
D r i f t g l a s s

for percussion and five amplified instruments

C h r i s D e n c h

D r i f t g l a s s

for percussion and five amplified instruments ('90)

to Daryl Buckley and Liza Lim
(a belated epithalamion)

commissioned by Elision
with funds provided by the Australia Council
and first performed by Elision, conducted by Sandro Gorli
at the Beckett Theatre, Melbourne, on 17th March '91

flute (open-hole with B foot) - piccolo
E flat clarinet
tenor/bass trombone* + snare drum
guitar: VI scordatura (19-fret acoustic instrument)
contrabass: IV scordatura (not 5 string or extension)

(* using harmon (wa-wa) & plunger mutes/ needs F trigger)

Preferably four
speakers (I)
arranged as
indicated.

1 I
+

contrabass p e r c u s s i o n
guitar
trombone + sd
clarinet
piccolo
()
II

I 2
+

AUDIENCE

(rear of hall)

3 I
+

I 4
+

ii

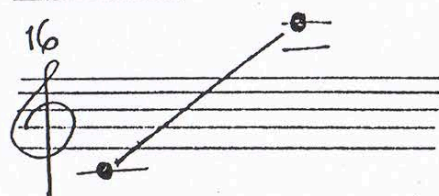
duration: 9/10'

percussionist:

all percussion instruments and objects are numbered in descending pitch order (1 to ...5 = high to low)

vibraphone

crotales:



chimes: glass & wood

mark tree

suspended thunder sheet (small)

2 brakedrums*

5 small metal pipes*

5 glass bottles* (descending
pitches, irrespective of size/
volume, or thickness of glass)

3 wooden tone blocks*

guiro, mounted on stand

3 log drums, two slits apiece,
(ascending pitches)

anvil: large semi-resonant metal
object struck with normal
sticks (eg: beer barrel)

6 ceramic bowls

wooden plank laid on floor

sizzle cymbal

-3 blankets for logdrum coperto effect

-5 wads of cloth to baffle cowbells (see part for stick specifics)

5 cowbells (small, rectangular)

5 almglocken (larger)

-all 10 horizontally arrayed-

3 snare drums-

piccolo : standard : military

1 pair timbales

1 pair bongos

1 pair congas

1 pair claves, one mounted on tray*

3 pairs of pebbles:

small/ medium/ large

3 stone plates° struck with stone

mallets: 'high/medium/low' pitches

orchestral bass drum (OBD)

bass drum, foot operated (FBD)

2 small triangles

switch: eg fishing rod, fencing foil
or similar flexible 'swishy' stick

* laid flat on tray, with non-slip
underlay

° these should be authentic pieces
of (eg paving) stone: large!

Temple blocks may be substituted for the wooden tone blocks, and wood blocks for the log drum (6 pitches) should the definitive instruments not be available. Other kinds of stone objects -for instance very heavy marble pestle and mortar sets- may substitute for the stone plates. A bell tree may be used in place of the mark tree, if necessary. iii

NB this provisional score is untransposed:

piccolo, guitar, and contrabass obey the usual octave transpositions
E flat clarinet sounds as written

- 1 The amplification should be 'analytic', that is, each instrument should be air-miked with the minimum of ambient contribution. The intention of this is, as Richard Toop says of Barrett's *Anatomy*, to "ensure that the individual timbres do not blend but are exposed as nakedly as possible". Amplification levels should be calibrated so that the instrumental balance is even at maximum dynamic (ffff); at lower dynamic levels this will favour the instruments with smaller dynamic ranges and profile them unsatisfactorily during quieter passages. For this reason, wherever necessary, the quieter instruments should play 'up' somewhat, so as not to be lost. Additionally, it is essential that the percussion does not drown any of the other instruments, and the calibration should reflect this; generally, a loud output is favoured. Each player should have a slider to enable their individual mike to be turned off during instrument changes, long silences, and so on; this may be done at the mixing desk or by the player, whichever is simpler. In a dry acoustic a little reverb should be added to each instrumental voice separately. The particular sound quality that amplification (as opposed to 'sound reinforcement' -yes, Rolf, I was listening!) gives is appropriate to the piece and need not be suppressed.

The guitar microphone line will be fitted with a foot-pedal volume control which will enable him/her to move from a lower level ① to a higher one ⑤. This gradient of amplification, peculiar to the guitar, is given in the score by the large ringed number prefacing the performer-subjective dynamic instruction; the guitarist's range therefore spreads from a lowest level of ① pppp to a maximum of ⑤ ffff. But note that the guitarist's pedal is never used actively (except for final golpe diminuendo), all modifications of level must be made while the instrument is silent, as is indicated in the score. Dynamic change within the phrase must be achieved by the player's touch, the pedal should not be used as a substitute for a wide range of tone. Downward pointing arrow over number indicates depressing pedal with toe pressure (louder), and upward arrow indicates heel pressure (quieter).

See also notes 12 and 15.

Nine steps of dynamic gradient are employed in this score:

pppp-ppp-pp-p-mf-f-ff-fff-ffff

Subtler/more subjective nuances are suggested verbally. All such instructions neglect the effect of amplification, and the conductor may suggest appropriate modifications arising from the performance situation.

- 2 Accidentals only apply to the notes they immediately precede.
- 3 This score is notated throughout at 4 centimetres = 1 second, irrespective of

operating metronome marks, excepting windows for time-signatures. Parts are set out similarly, with relevant time-signature windows added-in: referential time-signatures relating to the consistent, conducted, meta-pulse are given over the stave; local 'phenomenal' time-signatures, within the stave. In the sections with superscribed *accelerandi* and *rallentandi* the spatial distribution of note-heads does not attempt to render this small-scale contraction/attenuation visible, but retains the spacing appropriate to the initial (departure) metronomic tempo until contradicted when the new (goal) tempo is reached.

- 4 The pulse-life of this piece involves an active role for the conductor. Long durations with sophisticated inner subdivisions have been rendered by having individual instruments follow their own rhythmical route with the appropriate metronomic tempo to enable them to coordinate at certain given points, which are flagged by the conductor. The unchanging pulse which governs these points of unanimity is reflected in the large meta-time signatures, which guide the conductor's beat, even though there are moments when none of the players are actually locked into this reference tempo. The conductor's role is therefore primarily coordinative: he/she ensures structural cohesion, while leaving the nuances of inner detail largely to the player.

As a consequence of this, such de-synchronised instrumental parts, which have no common simultaneities with the other voices, are to be understood as inhabiting a world dominated by interpretative *rubato*. The written detail is to be seen less as a 'philologically' exact notational equivalent of a precise executative outcome, than as a metaphorical representation of, indeed a symbolic trigger to, a particular expressive gesture. This understanding of the notation as a series of bracketed 'cartouches', capsules of information both technical and expressive which require reading (that is, decoding and digesting) rather than just reflex articulation, is central to the fluidity of the piece. The 'cartouches' are framed by the bar-lines given by the conductor, and the contents of every one of these are to be understood as related: thus the performer's role is, in part, to seek and reveal these correspondences. In consequence of this highly 'imagised' meaning ascribed to the notational detail, even simple rhythmical formulae should be read similarly empathically/ metaphorically and be allowed to be distorted where the player deems appropriate.


- 5 Quarter-tones are primarily harmonic, and only secondarily colouristic; whenever possible they should be fingered rather than 'bent', except in the piccolo part where rolling-in is sometimes specifically indicated. The resulting anomalous tone-colours are both intentional and desirable. For flute/piccolo
♯ rolled-in; ♭ rolled-out. These signs appear bracketed over pitches /multiphonics where rolling the fingering in or out is necessary to the sound production; they also appear occasionally in the clarinet part to indicate an embouchure adjustment. Note that, in all cases, the pitches appearing in the stave are the result of the superscribed adjustment.

- 6 As little vibrato as possible should be utilised throughout. Specific instructions are:
poco vib which indicates a slight brightening of the tone accomplished by vibrato;
molto vib which indicates a degree of vibrato analogous to that ordinarily employed in the romantic repertoire, with perhaps a slight exaggeratedness. Not grotesque, however, merely gently sardonic.
- 7 Gracenotes subtending bracketed rests (or written values clearly not intended to last for their entire duration) should occupy as much as is necessary of the indicated gap and be fairly evenly distributed into the available time. They always occupy elapsing time, and have been notated appropriately within the 4cm = 1sec scheme.
- 8 trombone: o open, and ● closed for harmon and plunger mutes.
 gradual transition: ●—————>○ unchanging/abrupt change: ○●/○—————●/● o
- 9 **M** = mute for contrabass: **+M** apply mute of specified type; **-M** remove mute.
- 10 guitar: golpe attacks are notated as follows (t = thumb attack; 1-4 = fingers of RH)-
- slap upper/lower curves on side of body with flat fingers

a b a) left, b) right of strings, between shoulder and soundhole = sul tasto

c d c) left, d) right of strings, between soundhole and bridge = normale

e f e) left, f) right of strings, between bridge and butt = sul pont
- 11 contrabass: **AN** arco normal; **SP** sul ponticello; **ST** sul tasto -other instructions are given in full, as well as qualifiers to the above.
- 12 No attempt should be made to cosmeticise the instrumental sound during the more abrasive sections of this piece.
- 13 Broken slurs indicate groups where a psychological continuity is required while the actual execution is necessarily discontinuous. For contrabass, particularly, these slurs are adopted in one-note-per-bow sections, which are mostly legato.
- 14 Square slurs are ties, round slurs with the sostenuto symbol connecting the same pitches indicate an enveloped pulsing of the specified note without break. In addition to where they are specifically required, louré bowing and alternating variant fingerings/slide positions may be used to emphasise pulsing.
- 15 At end, trombone plays into a snare drum. This drum should be located in front of the trombonist, and slightly to one side, preferably invisible to audience. The snares must be off until the drum is needed, and there is an instruction in the score for trombonist to loose the snares. Clearly, the trombonists's amplification must be zeroed vi while this is taking place, but the mike should be placed so as to pick up both the

trombone and the snare drum resonance equally once both are in play. Circular breathing is desirable for the closing drone:  . Otherwise breathe furtively at slide change/pulses.

16 various abbreviations:

FLGR throat growl (or heavier fluttertongue if growl proves impossible);
FLZ fluttertongue, both these signs operate only in conjunction with tremelo sign; rapid, unmetricated -but even!- tremelo/repeated notes (in absence of **Fl/Flgr** indication);
TR teeth on clarinet reed: written pitches (in dotted ring) are mandatory, however, and should be performed normally, or as harmonics, if 'teeth on reed' is insufficiently controllable.

17 Piccolo harmonics are notated with the fundamental indicated by a diamond-shaped white note, and the partial as normal. The fundamental should always be clearly audible -I have not attempted to render non-tempered harmonic pitches exactly in the notation. There is no harmonic ° sign used. Clarinet harmonics are notated similarly; note that, in the clarinet, the distance between fundamental and harmonic (the 5th always predominant) is gradually foreshortened the further up the instrument. See 23.

18 Guitar harmonics, by contrast, do utilise the harmonic symbol °, but the appropriate string/fret position is indicated by number only. No artificial harmonics are used, excepting RH octaves.

19 Contrabass harmonics come in two types, and do not utilise the harmonic symbol °:

1 natural harmonics; including-

2 multi-nodal harmonics, which are achieved by utilising two/three nodes at harmonic pressure simultaneously. These are approached via one of the nodes, for easier placement. All harmonics are notated at written pitch, and will sound an octave lower. Harmonics, especially the multi-nodals, will be out of tune; I have not attempted to indicate these divergences and have simply notated the closest tempered pitch.

(3 artificial harmonics are not utilised in this piece.)

20 Multiphonics are specific and function both harmonically and melodically within the piece. Should it be found necessary to modify any of the given fingerings, a similar or exact alternative multiphonic must be found.

21 The square symbol in the piccolo part placed where a harmonic ° might ordinarily be found indicates a 'split octave', where the player aims between the two playing positions and achieves both pitches at once. The upper octave will be variously out of tune: make no attempt to correct this. The somewhat murky interior of the sound has

been notationally rendered by a thickened stem between the two outer notes.

22 Circled numbers appearing above the trombone pulsed notes indicate that the pitch beneath should be played in a sequence of different positions, going from low to high harmonics. The trigger(s) should be utilised to make more variety of positions available; I have particularly indicated this for section D, but the player is not obliged to adhere to my suggestions. Similarly, circled numbers over the clarinet pulsed pitches indicate variant (unspecified) colour fingerings for the same pitch.

23 Clarinet harmonics: I am postulating the following resultant pitches as harmonics arising from the diamond-headed fundamentals. As instruments vary players should try out this group and determine any adjustments that they need to make to the written fundamentals in order to accomodate such variations. The harmonic pitches are crucial both harmonically and melodically (although for obvious reasons they are bound to be approximations), and should be rendered as accurately as possible; small modifications in the fundamentals are acceptable. Where harmonics prove impossible to obtain, a normally-executed upper pitch must suffice. The lower pitches are closer to a multiphonic timbre; written pitches:



24 Scordature: guitar-



Note that in the parts the changed pitches are transposed appropriately for the bottom string of the contrabass, but not the guitar.

26 Although the guitar part is notated primarily monodically it should be imagined by the player as a continually moving harmonic wave: fingers should remain at frets until it is necessary to move them, allowing of a 'folded-over' polyphonic continuity. Only the very brief flurries (usually marked 'secco') contradict this.

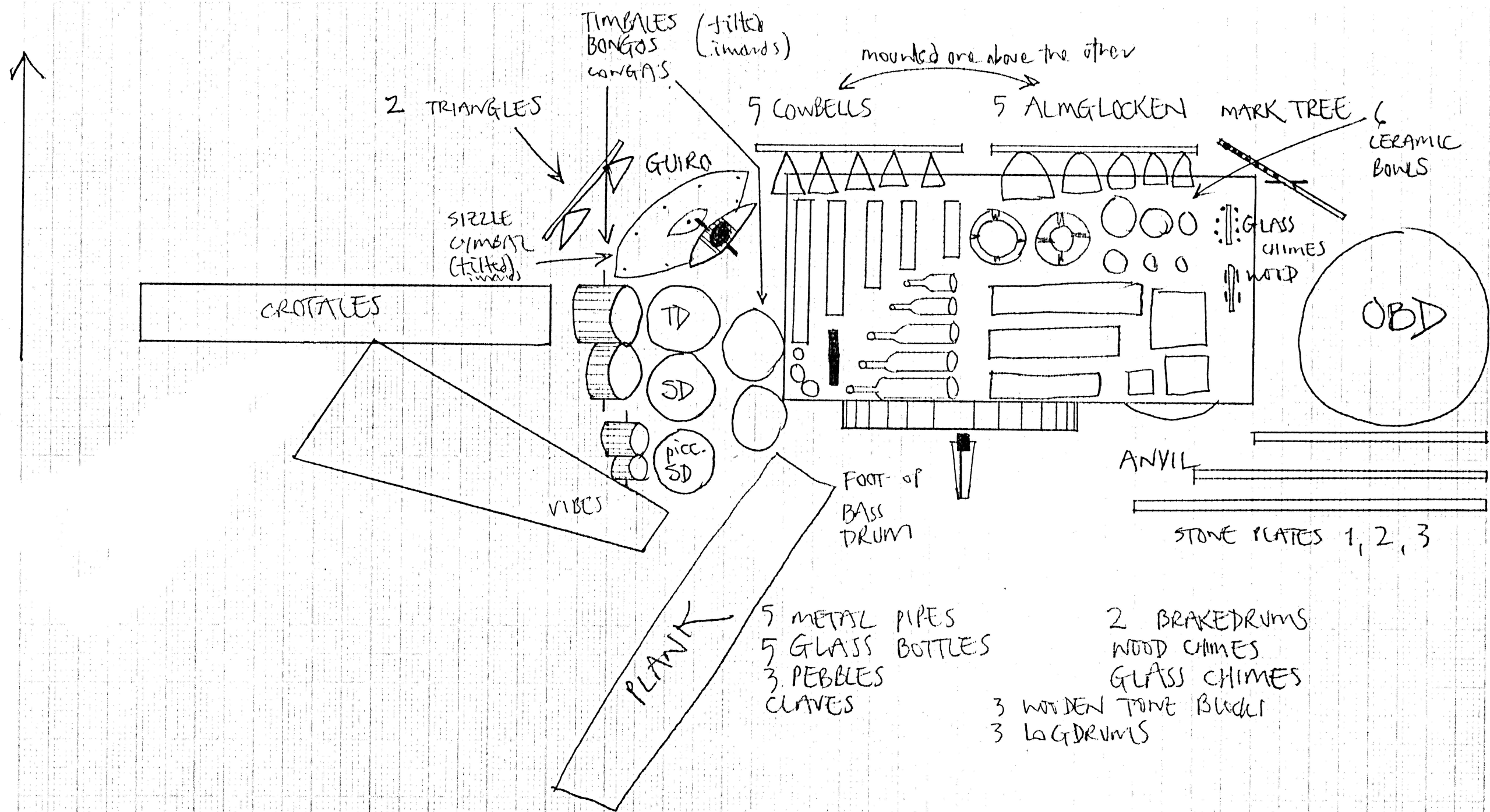
'The heavenly motions are nothing but a continuous song for several voices (perceived by the intellect, not the ear); a music which, through discordant tensions, through sinces and cadenzas, as it were (as men employ them in imitation of those natural discords) progresses towards certain pre-designed quasi six-voiced clausuras, and thereby sets landmarks in the immeasurable flow of time.'
-from Harmonice Mundi (1619), Johannes Kepler

'...They say the same crowd surges up the street and surges down again, like driftwood borne tidewise ashore and sucked away with backwash, only to slap into the sand again, only to be jerked out and spun away...
The colours disappear at break of day when stragglers towards the west riverdocks meet young sailors ambling shipward on the street...'

from Prism and Lens, by Marilyn Hacker
-quoted in Babel 17 by Samuel R Delany.

The title is taken from a short story by Samuel R Delany.

This work owes its effectiveness to the excellence, enthusiasm, and dedication of the members of Elision: Paula Rae/flute & piccolo, Jane Robertson/clarinet, Brett Kelly/trombone, Kees Boersma/contrabass, and, particularly, Peter Neville/percussion. My gratitude and appreciation has its concrete expression in my currently being engaged in writing another work for these excellent players. ix

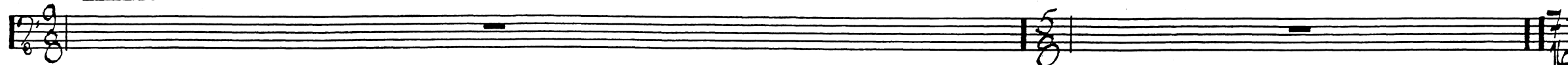


LD.

A1 $\text{♩} = 75$ Rall $\text{♩} = 117$



$\text{♩} = 108$ Accel



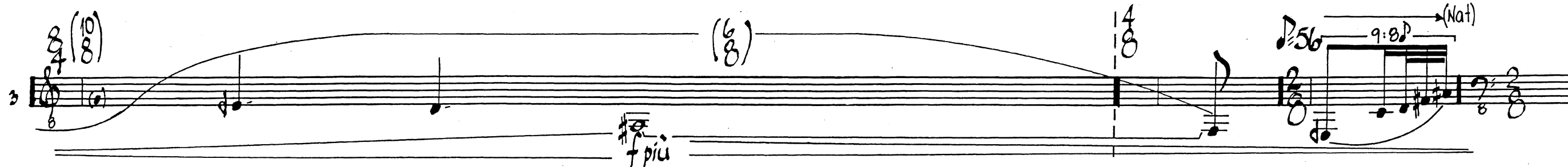
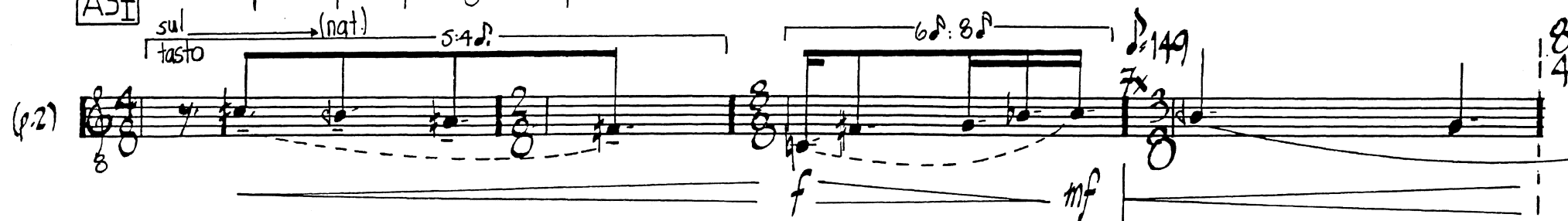
$\text{♩} = 125$ - (Più accel)

A2

$\text{♩} = 156$



A3I $\text{♩} = 156$ poco a poco più legato e pesante



Cb

Handwritten musical score for Cb, featuring multiple staves with complex notation, including time signatures, dynamics, and performance instructions.

Staff 1: (p5) 5:4, 7:8, 107, 3/8, 5/8, 2/8, 67. Dynamics: *f*, *mf*, *f*, *mf*. Includes a *(4x5)* marking.

Staff 2: A3_{III} *feroce!*, A3_{IV}, 6:5, 235, 5:7, 3:2, 25:7, A3_V 83, 2/7:8, 4/7:8. Dynamics: *f*, *mf*. Includes a *mfz/p* marking.

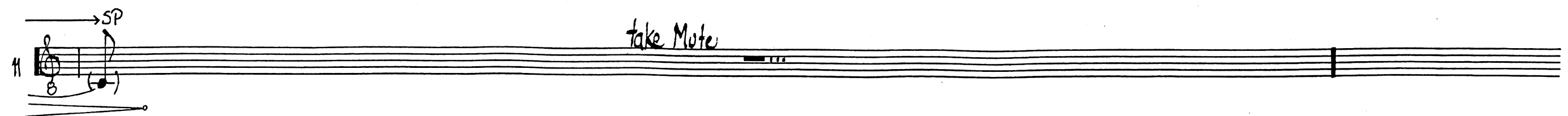
Staff 3: 5/7:8, 9/7:8, 79, 57, 16, 14. Dynamics: *mfz/p*, *poco mf*, *p*.


Staff 4: 4, 8, 83, 7:8, 84. Dynamics: *poco mf*, *p*.

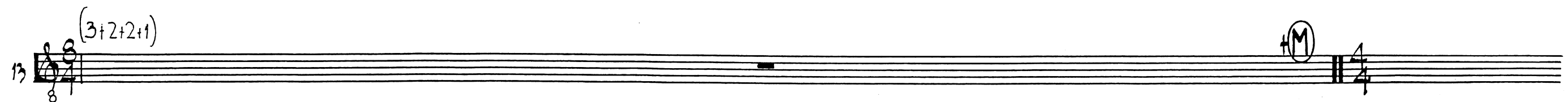
Staff 5: 8, 156, A4_I *intense but restrained*, 63, 8, 14, (s.p.). Dynamics: *mfz*, *p e dim...*.

Staff 6: 10, 8, 7, 8, (s.p.).

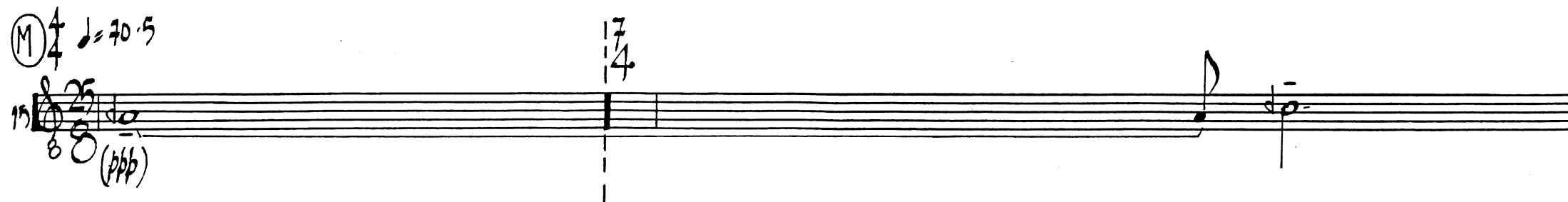
Cb

11 

12 

13 

14 

15 

16 

Handwritten musical score for a piece, likely for a string instrument, featuring various musical notations, dynamics, and performance instructions.

Measure 17: Starts with a circled 'M' and a key signature change to two flats (B-flat and E-flat). The tempo is marked $\text{♩} = 164$ with the instruction "restrained, still". A box labeled $A4_{IV}$ is present. A dynamic marking of (pp) is shown. A performance instruction "(reduce harmonic pressure to zero)" is written below the staff.

Measure 18: Continues with a circled 'M'. It includes a 23:24 ratio marking and a 9:8 ratio marking. Dynamics include pp and mf .

Measure 19: Starts with a circled 'M' and a key signature change to one flat (B-flat). The tempo is marked $\text{♩} = 120$ with a box labeled $A4_{V}$ and the instruction "(do not rush)". A 9:8 ratio marking is present. Dynamics include pp and mf .

Measure 20: Starts with a circled 'M' and a key signature change to one sharp (F-sharp). The tempo is marked $\text{♩} = 100$ with a box labeled $A5_I$. A circled '-M' is at the end of the measure. A 4+7+2 ratio marking is shown.

Measure 21: Starts with a box labeled $A5_{II}$ and the instruction "(st e flautando) poco Acce!". The tempo is marked $\text{♩} = 100$. A 23:32 ratio marking is present. Dynamics include mf and f . A performance instruction "cresc..." is written below the staff.

Measure 22: Starts with a box labeled $A5_{III}$ and the instruction "legato e momentaneamente grazioso Nat.". The tempo is marked $\text{♩} = 108$. A 9:8 ratio marking is present. Dynamics include f and pp . A 3x5 ratio marking is shown.

Measure 23: Continues with a 9:8 ratio marking and a 2x3 ratio marking. The tempo is marked $\text{♩} = 141$. Dynamics include pp and f .

Cb

23 *Rall.* *mf* *cresc...* *A5_{IV}* *♩=100* *9:8* *A5_V* *quiet but intense* *♩=63* *17:12* *9:8* *2x7*

24 *(p e cresc...)* *(3:12+4)* *19:18* *5:4*

25 *B1* *vertiginously fast* *♩=205* *7:6* *(2nd)* *(3rd)* *6th* *subito ritenuto* *12th* *16:13* *(12th)* *(6th)* *allegro*

** (add in midpoint between 2nd & 3rd notes for 12th) (see note to line 70)*

26 *(p) cresc...* *sfz* *B2* *♩=136* *Even faster!* *8:9* *mf* *edim...*

27 *11:13* *7:6* *gliss* *8 1/2:9*

28 *B3* *♩=189* *(+12th)* *35:13* *(3rd)* *(2nd)* *6th* *(as before)*

Handwritten musical score for Cb, measures 29 to 34. The score includes various musical notations, dynamics, and performance instructions.

Measure 29: Cb. Dynamics: ff *molto*, p . Performance instruction: *port.*

Measure 30: Dynamics: mf , f , p , mf , mfz/p .

Measure 31: Dynamics: (p) , sfz . Performance instruction: *Colla Parte!*, *pizz.*

Measure 32: B5. $\text{♩} = 205$ Again very fast. Dynamics: f , f , sfz . Performance instruction: *(gradually to harmonic pressure)*.

Measure 33: B6. Again, even faster. $\text{♩} = 136$. Dynamics: mfz .

Measure 34: Dynamics: p , ff/f . Performance instruction: *(gradual increase from harmonic to normal pressure)*.

Other markings include measure numbers (29, 30, 31, 32, 33, 34), time signatures (3/8, 3/16, 3/2, 3/4, 3/8, 3/16), and various musical symbols (notes, rests, beams, slurs, ties, etc.).

Cb [B7] Still fast

35 $\text{♩} = 189$ $5:6$ $5:13$ $7:6$ I II $7:9$ $8:9$ (7th)

f

Cantabile

36 $\text{♩} = 113$ $5:6$ $12+1$ 16 *sfz*

[C1] Colla Parte!
circa lo

37 $\text{♩} = 141.5$ $6:5$ *f*

38 $10:11$ $15:21$ *sfz* molto *mf* *f* *mf*

39 $41:50$ $19:16$ *f* *ff* *f* *ff*

40 $\text{♩} = 154$ [C2II] *sfz*

Cb

Handwritten musical score for Cb, measures 41 to 46. The score includes various musical notations, including notes, rests, and dynamic markings.

Measure 41: C_{III} malinconico. $\text{♩} = 113$

Measure 42: C_{IV} $\text{♩} = 100$ Agitato (hushed)

Measure 43: C_{V} $\text{♩} = 150$

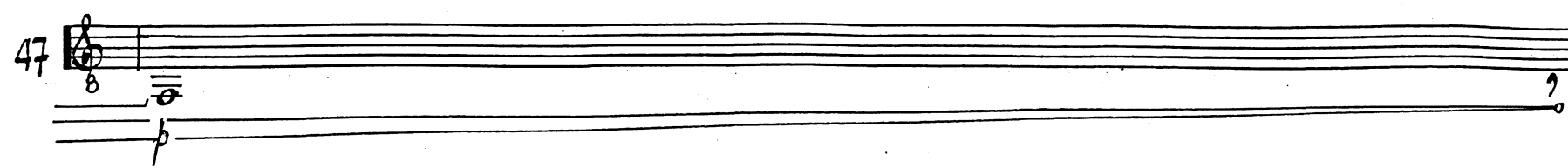
Measure 44: C_{VI} $\text{♩} = 113$

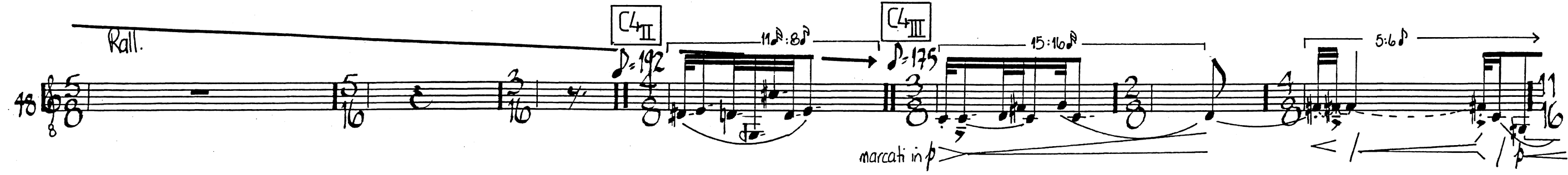
Measure 45: C_{VII} $\text{♩} = 128.5$

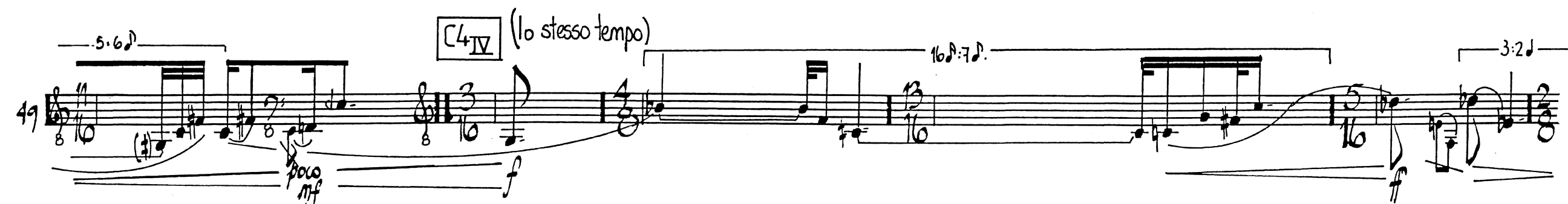
Measure 46: C_3 Colla Parte! circa 9"

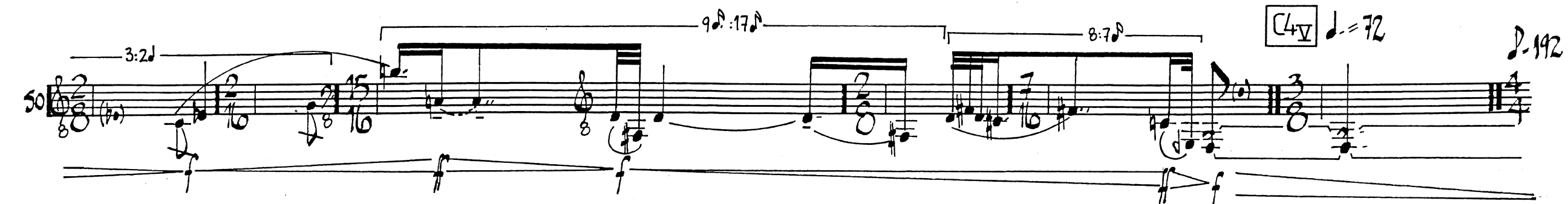
The score also includes dynamic markings such as ff , sfz , and ff , and various time signatures and note values.


Cb

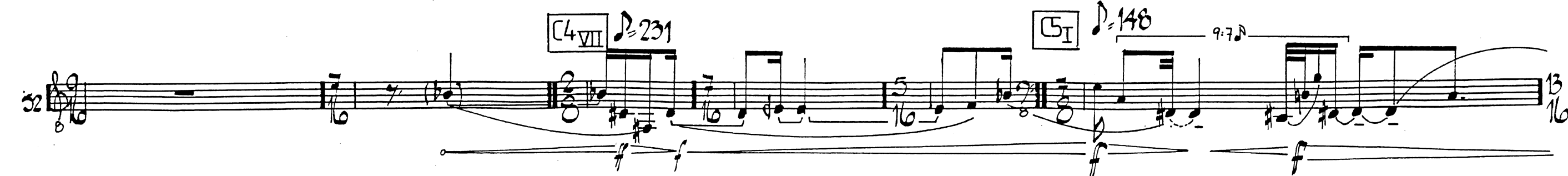
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48 

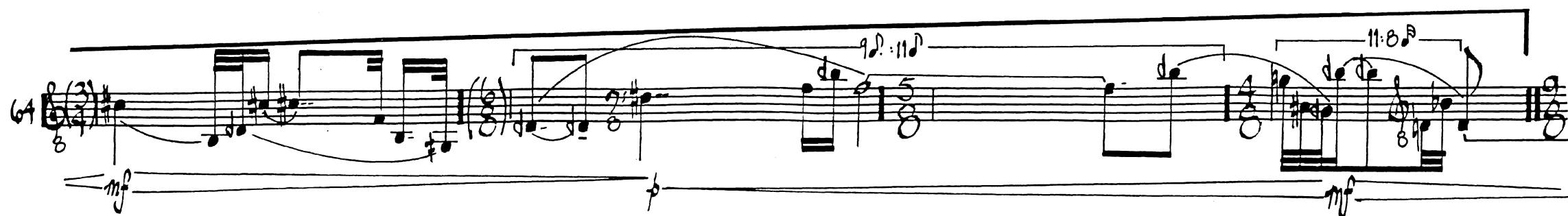
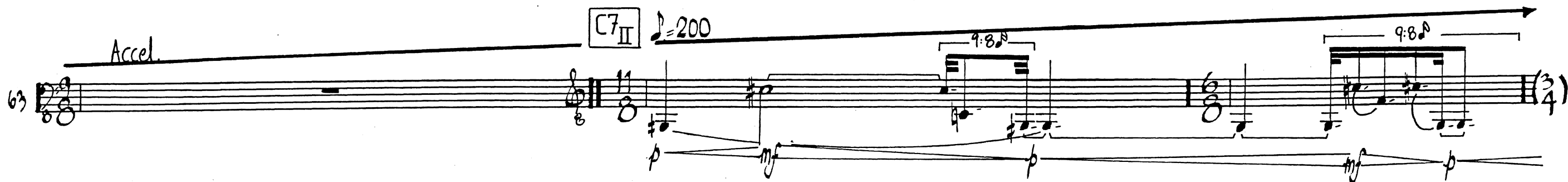
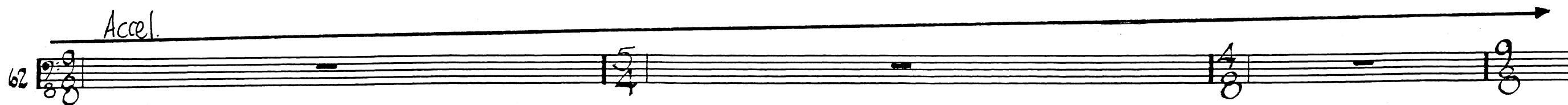
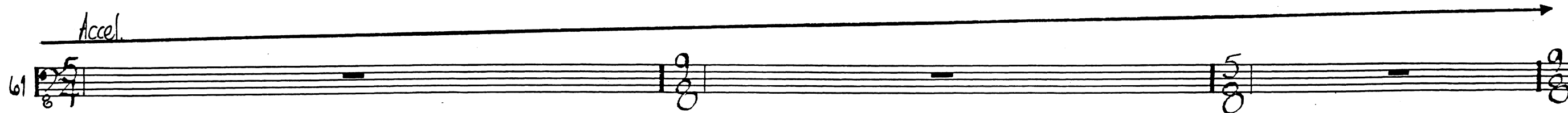
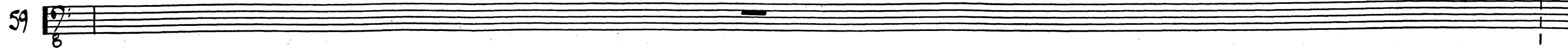
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50 

51 

52 

Cb



Cb *subito Rall.* C7 III $\text{♩} = 126$ C7 IV $\text{♩} = 113$ $3:2$ $5:4$

65 C7 V $\text{♩} = 103$ *Rall.* $11:12$ $9:10$ $19:15$ *meno*

66 *Rall.* $19:15$ $3:2$ C7 VI *sub. Accel.* $\text{♩} = 84.5$ $5:4$

67 *ff pesante*

68 C7 VII $\text{♩} = 99$ (Evenly) *hieratic and cool* $5:4$ *solo* $7:6$ II I 2×5

69 2×5 $8:9$ $9:8$ $7:11$

70 $7:11$ $7:11$ D1 *Colla parte, as before* $\text{♩} = 70.5$ 2^{nd} 12^{th} (2nd, 3rd + 12th) 8 8^{va} 11 12 (NB: no pulses)

(Do not damp low D string, but do not continue to bow it.)

(unchanging to end)

(*Add in 2nd harmonic fingering while keeping and simultaneously add 3rd node + also a point almost exactly midway between them to get the extra octave)

Cb

D2 (lo stesso tempo)

71

(ppb)

72

(ppb)

D3

73

tacet to end

