"An Analysis of Elliott Carter's *Gra*"

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Abstract

As a performer of recent music, I have found it necessary to uncover the underlying formal/structural features as a basis for forming an interpretation of a given piece. As such, I was eager to do an analysis/performer's guide to Elliott Carter's 1993 work Gra (which means "game" in Polish) which, hopefully, would serve to make others' and my performances of this great work more engaging and exciting. Carter states in the opening of the score: "This Clarinet piece, frequently changing and playful in character (yet based on the same material throughout), recalls to me my many visits with the composer (Witold Lutoslawski) in America and Poland." In this article, I will discuss Gra's "same" material – the all-triad [0,1,2,4,7,8] hexachord – which serves as the constant feature in this piece of ever-changing moods and characters. I will show how rhythmic gesture and modern clarinet techniques serve structurally and motivically in the piece.

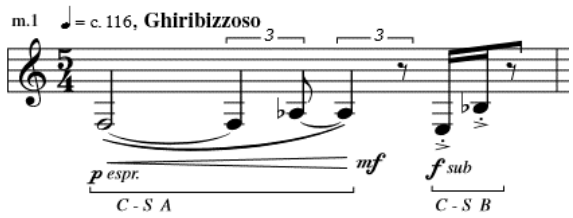
Gra's form consists of three sections which are defined by Carter's use of Character-Structures – or in his terms "musical characters". These Character-Structures are motivic gestures typified by certain, rhythmic, articulation, dynamic, or playing style content. In this piece, they are either espressivo or scherzando in nature. It is the growth of – and interplay between – these Character-Structures which define the three sections and give the piece drama. In this article, I will discuss how these opposing musical personae are created and explored in Carter's all-triad hexachord "game."

As a new music performer, I account for known compositional devices as well as formal/structural features in the formation of my interpretation of a given piece. As such, I was eager to do an analysis/performer's guide to Elliott Carter's 1993 work *Gra* (a piece I had the honor of performing for and discussing with Mr. Carter) which, hopefully, would serve to make others' and my performances of this great work more engaging and exciting. *Gra*, which means game in Polish, is written for solo, unaccompanied clarinet. This piece, premiered by Roland Diry at the Pontino Festival in Sermoneta, Italy in 1993, was composed as a tribute to Carter's long-time friend Witold Lutoslawski to commemorate his eightieth birthday. Carter states in the opening of the score: "This clarinet piece, frequently changing and playful in character (yet based on the same material throughout), recalls to me my many visits with the composer in America and Poland." During the 1960s, Carter stated that the importance of compositional technique "lies only in how it is used to further enhance the artistic qualities and character of an individual work."[1] Assuming Carter's compositional ideal had not changed, I will discuss what I conceive to be *Gra's* "same" material – the all-triad [0,1,2,4,7,8] hexachord – as it serves as the constant feature in this piece of ever-changing moods and characters.

[1] Elliott Carter, *Shop Talk by an American Composer,* New York, p. 51.

It is the compositional display of intervals and motives – rather than hexachord transpositions -which is important structurally, though motivic and harmonic material does emerge from alternating Prime and Inversional forms as shown in Appendix A. Rhythmic gesture and modern clarinet technique such as multiphonics and timbral variance also play a vital role in the piece. Intervals will be discussed in terms of interval classes in order to bring out the unity and coherence I have found in the piece. *Gra* is composed of Character-Structures (referred to by Carter as "musical

Example 1: Character-Structures in *Gra*



characters") which are motivic gestures typified by certain rhythmic, articulation, dynamic, or playing style content. In this piece, they are either melodic and marked *espressivo*, or they are *scherzando* in nature, as shown in Example 1. It is the growth of – and interplay between – these Character-Structures which give the piece drama as well as define its form.

Gra consists of three sections: an introductory first section in which the hexachord and Character-Structures evolve. A developmental second section highlights the *scherzo* quality of the piece and is characterized by a break of the hexachordal underpinning as well as by *espressivo* interruptions. Section 3, which is "slower" than the previous section, is largely *espressivo* in character but with *scherzando* interjections. Section 3 is also characterized by the repetition of notes which often begin phrase units; this repetition serves to create arrival points via long range voice leading throughout this section.

Section 1 of *Gra* consists of the first 15 measures. The opening measure is the germ of the section, containing a soft, low-register expressive gesture (henceforth "Character-Structure A", or C-S A) followed by a loud, percussive two-note interruption ("Character-Structure B", or C-S B) – this juxtaposition defines the fundamental jaunty, almost schizophrenic nature of the piece. Though these Character-Structures change through altering rhythmic, articulation, and dynamic content, their identities of *espressivo* and *scherzando* are retained. Measure 1 also contains the structurally important intervals to be used throughout the piece: the pi-1, pi-4, and pci-5; these intervals serve to connect the various statements of the [0,1,2,4,7,8] hexachord.

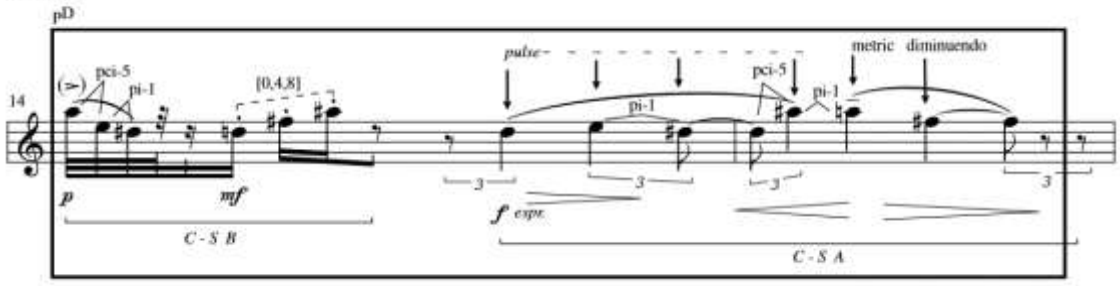
The first four notes of this piece (F, Ab, E, Bb), forming the all-interval [0,1,4,6] tetrachord, are the only notes used in the first four measures. In measures 1 through 4, C-S B gets longer with each statement through the addition of notes – first, with the G# (still within the [0,1,4,6] tetrachord) then with the C in measure 5. The C in measure 5 (forming a pci-5 from the F preceding it) begins the formation of the [0,1,2,4,7,8] hexachord created by the succeeding new notes (see Appendix B). To further enhance the growth and intensification of C-S A in measures 5 through 8, Carter increases the dynamic level from *p* — *mf* to *mf* — *f*; the new notes stated in measures 5 through 8 (after C in measure 5) are: B in measure 6, D# in measure 8, G in measure 9, C# in measure 9, and F# in measure 12.

Beat 3 of measure 4 through beat 1 of measure 6 spells the first complete statement of the [0,1,2,4,7,8] hexachord – the chord-type upon which the rest of the piece is based. Both Character-Structures A and B are contained within this hexachord statement. While there seems to be no pattern among transpositions of the [0,1,2,4,7,8] hexachords throughout the piece (though the combined Prime and Inversional forms cycle through all twelve chromatic transpositions), the hexachord statements are often linked (end to beginning) by one of the key intervals, being pi-1, pi-4, and pci-5:

B and Bb in m. 6 = pi-1
B and G in m. 9 = p(c)i-4
A# and F in mm. 11 and 12 = pci-5
C# and C in m. 13 = p(c)i-1
G# and A in mm. 13 and 14 = p(c)i-1

[0,1,2,4,7,8] hexachord statements within each of the Character-Structures, sharing the same transposition. These measures display the key intervals (pi-1, pi-4, pci-5) as well as the [0,4,8] subset of [0,1,2,4,7,8] – the trichord to occur motivically in *scherzando* gestures throughout the piece. Measures 14 and 15 also display the duality of the Character-Structures and the expressive, leading tone nature of the pi-1 intervals that are explored throughout the piece (Example 2):

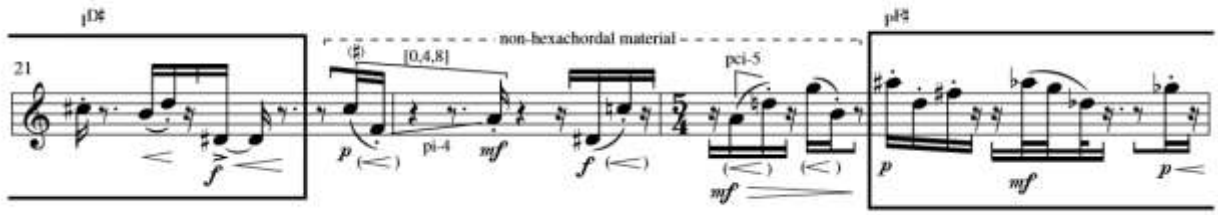
Example 2:



This statement of C-S A in measures 14 and 15 exhibits what will be referred to in this analysis as "metric diminuendo" (or crescendo, as the case may be) in which the rhythmic configuration yields a perceptual change of speed while the underlying performance tempo remains constant. This is accomplished through various metric groupings and ties (see Example 2). The performer should play the perceptual pulse[2] not as syncopations as the notational groupings often suggest. In this example, the perceptual pulse is ♩ which converts to a metronome pulse of ♩ =174. The first four notes of the C-S A (beat 3) in Example 2 establish the perceived pulse while the fifth and sixth notes convey a perceptual slowing down of pulse. The statement fades dynamically as well as metrically, concluding this section of the piece.

Section 2 (measures 16-32) is a *scherzo* with the marking *leggero, giocoso.* While section 1 culminates with hexachord/Character-Structure agreement (both Character-Structures contained within the same transposition), this harmonic/motivic relationship does not evolve in Section 2. Rather, these C-S-inclusive hexachords (mm. 18-19 and mm. 27-28) are interruptions in this otherwise *scherzando* section in which the hexachordal underpinning breaks up. The key intervals pi-1, pi-4, pci-5 and the motivic [0,4,8] trichord, however, remain constant and serve motivically in this section as shown in Example 3. This section is developmental in nature both in its harmonic (hexachordal) break up as well as in the way Carter takes the pci-5 relationship established in measures

Example 3: Hexachordal break up

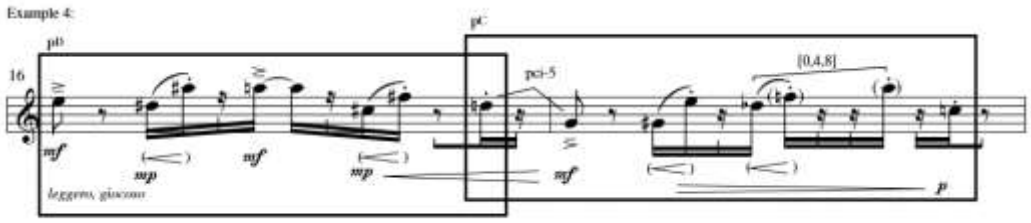


14 and 15 and uses it to link hexachord statements between measures 16 and 26 (see Example 4). The following outlines this pci-5 relationship:

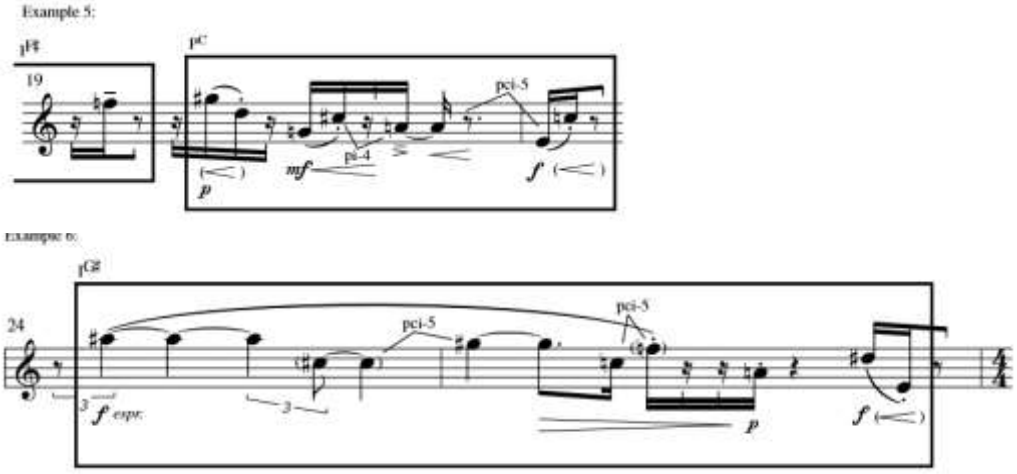
D (m. 16) ⟶ G (m. 17) (linking hexachords)
C (m. 20) ⟶ G (m. 20) (linking hexachords)
E (m. 25) ⟶ B (m. 26) (linking hexachords with following gesture)
A# (m. 32) ⟶ D# (m. 32) (linking hexachords)

In measures 16 and 17, the notes A and F do not fix the hexachord. However, these "out of place" notes serve in creating pi-4s and the motivic [0,4,8] trichord:

[2] Metronome marking X unit into which the written beat is divided = perceptual pulse
quantity of subdivided unites equaling 1 perceptual beat

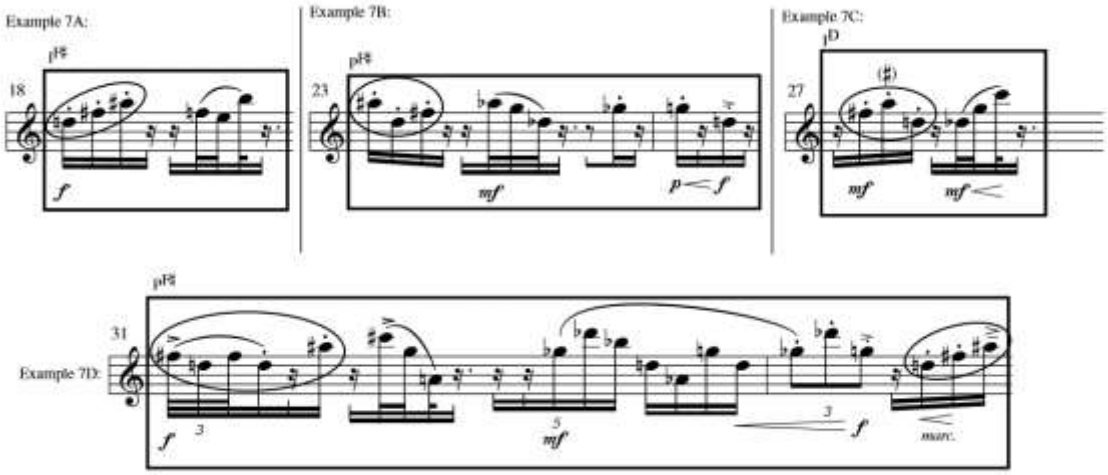


Measure 19 (Example 5) as well as measures 24 and 25 (Example 6) also contain non-hexachordal notes which serve in creating key intervals emphasized by dynamic and articulation markings:



The D, F#, and A# trichord (example 7) serves contextually as a unifying element in this section as it occurs several times in various pitch orders and rhythms; the final occurrence, spelled in the original pitch order as defined in measure 18, concludes the section of the piece:

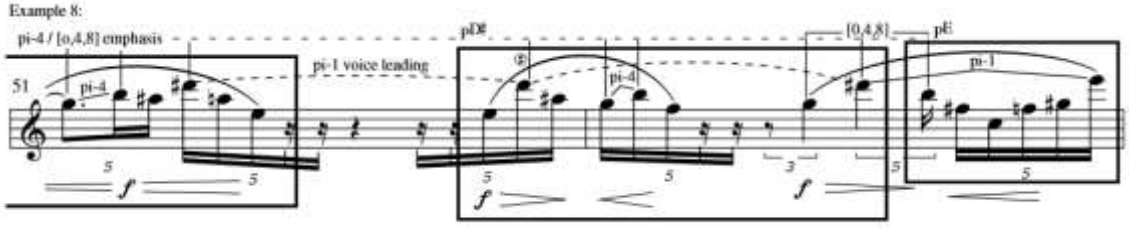
It is to be noted that, especially in section 2, Carter's markings are abundant regarding articulation, dynamics, and style – nearly every note is accompanied by some sort of stylistic indication. This section has a sense of nervous energy and forward motion, largely through disjunct rhythms and crescendi in parenthesis, which contribute to a state of unrest throughout the incomplete hexachord material (see Example 3). As a performance issue, these fragments must not be "phrased". Rather, the crescendi must lead to the silence. The final hexachord statement of this section begins at measure 31, recalling the motivic D-F#-A# trichord and containing a metric diminuendo and amplitude crescendo; measure 31 through the A# in measure 32 complete the hexachord, concluding this section of the piece.



The third section of this piece, beginning on the D# in measure 32, initiates a restful passage that differs from all of the nervous rhythmic energy that precedes it. While Section 2 is *scherzo* with *espressivo* interruptions, this *espressivo* third section contains similarly opposing "dialogue" with its *scherzando* interjections. The first statement of the Character-Structure A, consisting of the [0,1,2,4,7,8] hexachord, is transitory with its accented notes (characteristic of Section 2) which are followed by *espressivo* notes under a slur; a metric diminuendo also lends a feeling of transition into this "slower" section. Following this, a twelve-note set is stated, beginning on the A# (which is shared by the previous hexachord) and ending on the D# in measure 43. Within this twelve-note statement, beginning on the C# in measure 40, the [0,1,2,4,7,8] hexachord is stated, concluding with the G in measure 45. At this point the performer is instructed to diminuendo from this G and to vary the sound of this sustained note through a combination of vibrato speed and timbral variance[3]. (The author finds it curious that the eighty-three-year-old composer, who had not yet written extended techniques for the clarinet, chose to write them in this 1993 work.) This vibrato-altering event is quite dramatic and expressive as it calls upon the clarinet's timbral capabilities to create tonal shadings and oscillations which recall the metric crescendi/diminuendi that have occurred throughout the piece.

A dramatic use of voice leading occurs after the held G in measures 51 and 52 (Example 8) where the repetitive, *forte* D#s lead with a pci-1 (supported by a *crescendo*) to the E at the end of measure 52, concluding this *scherzando* gesture:

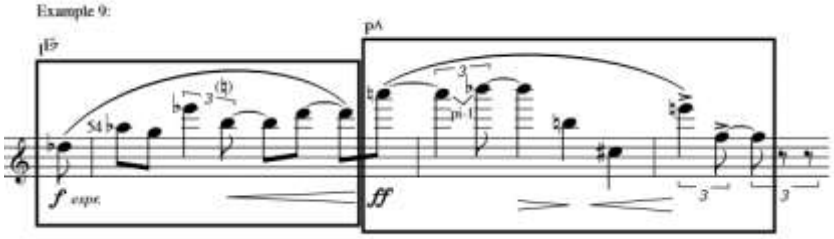
Example 8:



The pci-4 interval is also emphasized along with a [0,4,8] trichord.

The following *espressivo* phrase (Example 9) also contains an expressive and quite climatic use of the pi-1 interval; two complete hexachord statements are contained within the gesture:

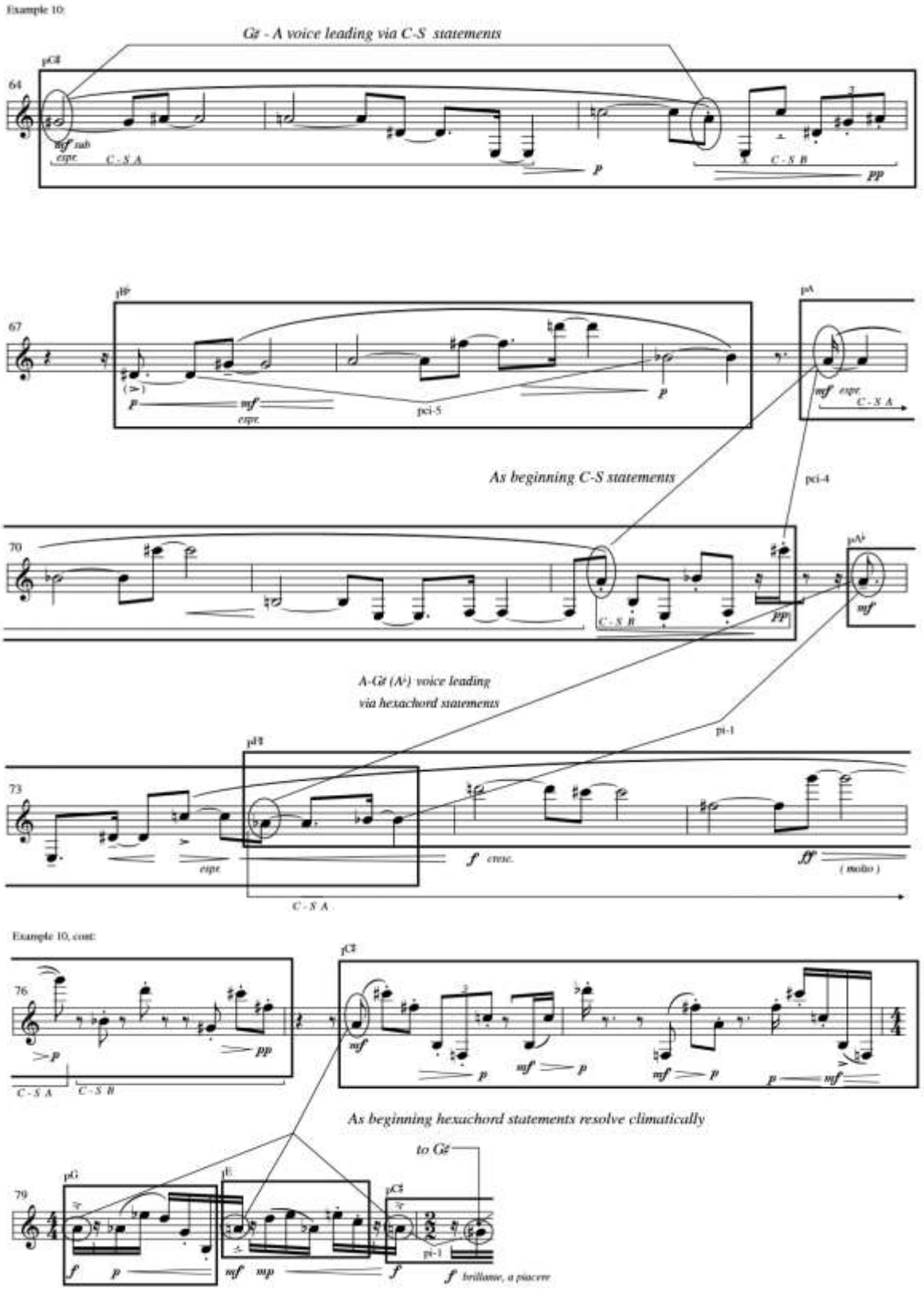
Example 9:



Following this is a *scherzando* utterance which, while not a complete hexachord, is rich in the key intervals of pi-1, pi-4, and pci-5.

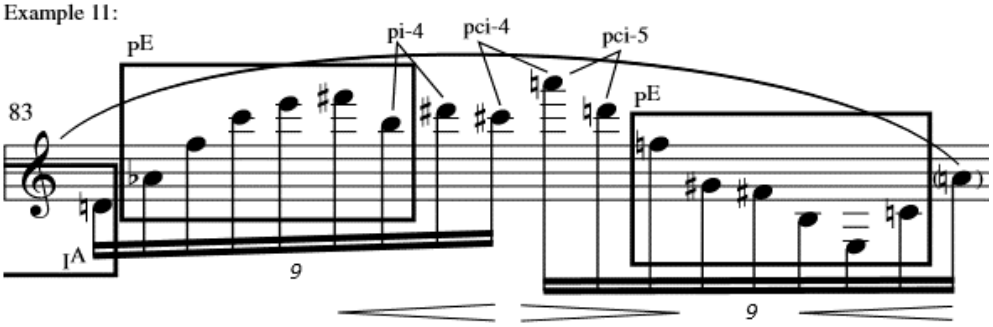
Long-range pi-1 voice leading is evident between G# and A in measure 64 through 80 (Example 10); these notes begin many of the phrase units (and hexachords) in these measures. The As in measure 79, which begin hexachord statements and are emphasized via crescendi and accents, lead climactically to the *forte* G#. There is also a key interval relationship between the first and last notes in many of the hexachords in Example 10 as well as *scherzando* interjections which, like the *espressivo* interruptions in Section 2, appear in C-S-inclusive hexachords:

[3] Perf. note: While holding this note, increase and decrease a change in tone-color or vibrato or both.



The climatic, *forte* A-G# resolution in measures 79 and 80, as prepared by the preceding repetitive As that are accented and loud, begins a brilliant *a piacere* passage which, according to Charles Neidich, Carter wanted to be played as fast as possible. Within this passage, there are complete statements of [0,1,2,4,7,8] hexachords but with extra notes. These added notes, however, continue to serve in reinforcing the key intervals, as evident in Example 11:

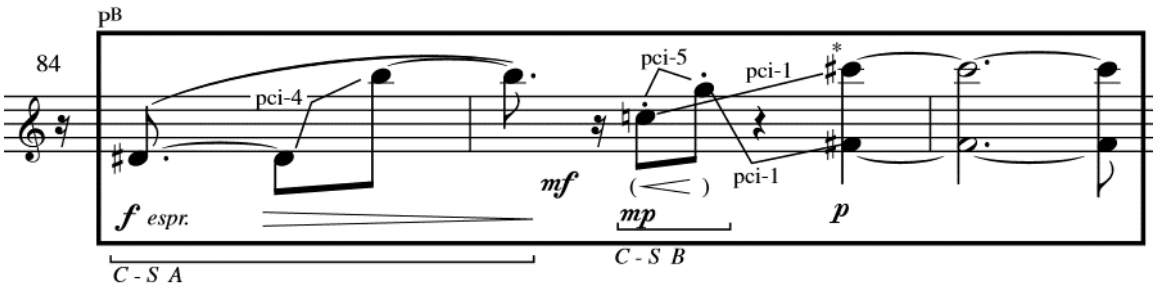
Example 11:



Following this high point in the piece is a short statement recalling the Character-Structure B, containing a complete hexachord statement.

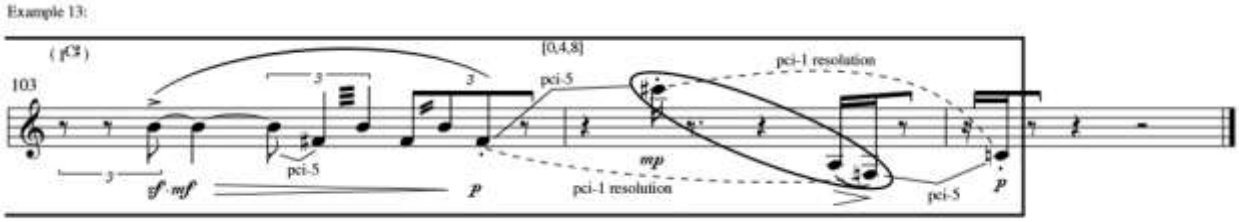
The following "event" includes Carter's first use of the multiphonic for the clarinet; in this case, it is an F#-C# dyad which is prepared melodically in measures 73 through 78 and introduced harmonically as a multiphonic in measure 85. Carter has referred to this multiphonic (in conversation with Charles Neidich) as a "cadential dominant pedal." The author interprets this F#-C# dyad as cadential as it resolves (after several iterations harmonically then melodically in the last two measures) to the F and C in the last measure of the piece. While the hexachord transpositions vary with each multiphonic statement (though Appendix A shows that the recurring dyad is formed from consistently alternating Prime and Inversional forms of the hexachord), the sustained multiphonics – remaining dynamically and registrally the same with each iteration – emerge as the harmonic constant. As a performance issue, the clarinetist needs to perform the multiphonics consistently and with an expressive tone in order to sustain this "harmonic" function. The sense of "resolution" is further supported by Carter's extensive use of the pci-1 interval as a voice leading device throughout this section of the piece. The first multiphonic statement is preceded by concise Character-Structure statements and expressive key intervals within the hexachord statement (Example 12):

Example 12:



The final hexachord statement of the piece (measure 102 to the end) contains an interesting accentuation of the pci-5 interval with the *tremolo* between the B and the F#. The following F# and C# recalls the multiphonic "cadential dominant" dyad which, in turn, resolves to the final F and C – but after the expressive pi-4 interval as shown in Example 13; the final two measures display the key motivic and structural intervals – pi-1, pi-4, pci-5, and the [0,4,8] trichord:

Example 13:



The final two measures also emphasize (via wide registral leaps) the interruptive nature of the Character-Structures in the piece, being *espressivo* vs. *scherzando* – it is these opposing musical personae which are created and explored in Carter's all triad hexachord "game".

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Selected Discography

Gra

Bridge BCD 9044 (CD) (1994); *Elliott Carter: Eight Compositions (1943-1993);* The Group for Contemporary Music: Charles Neidich (cl); with *Enchanted Preludes; Duo for Violin and Piano; Scivo in Vento; Changes; Con Leggerezza Pensosa; Riconoscenza per Goffredo Petrassi; Sonata for Violoncello and Piano*

Appendix A: list of [0,1,2,4,7,8] hexachord statements in *Gra*

Section 1:

Measure:	Hexachord:	Transposition:	
4-6	E Ab F Bb C B	I^{C}	Alternating Prime and Inversional forms from which the Character-Structures evolve
6-9	Bb C E F B G#	I^{C}	
9	B G F E A# D#	$P^{D\#}$	
9-11	C# F A D# E A#	I^{F}	
12-13	F C G F# A C#	P^{F}	
13	C F# D# F B G	I^{G}	
14-15	A E D# D F# A#	P^{D}	

Section 2:

16	E D# A# A F# D	P^{D}
16-17	D G G# E Db C	P^{C}
18-19	D F# A # F E B	$I^{F\#}$
19-20	G# D G C# E C	P^{C}
20-21	G B G# C# D D#	$I^{D\#}$
23-24	A# D F# Ab G Db	$P^{F\#}$
24-25	A# G# C A D# E	$I^{G\#}$
27-28	F# A# D Db G C	I^{D}
31-31	F# D A# C# G Ab	$P^{F\#}$

Section 3:

32-34	D# E A D F# A#	P^{D}
40-45	C# D# D G# B G	$I^{D\#}$
45-51	G B A# D# A E	I^{B}
51-52	E D# A# G B F	$P^{D\#}$
52	B F# C F G# E	P^{E}
53	Bb F F# B D C	P^{Bb}
53-54	Db Ab G Eb B D	I^{Eb}
54-56	A Bb B C# E F	P^{A}
56-58	Bb A Eb D F# G#	I^{Bb}
58-59	D C Bb Gb G Db	I^{D}
59-60	Gb Bb D A Eb G#	I^{Bb}
60	G# C E G F# C#	$I^{G\#}$
61	C# D# F# C G B	P^{B}
61-63	C# G# D G F A	I^{A}
64-66	G# A# A D# E C	$P^{G\#}$
67-69	D# G# A F# D Bb	I^{Bb}
69-72	A Bb C# B E F	P^{A}
72-73	A E D# C Ab Bb	P^{Ab}
73-76	Ab Bb D C# F# G	$P^{F\#}$
77-78	A C# F# B F C	$I^{C\#}$
79	A Ab Eb D G B	P^{G}
79	A D E Ab E C	I^{E}
79-80	A G# C# D# D F	$P^{C\#}$
81-82	F Ab Eb Db D A	$P^{C\#}$
82-83	F Ab Db G A D	I^{A}
83	Ab F C E F# B	P^{E}
83	F G# F# B E C	P^{E}
84	Eb Ab G B D C#	I^{Eb}
84-86	D# B C G F# C #	P^{B}
87-89	C G Bb D F# C#	I^{D}
90-92	F A F# C# C G	P^{F}
92-96	E G# C# F# C G	I^{Ab}
96-98	E A D# F# D Bb	P^{D}
98-100	Bb Ab B C F E	I^{C}
100-102	F# C# G D Bb G#	$P^{F\#}$
102-105	C# B C F F# A	$I^{C\#}$

F#-C# dyad ("Cadential dominant pedal") created from alternating Prime and Inversional Forms

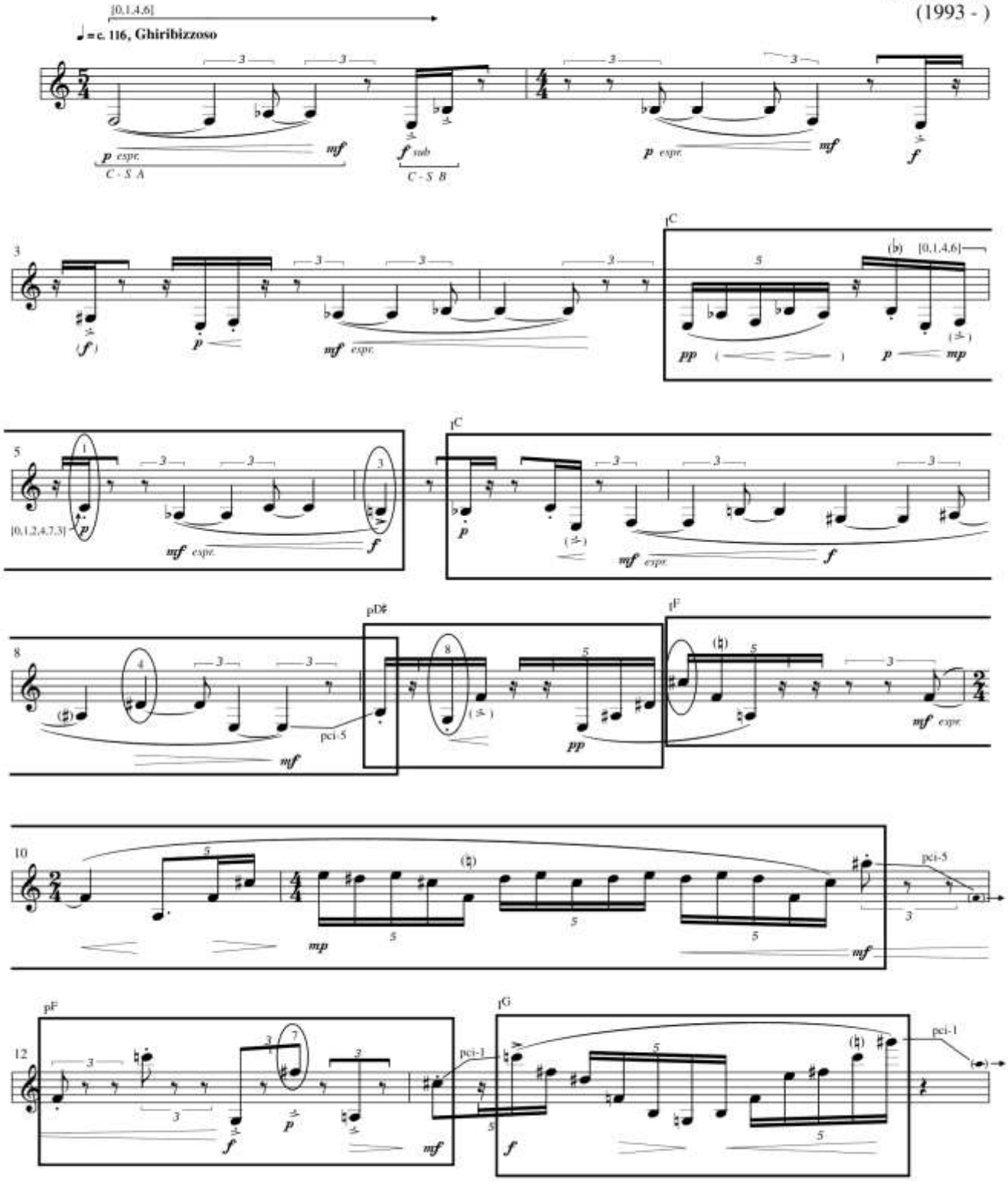
Appendix B: *Gra*

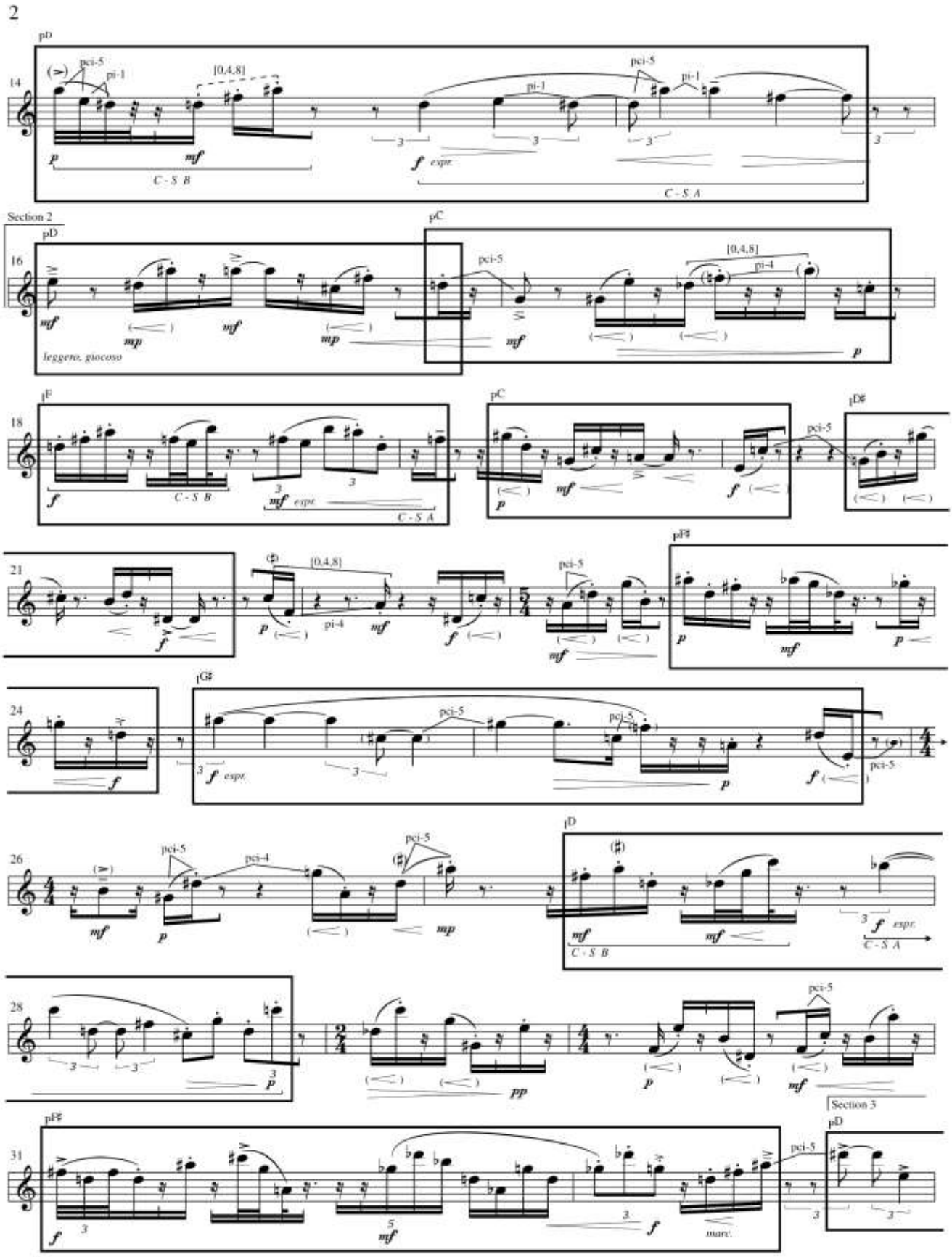
For Witold Lutowstawki's 80th birthday
with admiration and affection

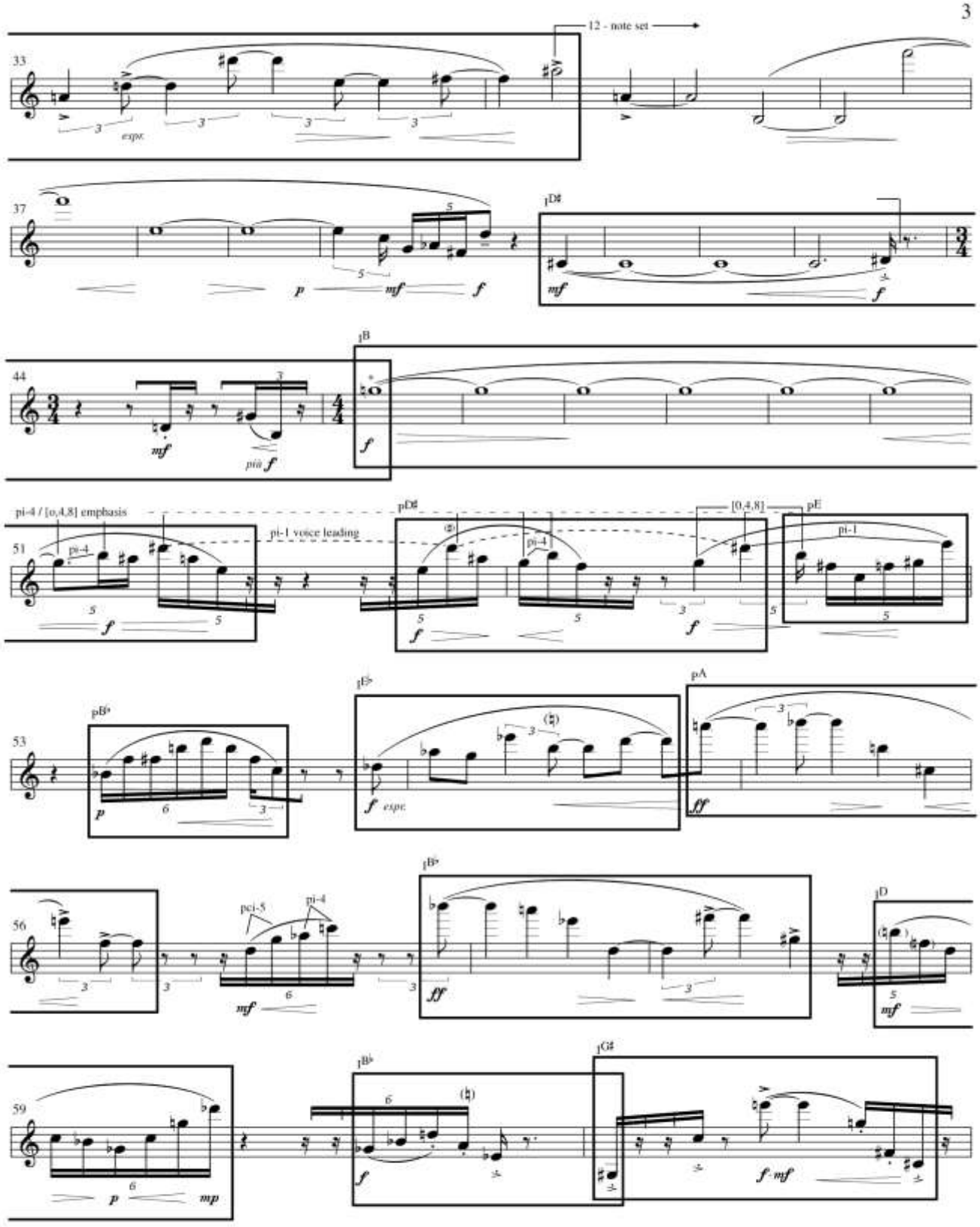
GRA

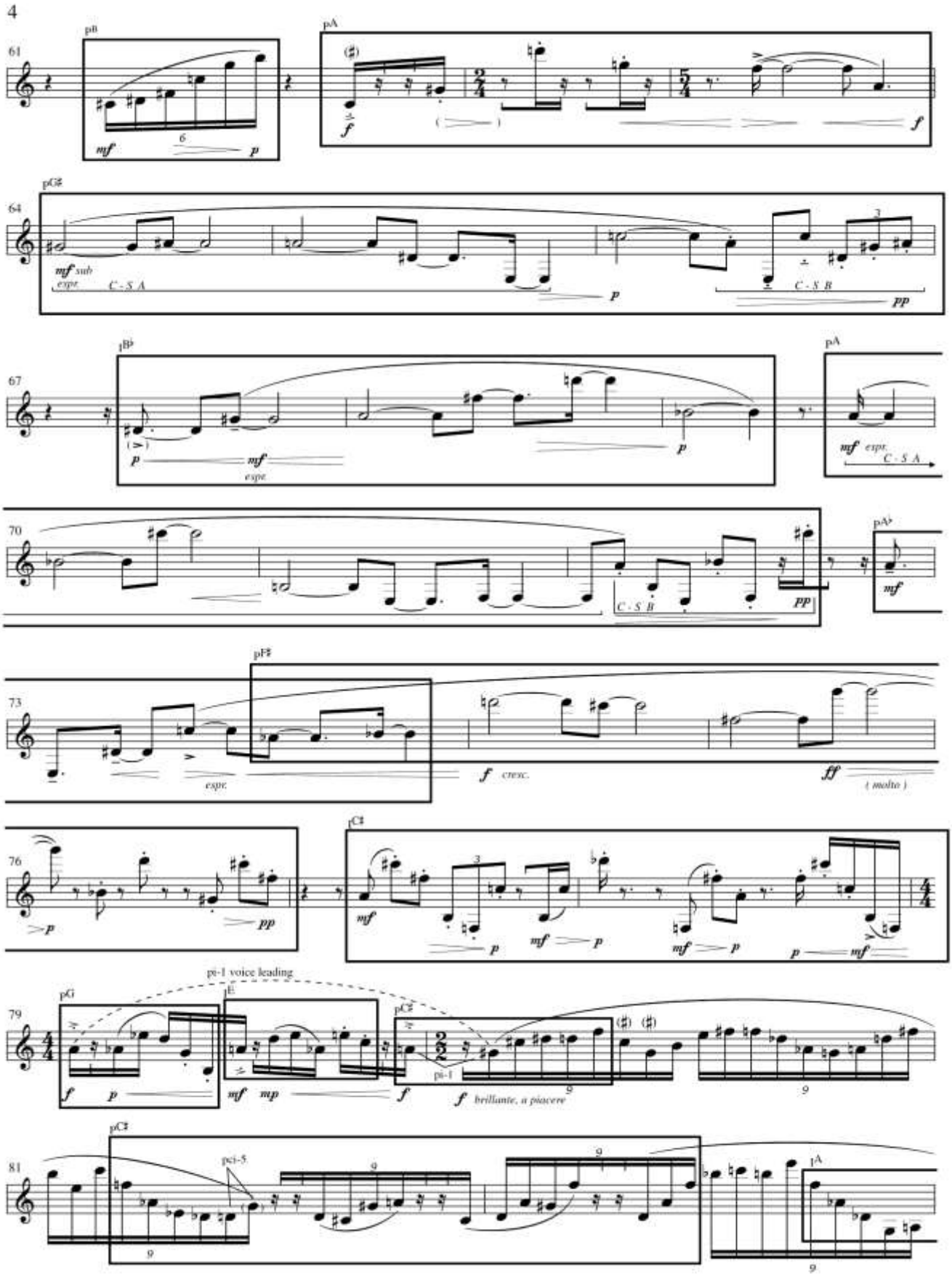
for Bb Clarinet alone

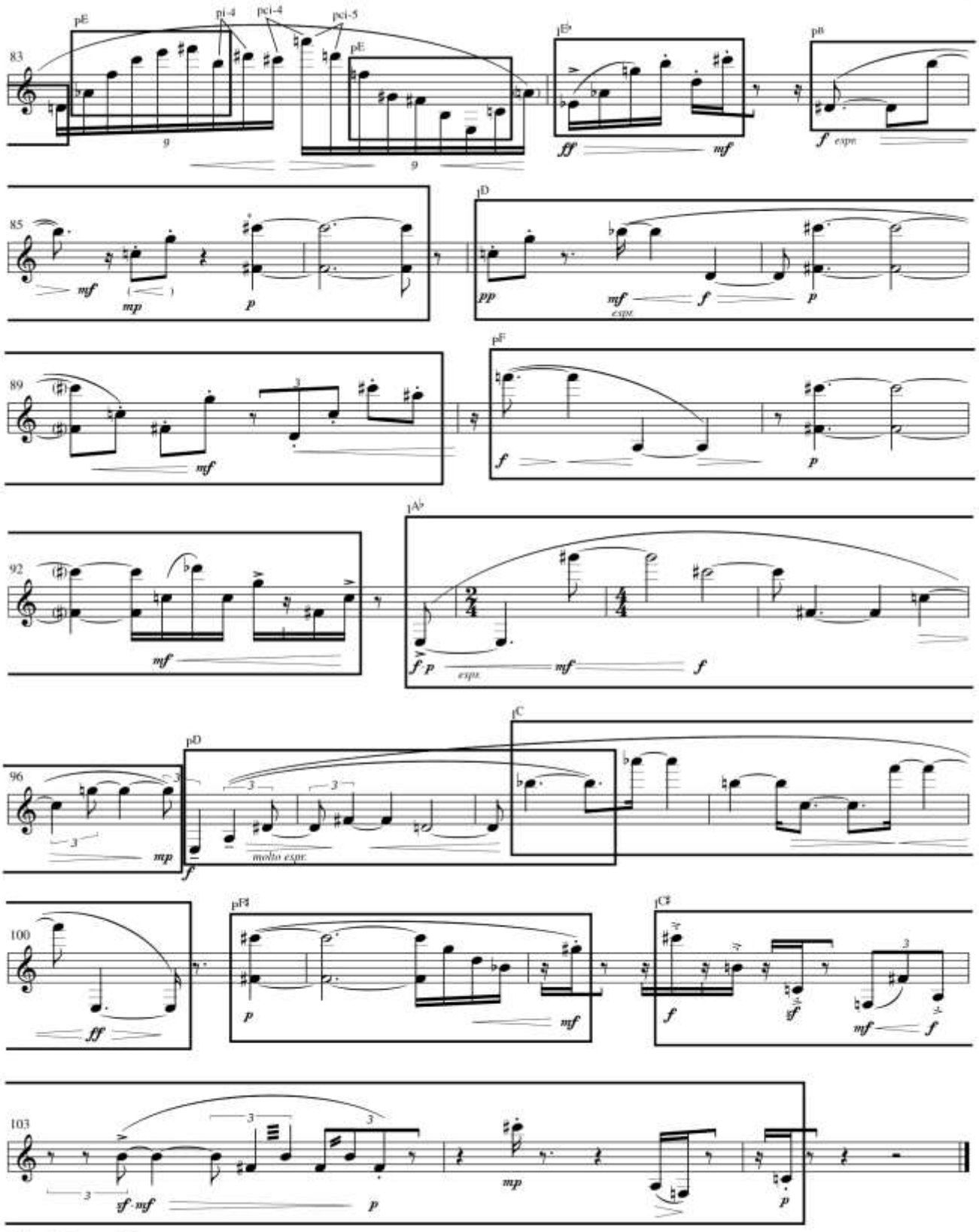
Elliot Carter
(1993 -)




2
pD
14
pci-5
pi-1
[0,4,8]
pi-1
pci-5
pi-1
C - S B
C - S A
Section 2
pD
pC
16
pci-5
[0,4,8]
pi-4
leggero, giocoso
pE
pC
pD♯
18
pci-5
C - S B
C - S A
pF♯
21
[0,4,8]
pi-4
pci-5
pG♯
24
pci-5
pci-5
pci-5
pD
26
pci-5
pci-4
pci-5
C - S B
C - S A
28
pci-5
pF♯
Section 3
pD
31
pci-5
marc.


12 - note set
33
37
44
51
53
56
59
pi-4 / [0,4,8] emphasis
pi-1 voice leading
[0,4,8]
pci-5
pi-4
pi-1
espr.
* While holding this note, increase and decrease a change in tone-color or vibrato or both.


4
61
pB
pA
mf
p
f
64
pG♯
mf sub
espr.
C - S A
C - S B
pp
67
pB♭
pA
mf espr.
70
pA♭
73
pF♯
espr.
ff
(molto)
76
pC♯
79
pG
pE
pC♯
pc-1 voice leading
pc-1
brillante, a piacere
81
pc-5
pA


pi-4
pci-4
pci-5
83
85
89
92
96
100
103
molto espr.
espr.
* See Performance Note.
NY Feb. 26
March 7