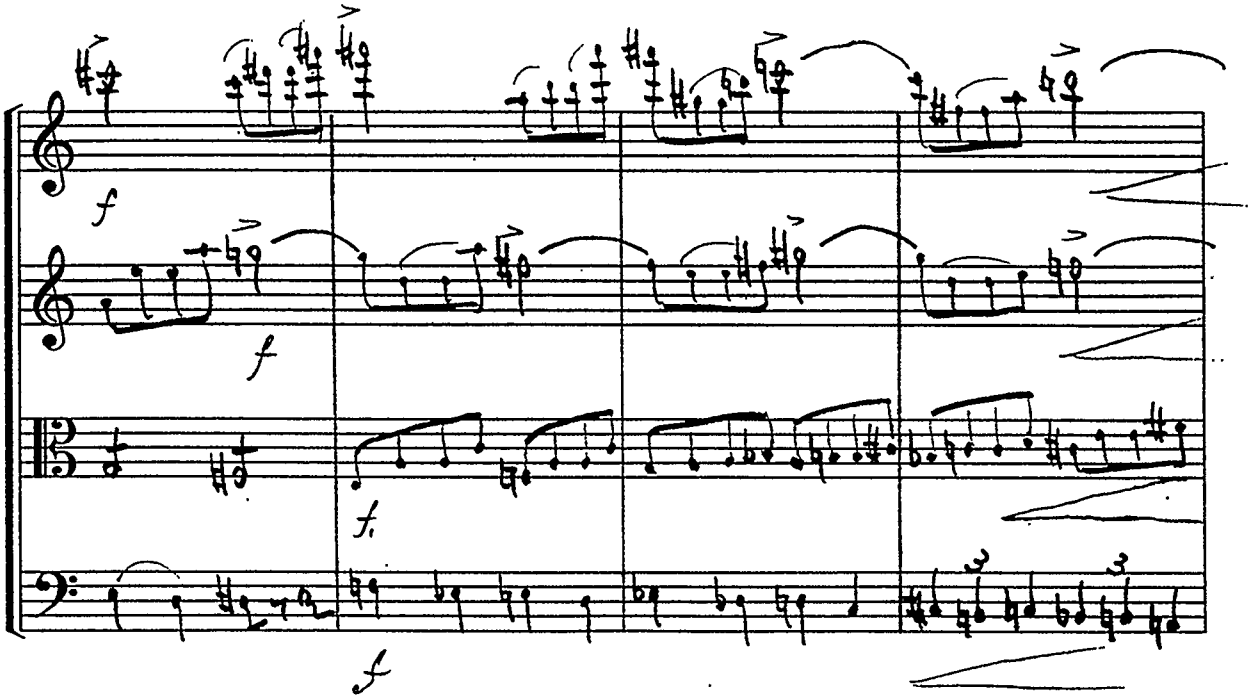



100
f
f
f
f

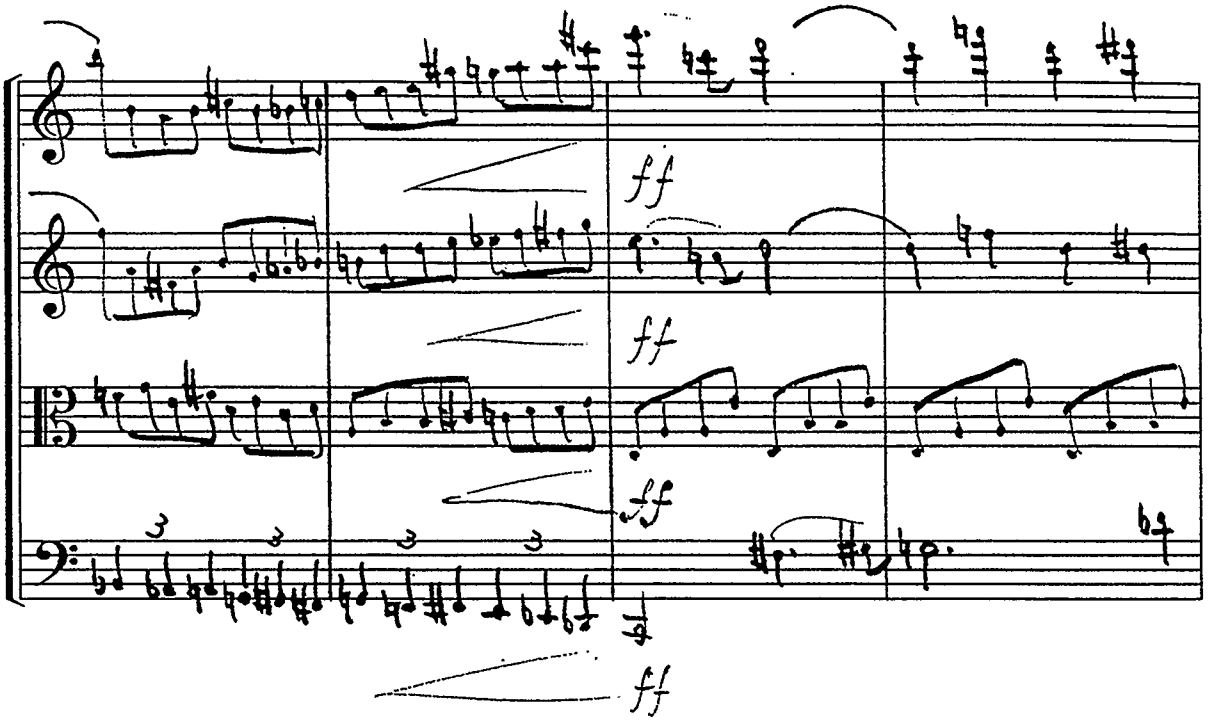

105
P sub
P sub
P sub
p sub.

110

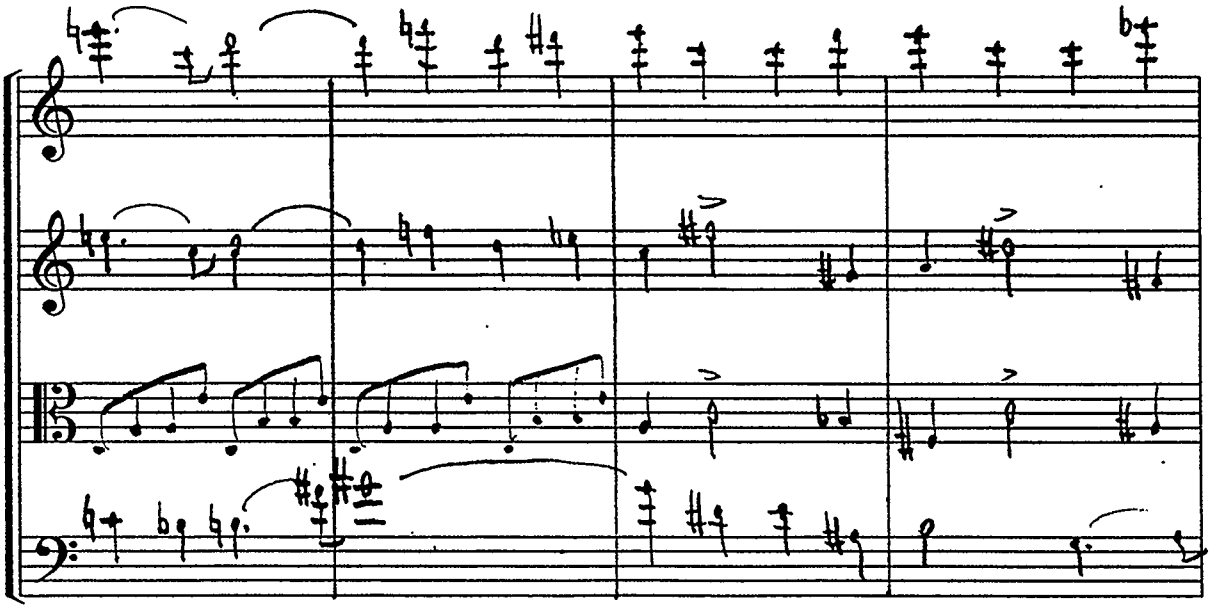




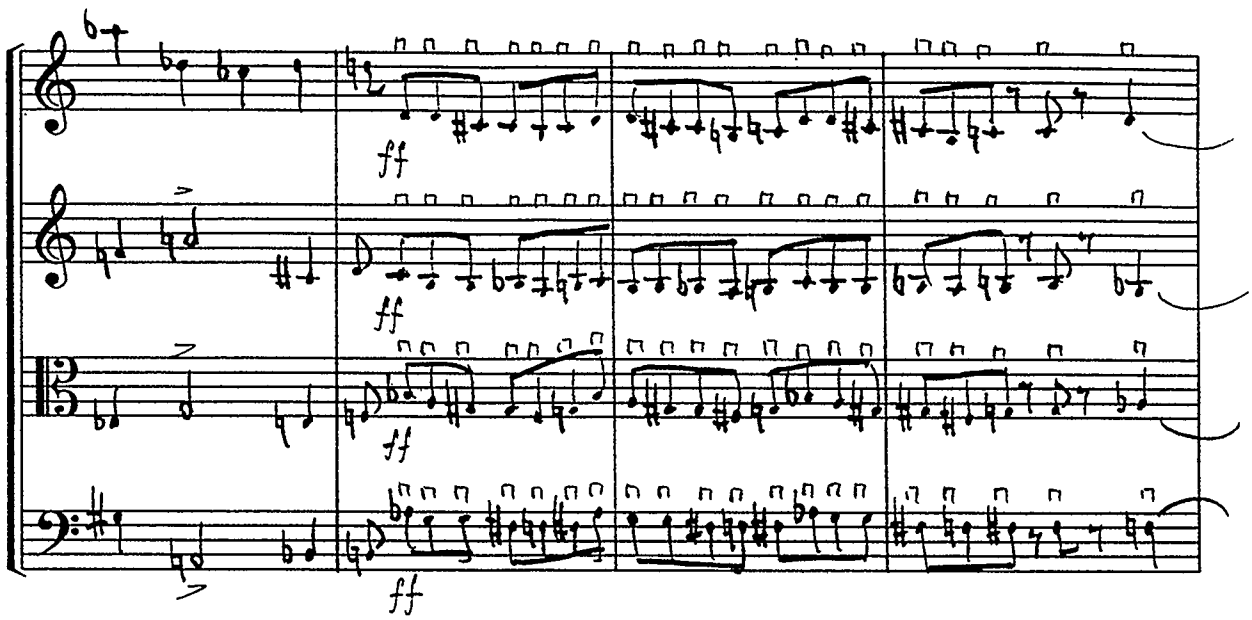
115



120

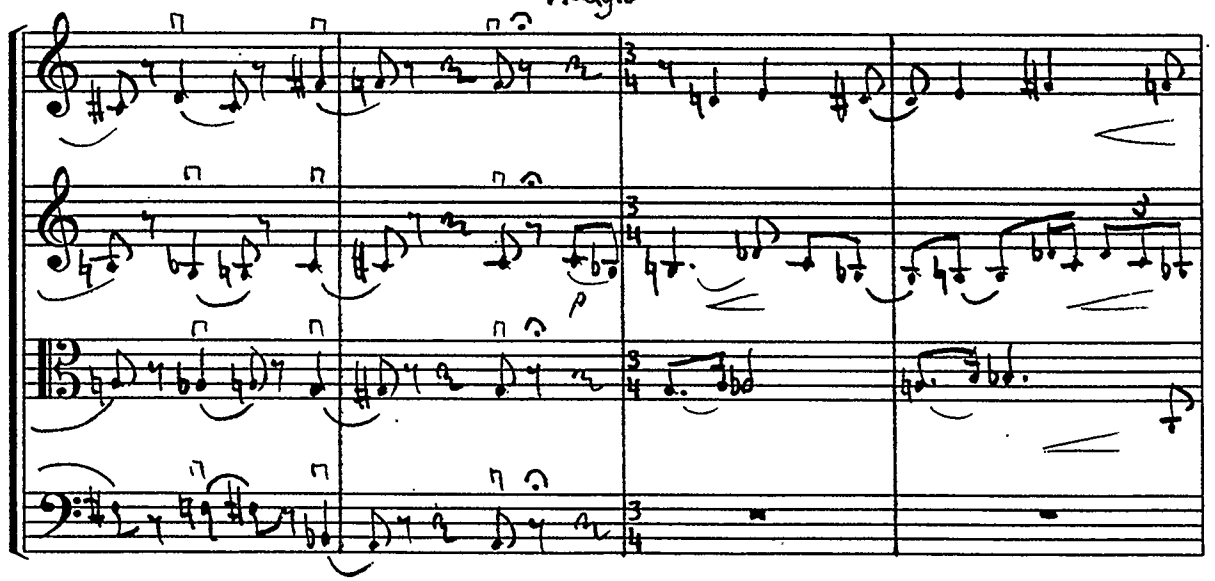


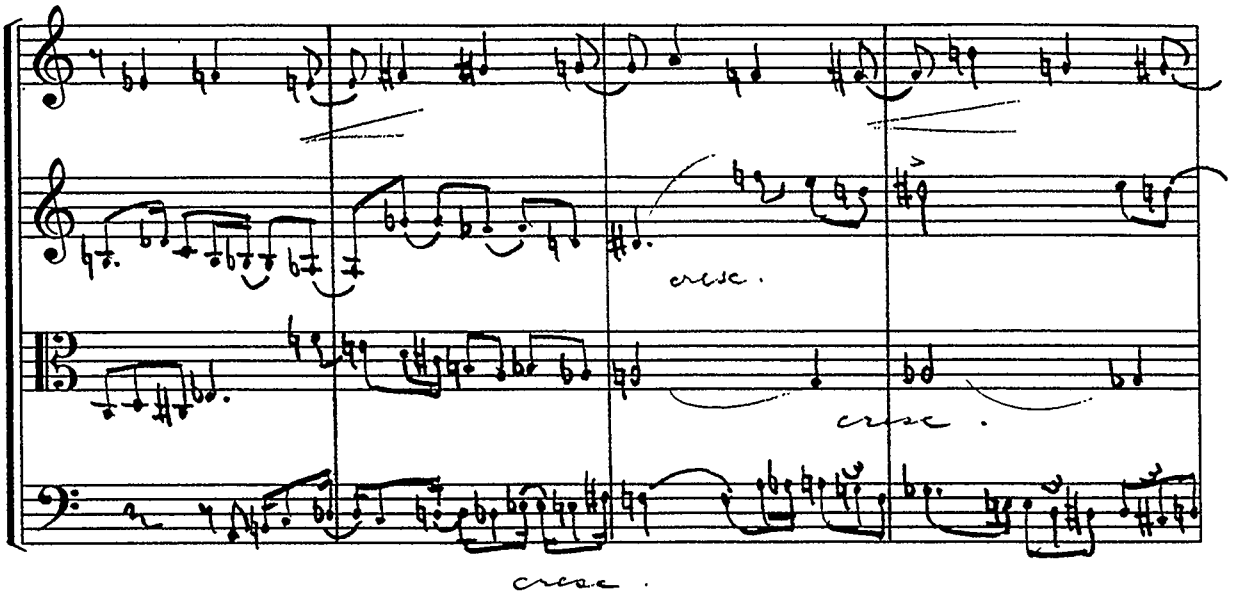
125



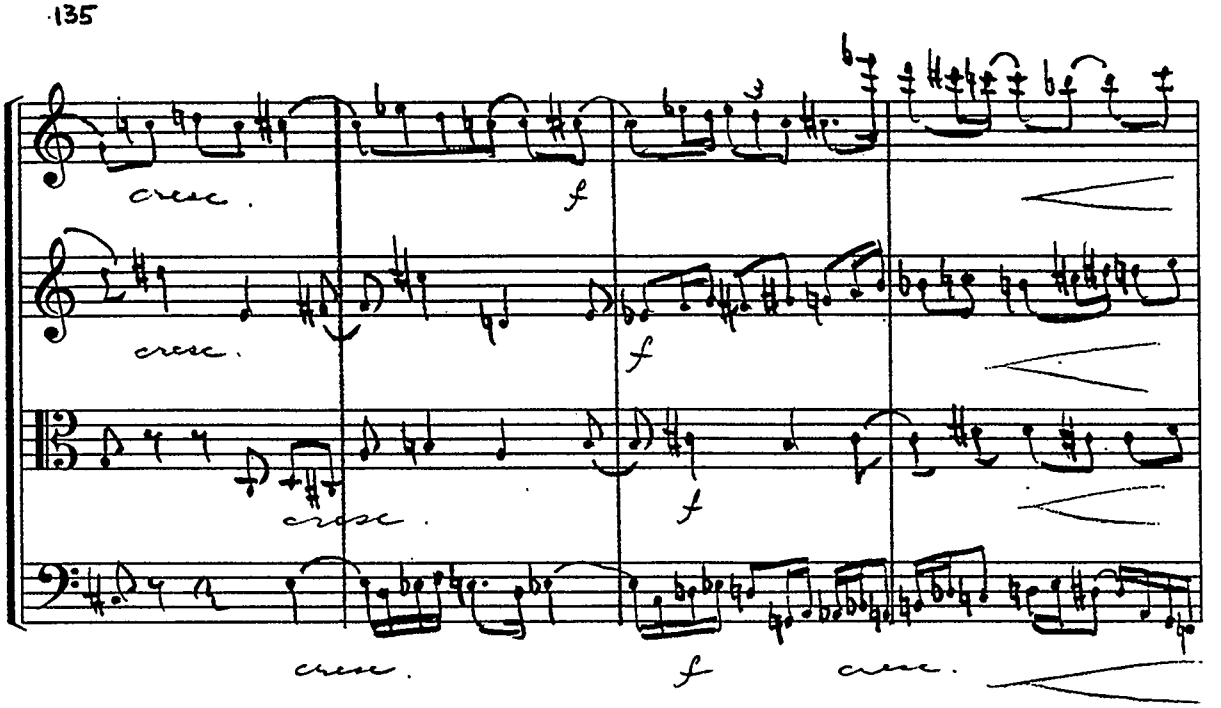
130

Adagio

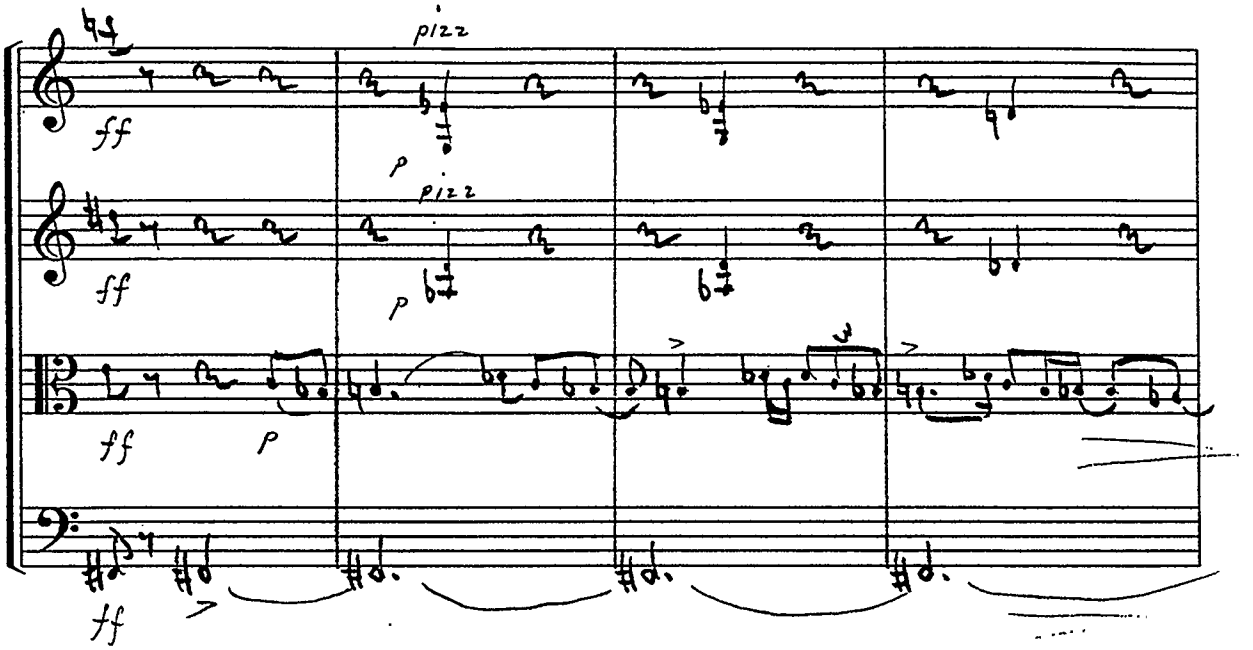


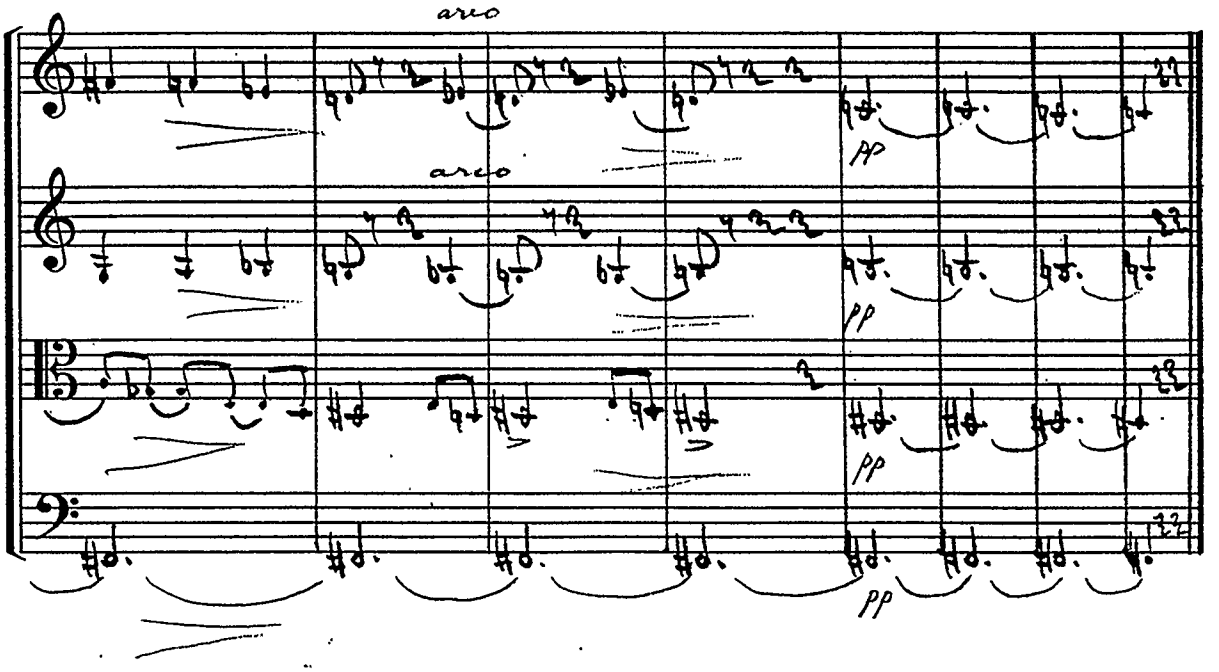


135



140



145

150