All of old.

for piano quartet (violin, cello, synth and piano)

Pangur

00110010 00110000 00110010 00110000 00110000 00110001 00110010 00110001 01111001 01100101 01101110 01110100 01110010 01100001 01100011 01100011 01101101 01101101 01100001 01100100 01100001

0.1 Appendix

All of old

Nothing else ever. Ever tried. Ever failed. No matter. Try again. Fail again. Fail better.

– Samuel Beckett, Worstword Ho

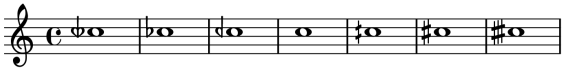
for piano quartet (violin, cello, modular synth and piano)

Duration ca. 14’

Notes on performance

Tuning

24 tone equal temperament is used throughout the piece. The following



accidentals are used to indicate pitches in quarter tone steps from ¾ flat – ¾ sharp

Dynamics

There are just five dynamic levels used in the piece, the distribution of dynamics between the instruments is one of the primary ways that the three different "colors" are distinguished from one another.

ppp – at the limits of audibility, a mixture of white noise and tone

pp – very quiet tone, clear and delicate

p – soft and clear

mp – full tone, to the fore of the sound

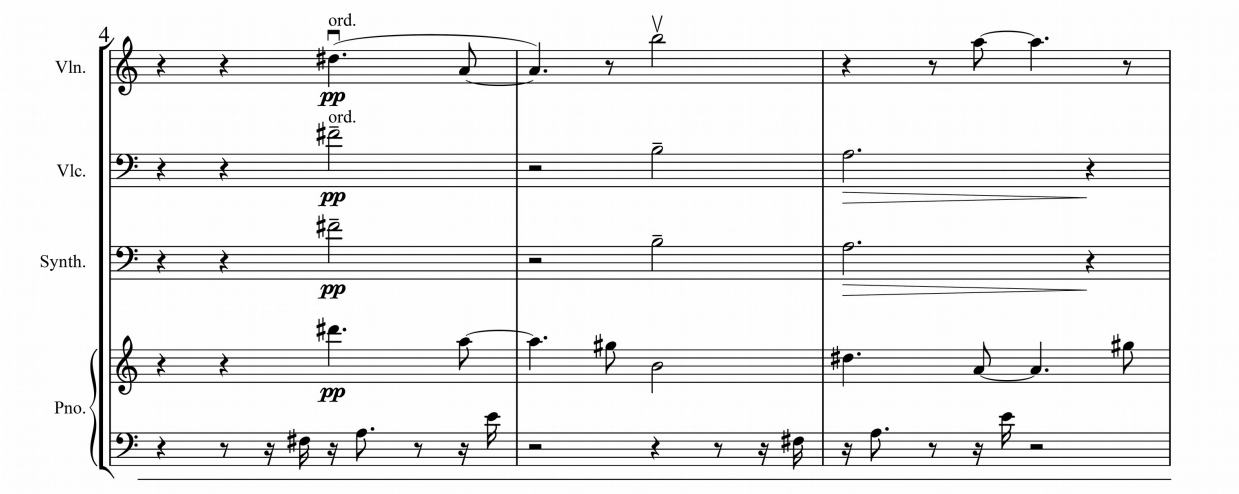
mf – loud clear tone, clearly in the foreground

Structure

As mentioned above, there are three different types of material used in the piece for ease of description, I'll use simple primary color names to explain the types. The recurrence of a particular type of material is based on permutations of a pitch class. These permutations arise from two transposition paths (m3-p4-m6, p4-m6-j2-j6), having traced out these paths, it becomes clear how often a particular class of pitch recurs. To emphasise the fact that some pitches recur

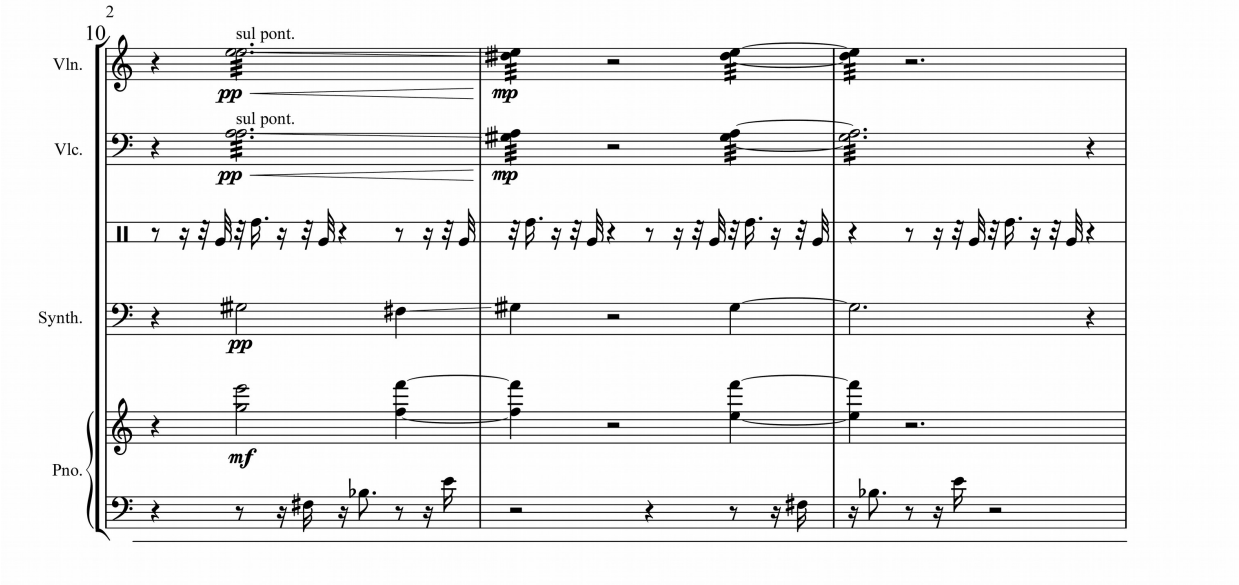
more frequently than others, the instrumentation is designed in a way so as to emphasize different colorings of pitch.

The piece therefore is not really about the pitches themselves, but rather about the sound of transitioning between the different instrumental colors.



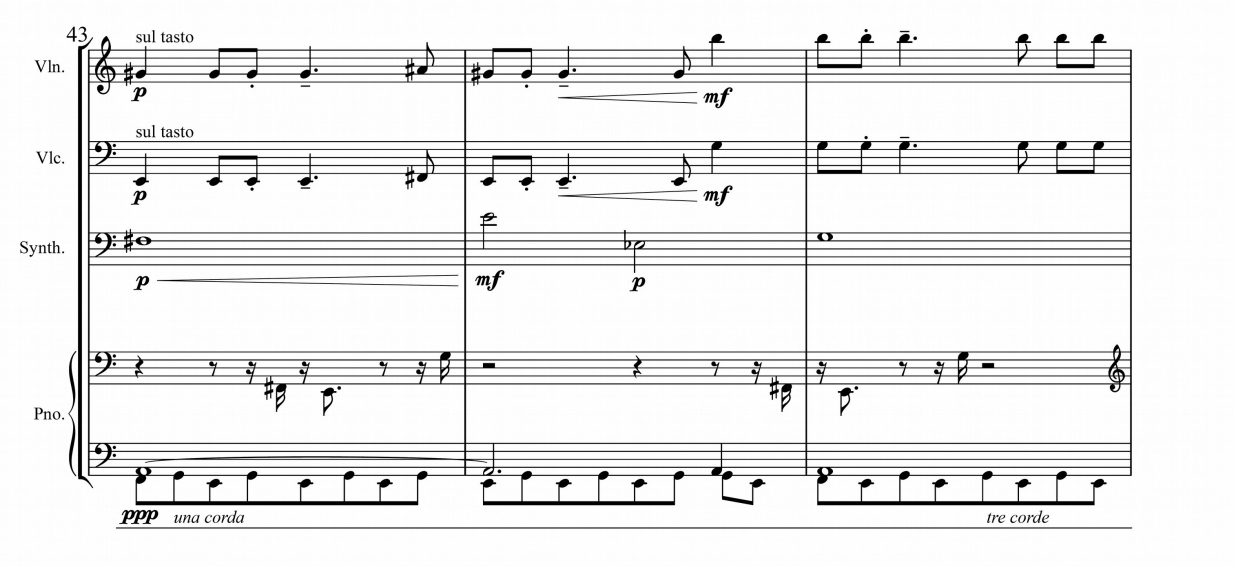
Blue

A clear, balanced sound where all instruments play at the same dynamic level and the tuning should be more clearly focused than the other sections.



Red

A more metallic and dissonant sounding figure, the material in the right hand of the piano part is in the foreground, with the strings and synthesizer playing microtonal resonance that swells in the background.



Green

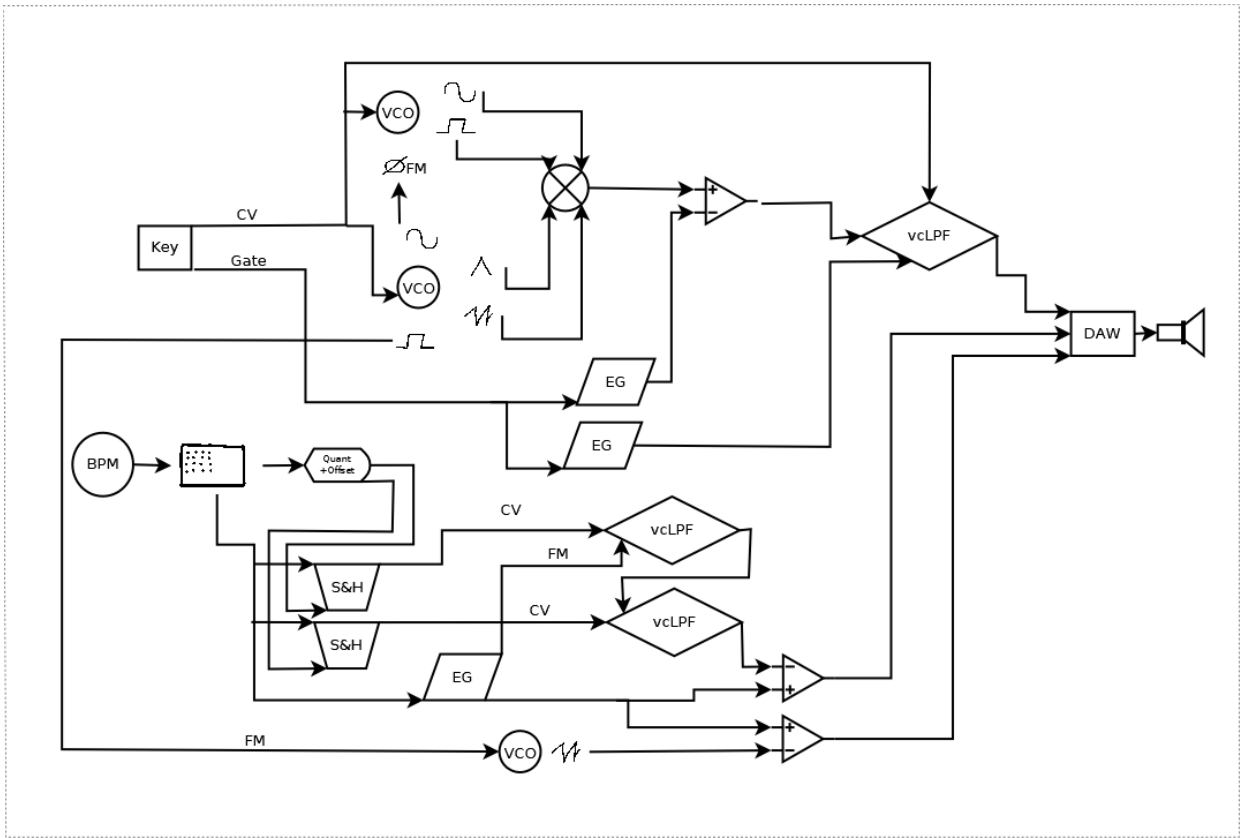
The idea here is to create a figure that has a lot of softly focused energy in the lower register. Rhythmical unity on the strings should take priority, clarity of pitch is less important.

Modular Synthesizer

The part for synthesizer has two voices: a simple subtractive bass voice that acts as an extension of the cello and left hand piano parts and a percussive figure in the higher register that is created using filter resonance. Although the rhythm is precisely notated in the score, this figure is actually a repeating sequence and sounds best when it is combined with a delay that shifts the pitch microtonally. The patch diagram on the next page outlines what modules are required to realize the synth voice. I used a small "eurorack" modular system to realise the

voices in the first performance, but any sort of digital equivalent would work also.

Patch diagram



BPM = clock source

CV = control coltage

DAW = digital audio workstation

EG = Envelope Generator

FM = frequency modulation (linear and thru-0 used)

Key = keyboard

Mix = mixer (circle with a big X)

Quant & Offset = quantizer with offset (a diatonic 10^{th} sounds good)

S&H = sample and hold

VCA = voltage controlled amplifier (sideways triangle with + and - poles)

vcLPF = voltage controlled low pass filter

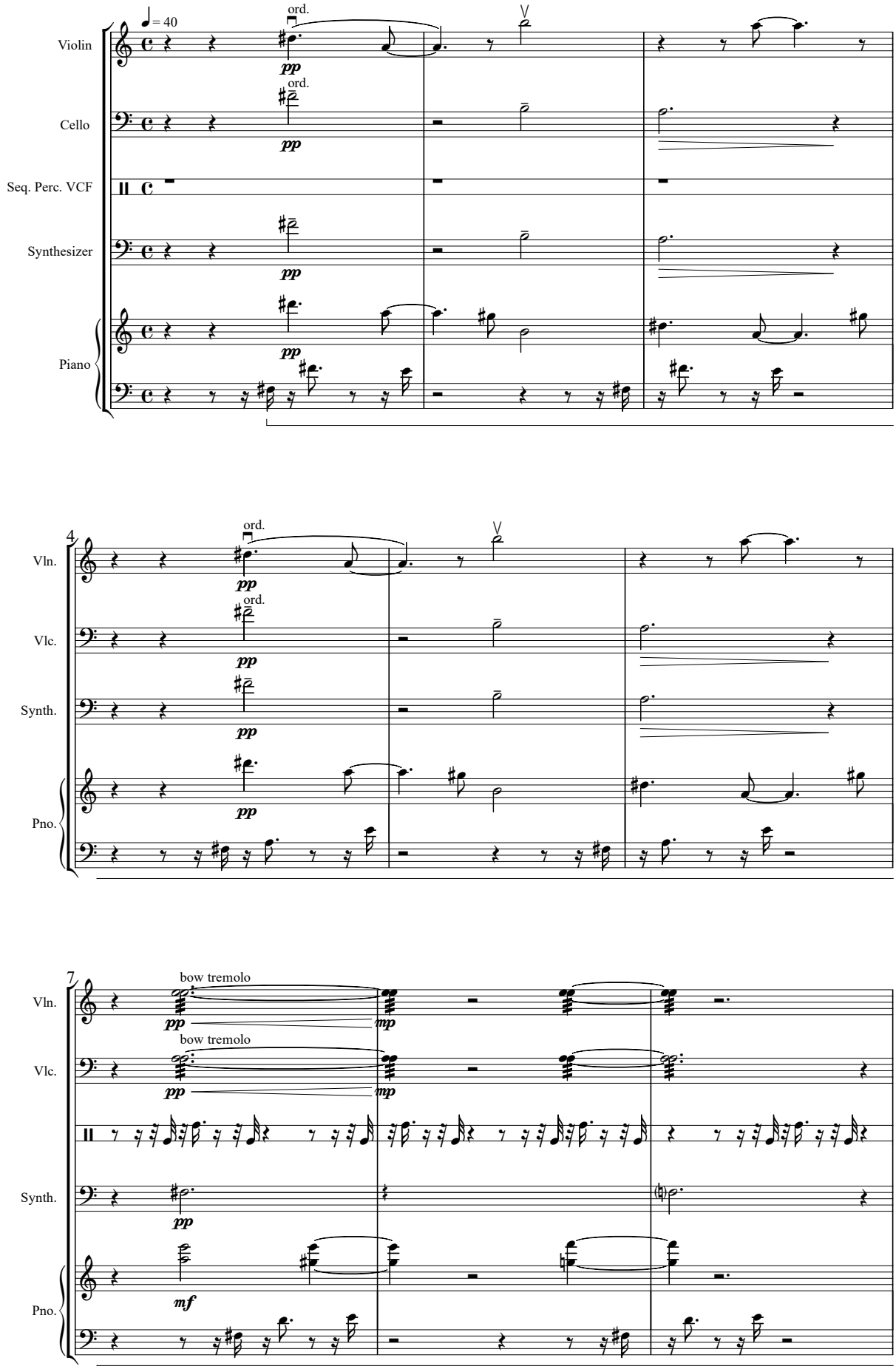
VCO = voltage controlled oscillator (using multiple waveforms)

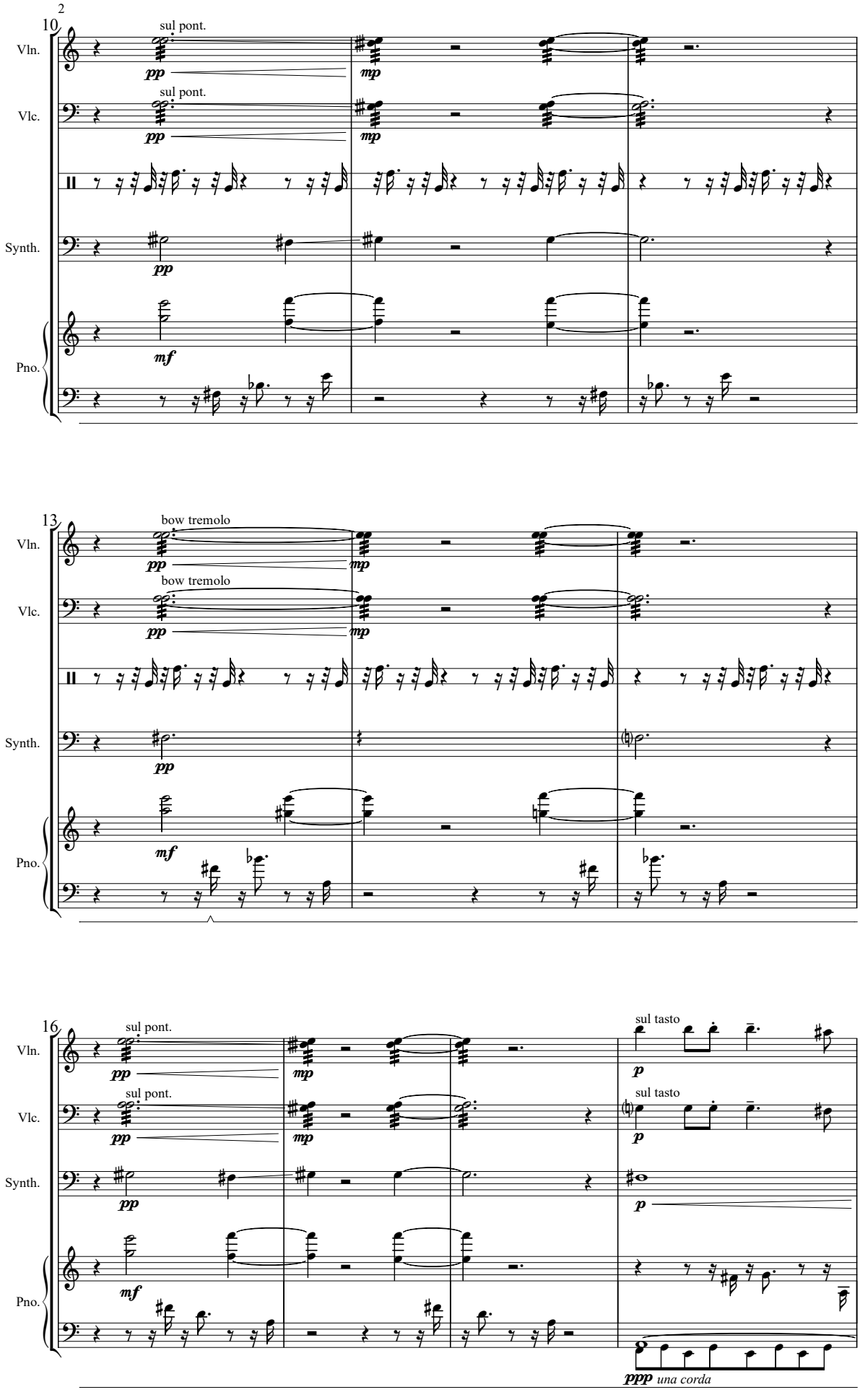
0.2 Score

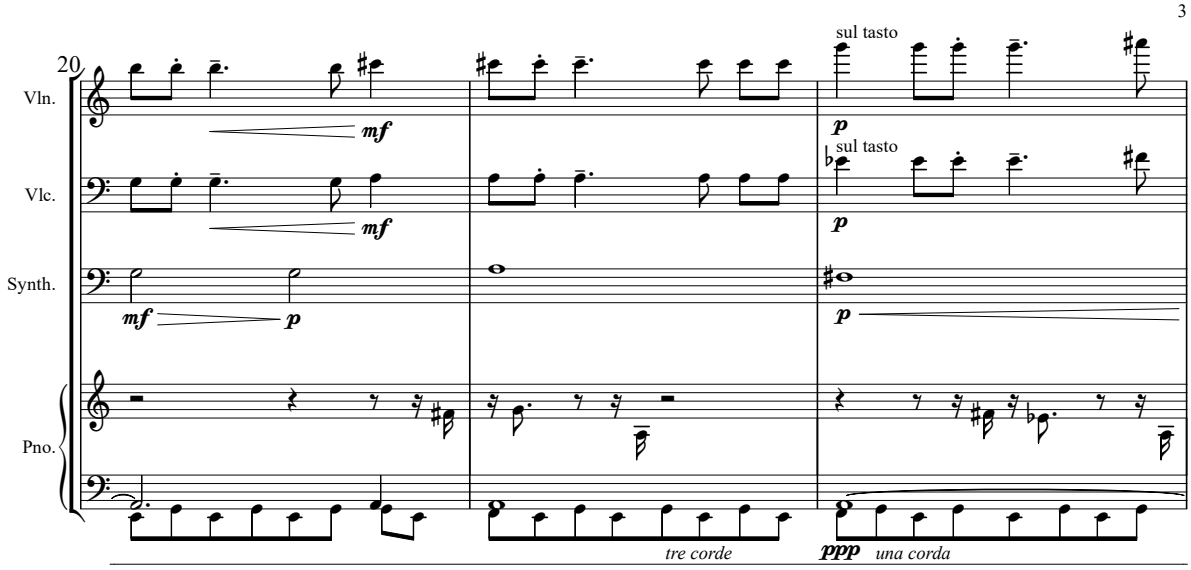
blankpage

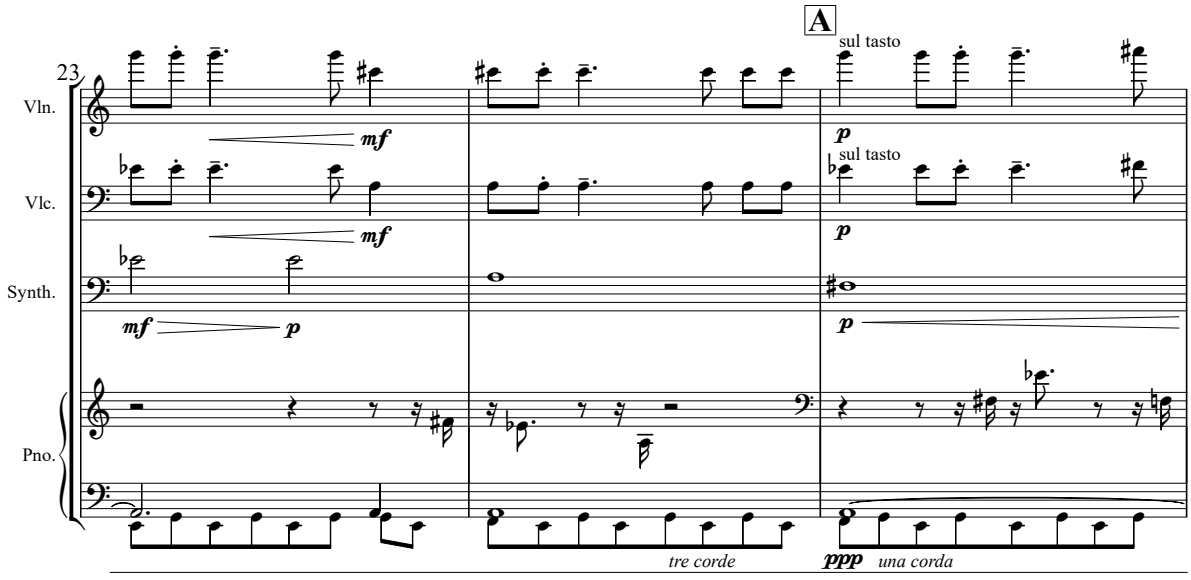
all of old

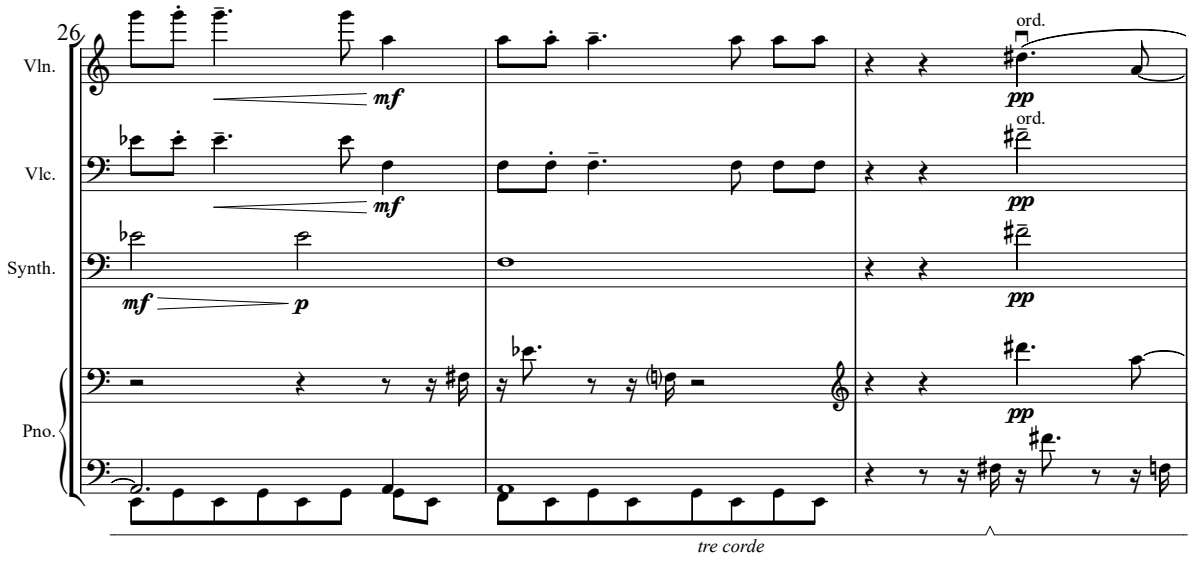
adam mccartney

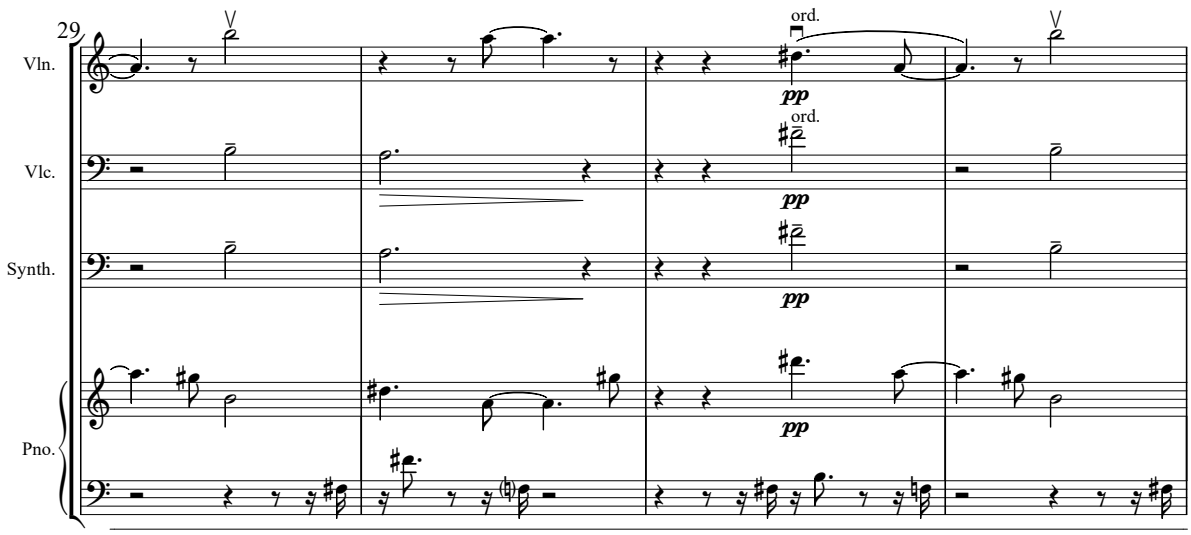


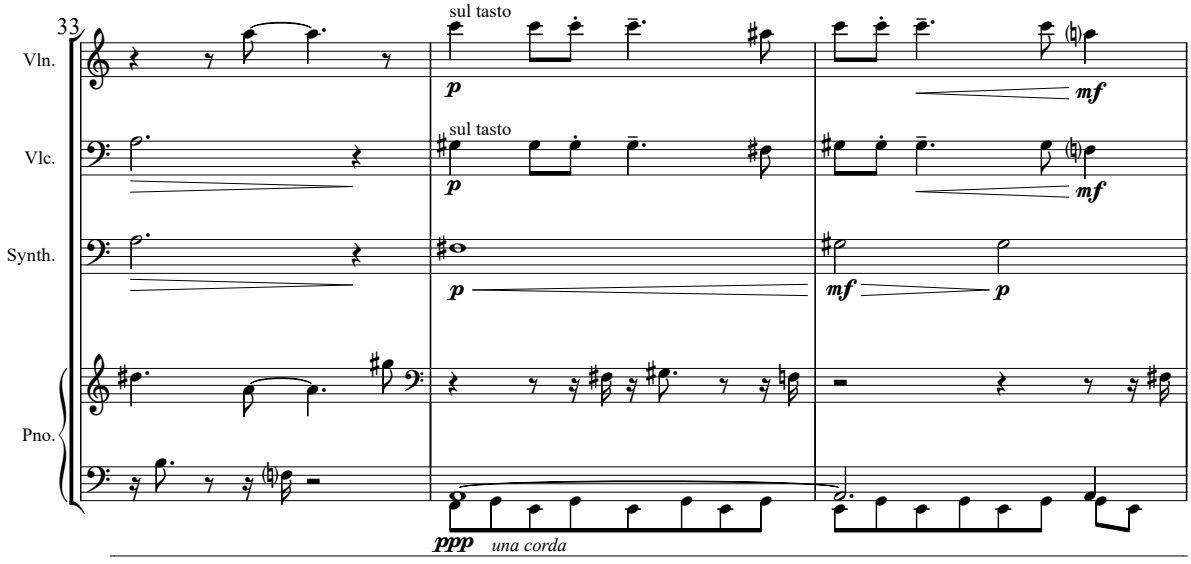

10
Vln.
sul pont.
pp
mp
Vlc.
sul pont.
pp
mp
Synth.
pp
Pno.
mf
13
Vln.
bow tremolo
pp
mp
Vlc.
bow tremolo
pp
mp
Synth.
pp
Pno.
mf
16
Vln.
sul pont.
pp
mp
sul tasto
p
Vlc.
sul pont.
pp
mp
sul tasto
p
Synth.
pp
p
Pno.
mf
ppp una corda

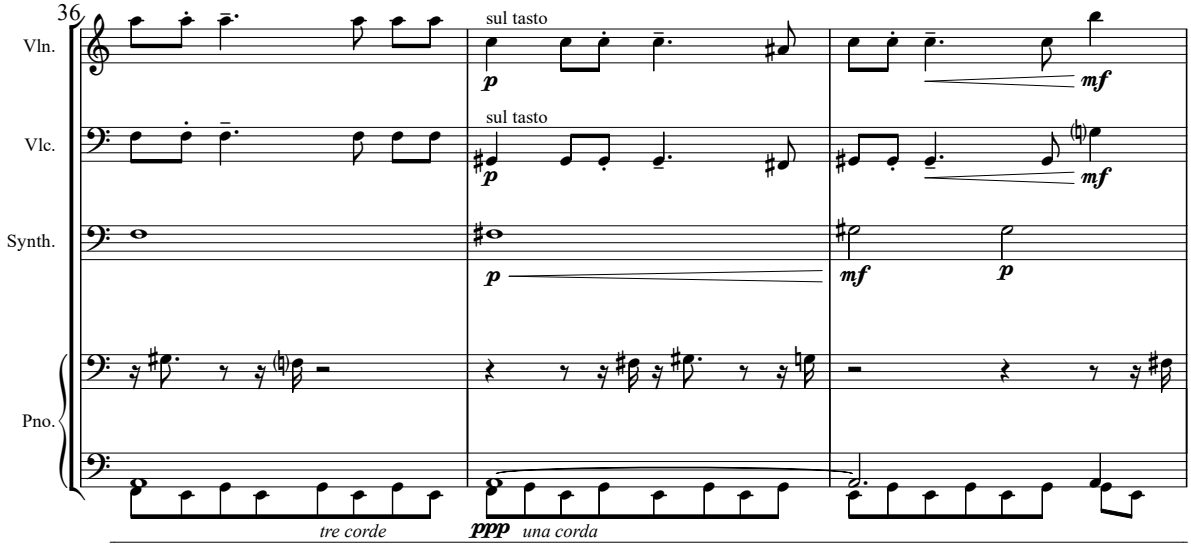

20
Vln.
Vlc.
Synth.
Pno.
mf
p
sul tasto
sul tasto
p
p
tre corde
ppp
una corda

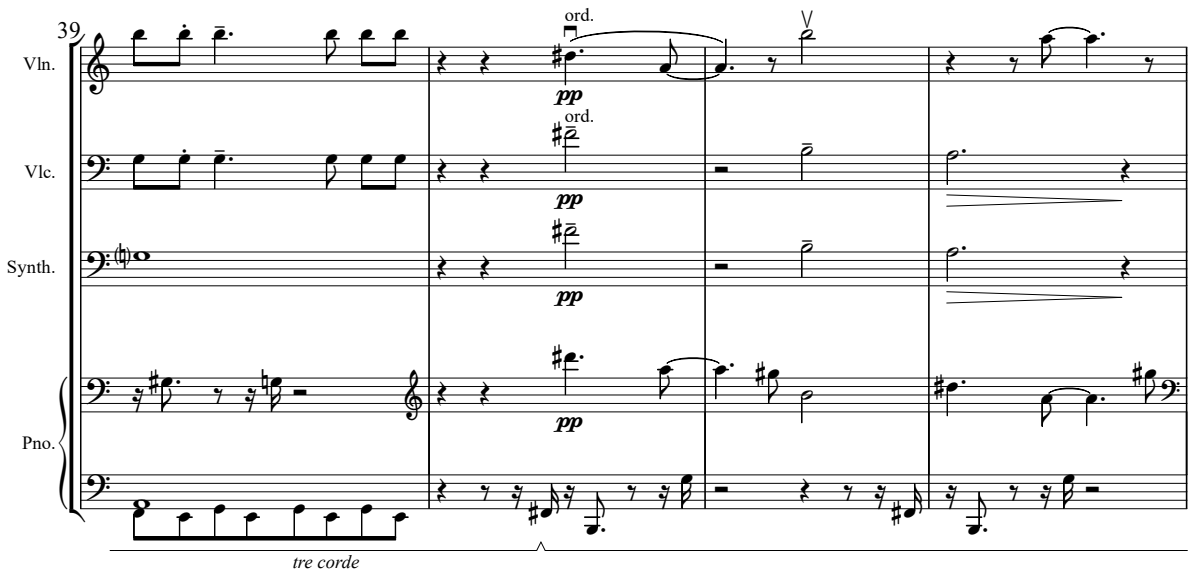

A
23
Vln.
Vlc.
Synth.
Pno.
mf
p
sul tasto
sul tasto
p
p
tre corde
ppp
una corda

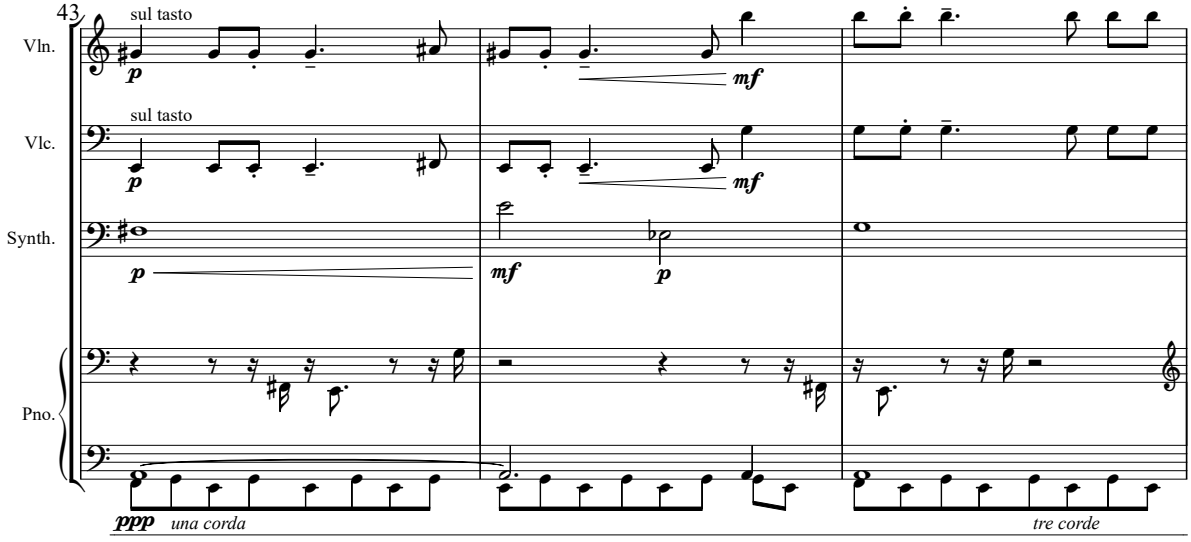

26
Vln.
Vlc.
Synth.
Pno.
mf
p
ord.
ord.
pp
pp
pp
pp
tre corde

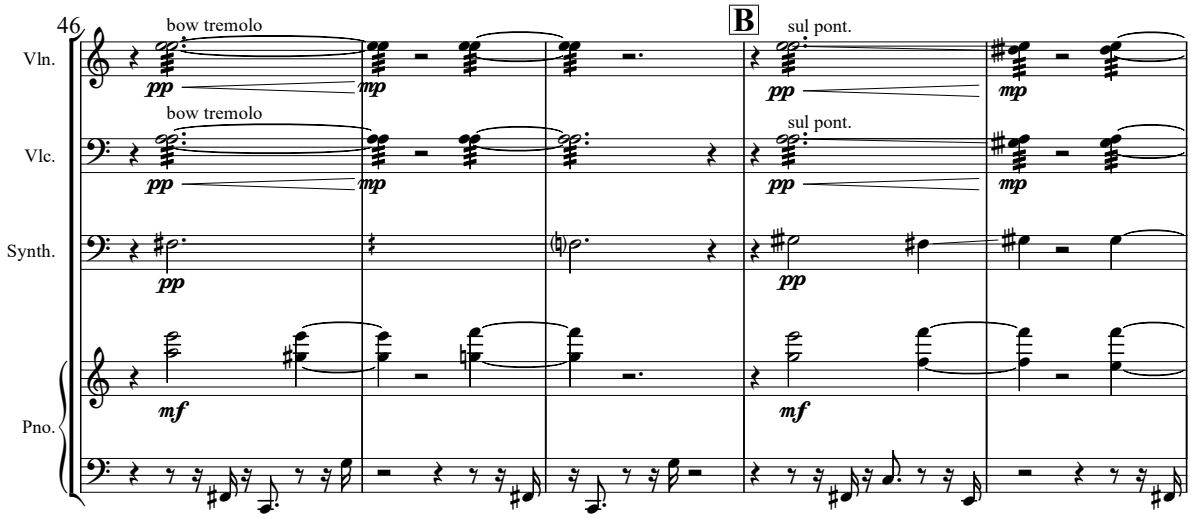

29
Vln.
Vlc.
Synth.
Pno.
ord.
pp
ord.
pp
pp
pp

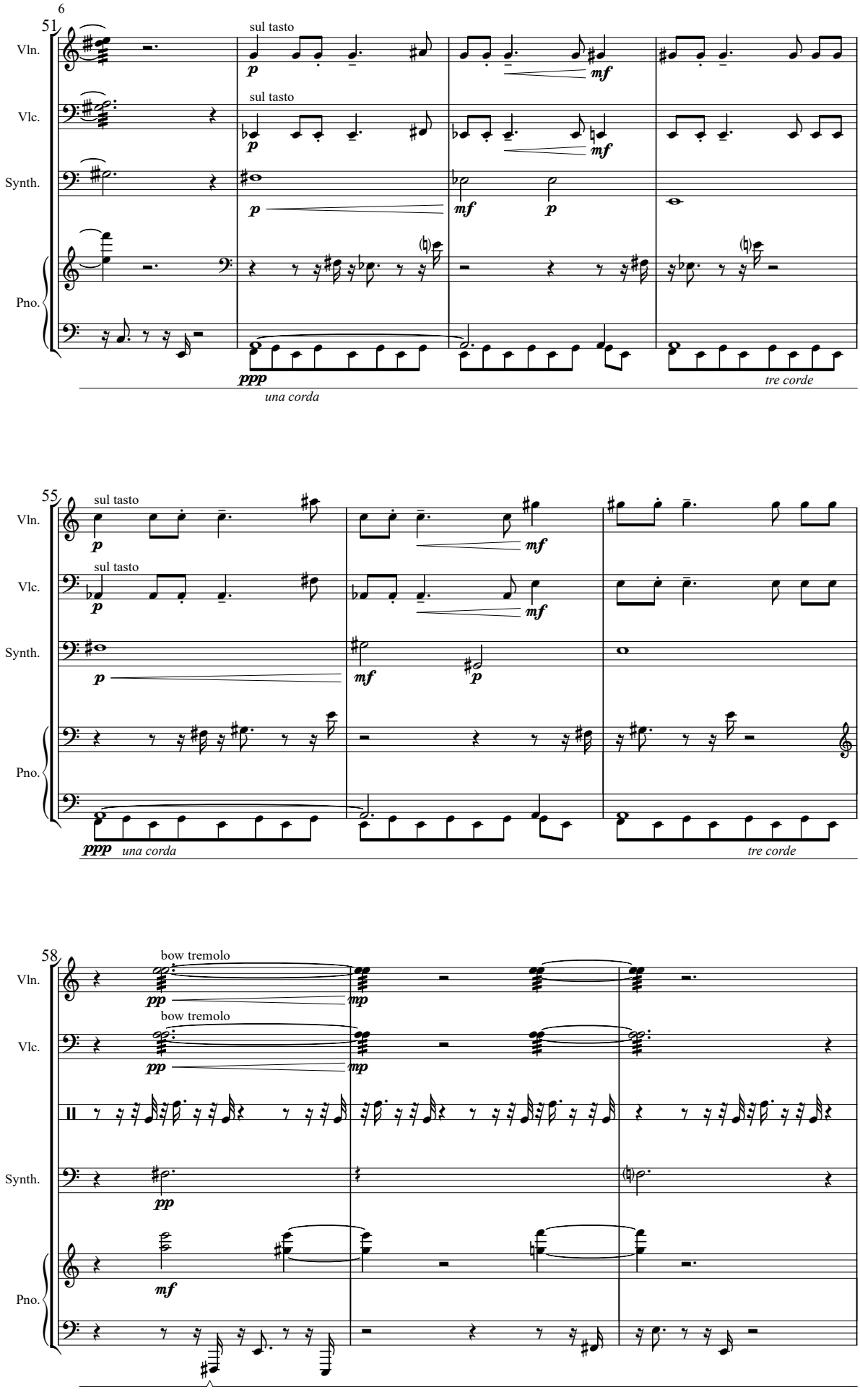

33
Vln.
Vlc.
Synth.
Pno.
sul tasto
p
mf
sul tasto
p
mf
p
mf
p
ppp
una corda

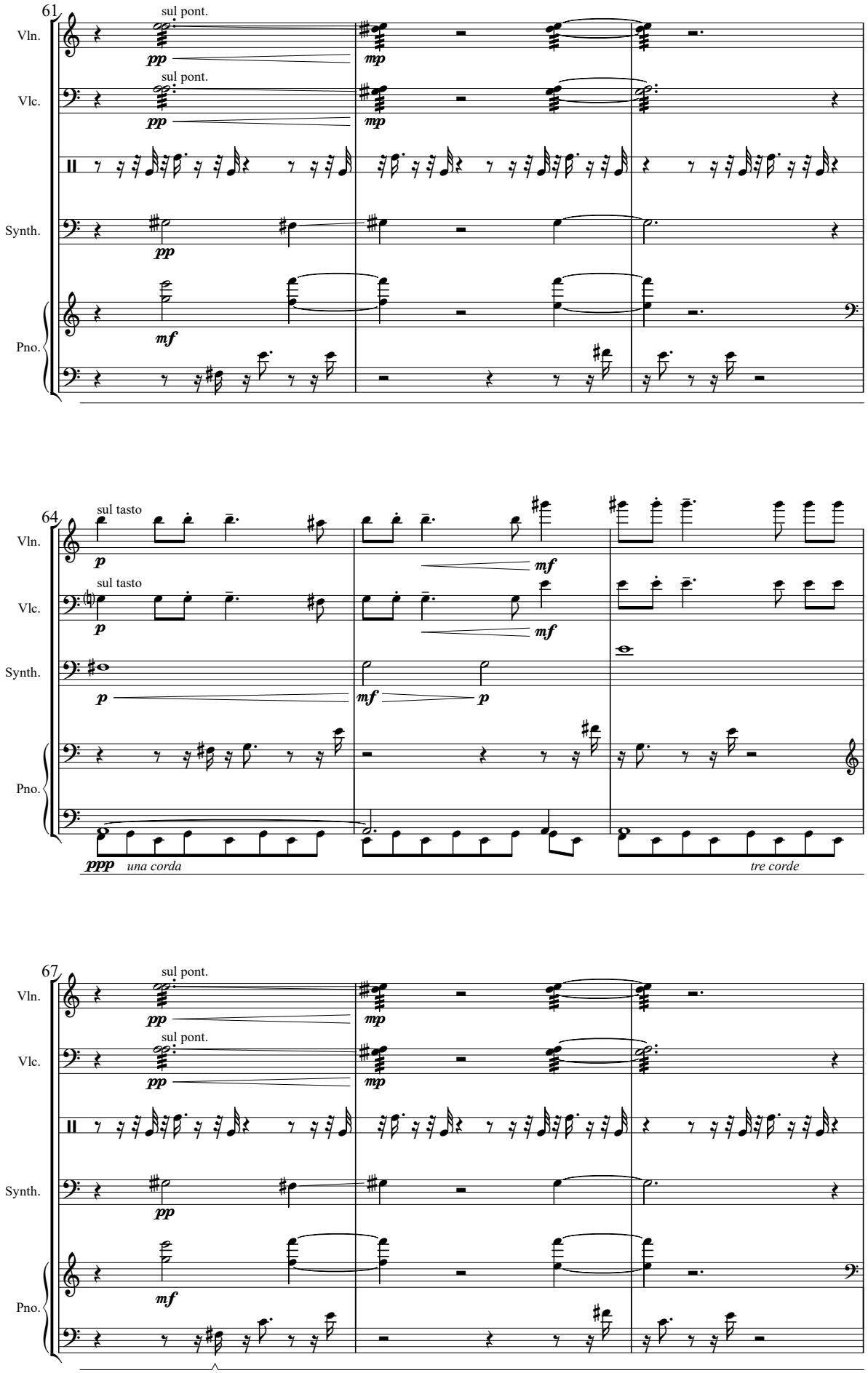

36
Vln.
Vlc.
Synth.
Pno.
sul tasto
p
mf
sul tasto
p
mf
p
mf
p
tre corde
ppp
una corda

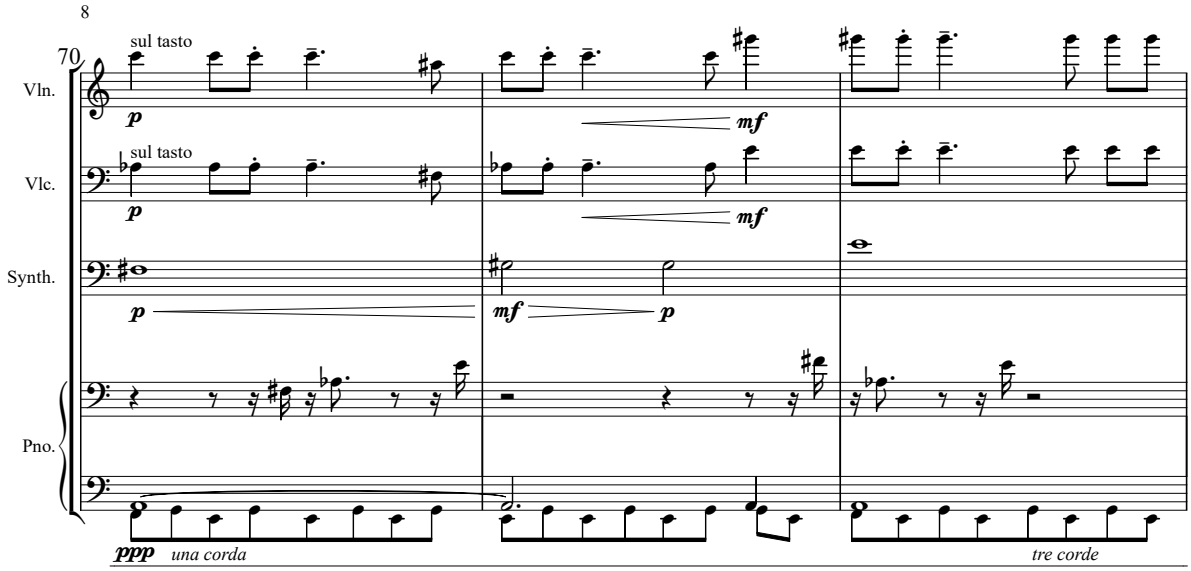

39
Vln.
Vlc.
Synth.
Pno.
ord.
ord.
pp
pp
pp
pp
tre corde

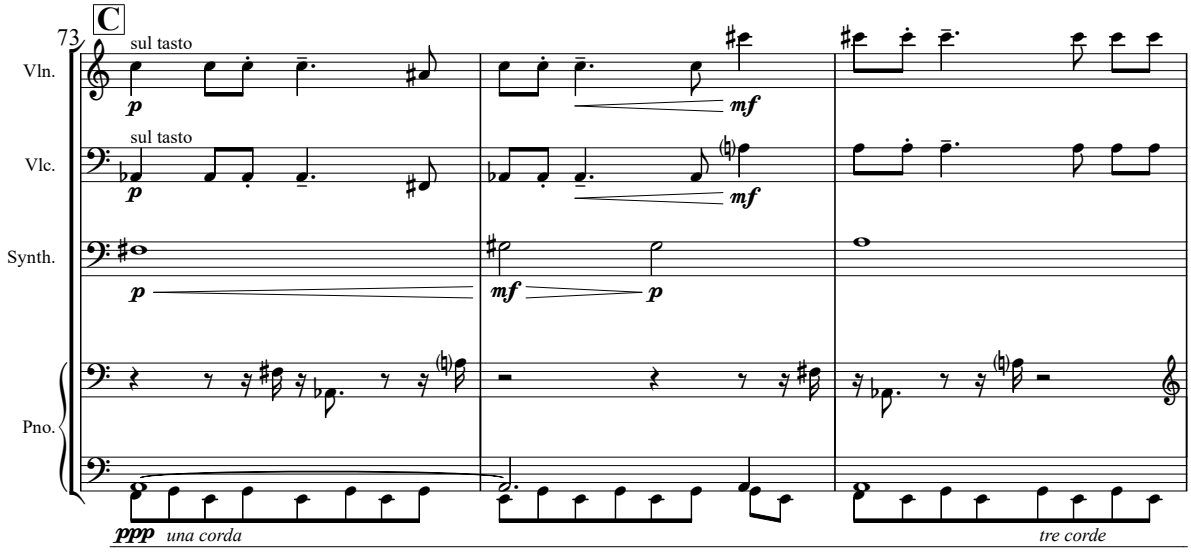

43
Vln.
Vlc.
Synth.
Pno.
sul tasto
sul tasto
p
p
p
mf
mf
p
ppp
una corda
tre corde

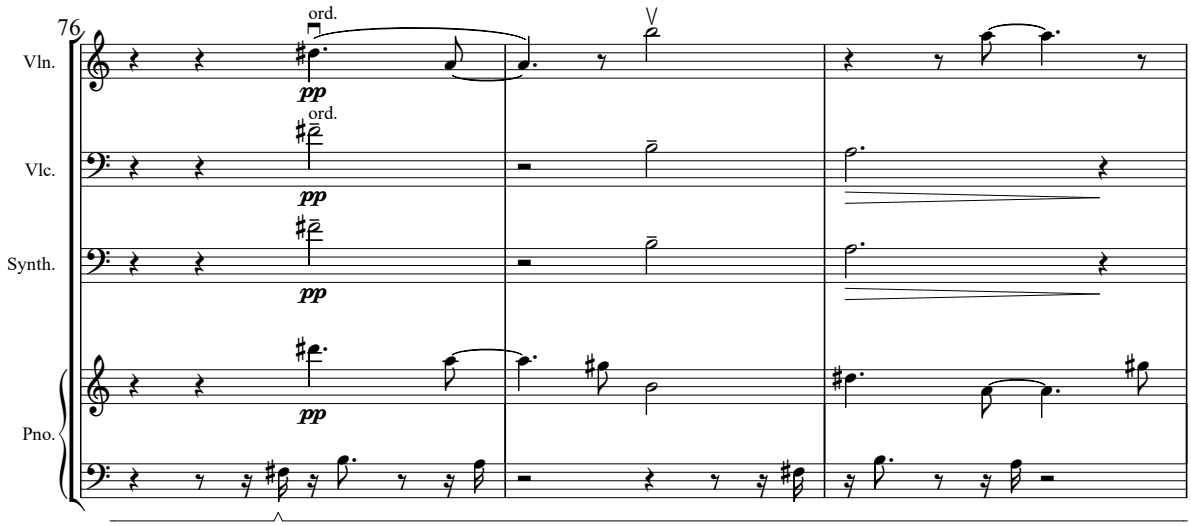

46
Vln.
Vlc.
Synth.
Pno.
bow tremolo
bow tremolo
B
sul pont.
sul pont.
pp
mp
pp
mp
pp
mp
pp
mp
pp
pp
mf
mf

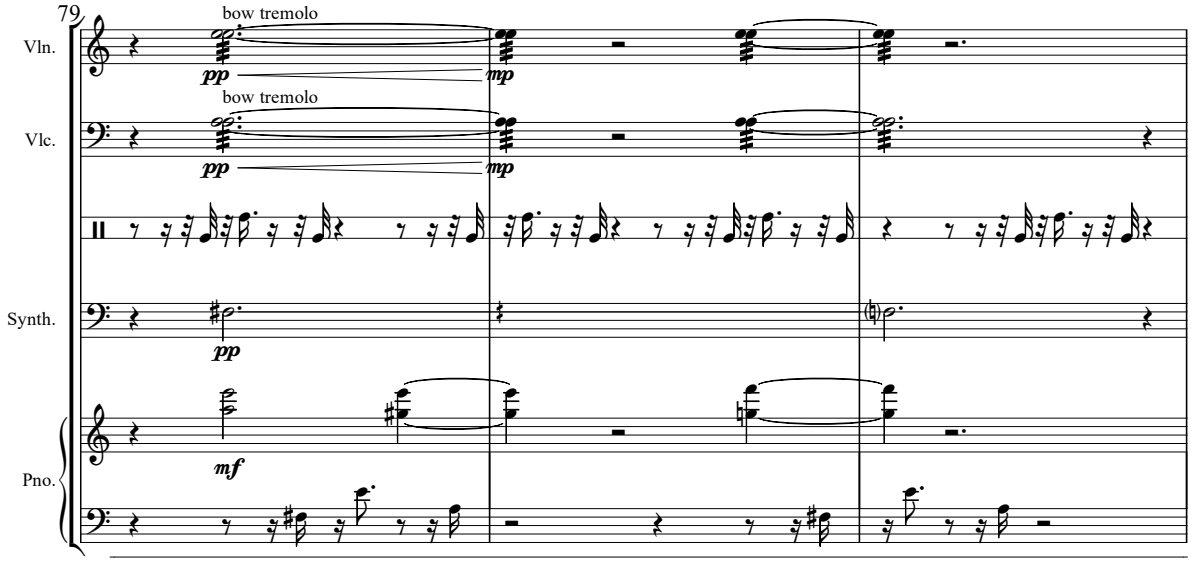

51
Vln.
Vlc.
Synth.
Pno.
sul tasto
sul tasto
p
mf
ppp
una corda
tre corde
55
58
bow tremolo
pp
mp

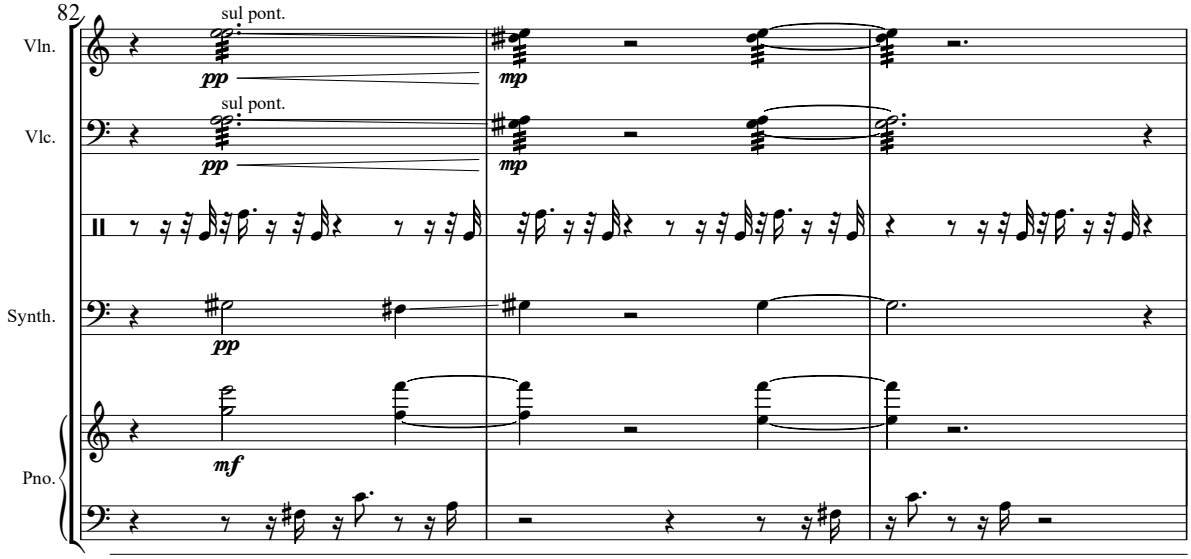

61
Vln.
sul pont.
pp
mp
Vlc.
sul pont.
pp
mp
Synth.
pp
Pno.
mf
64
Vln.
sul tasto
p
mf
Vlc.
sul tasto
p
mf
Synth.
p
mf
p
Pno.
ppp
una corda
tre corde
67
Vln.
sul pont.
pp
mp
Vlc.
sul pont.
pp
mp
Synth.
pp
Pno.
mf

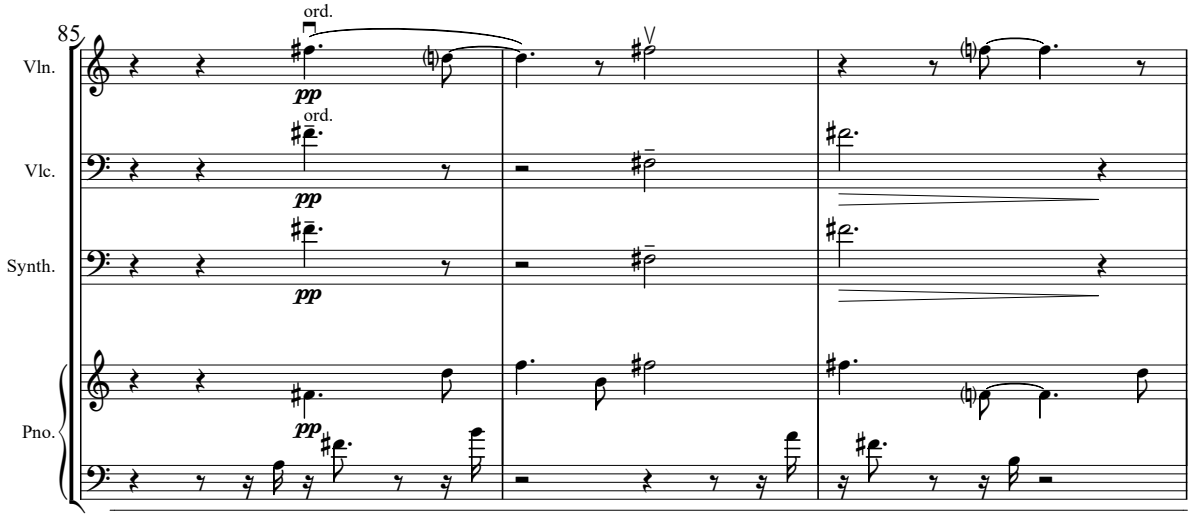

70
Vln.
sul tasto
p
mf
Vlc.
sul tasto
p
mf
Synth.
p
mf
p
Pno.
ppp
una corda
tre corde

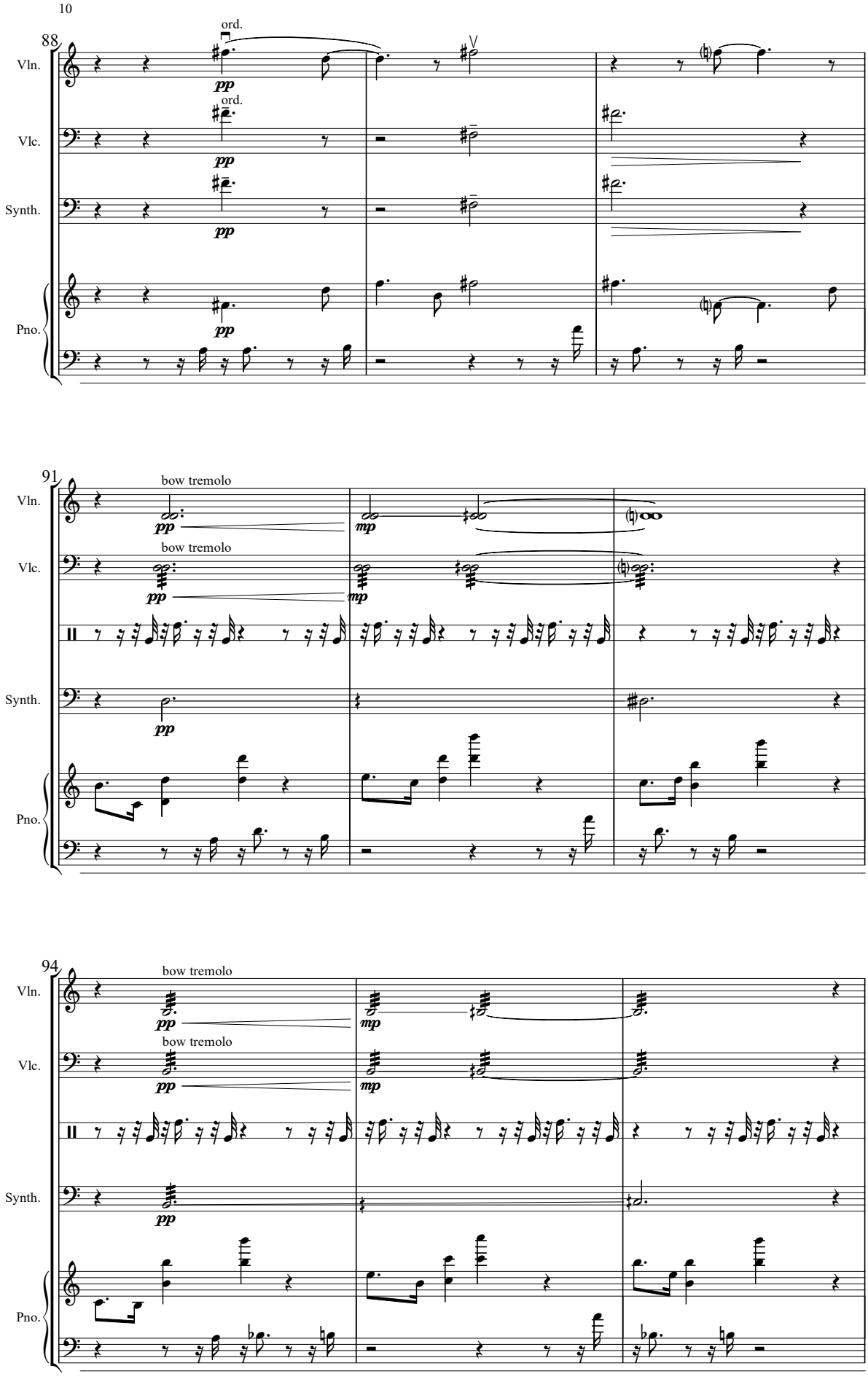

C
73
Vln.
sul tasto
p
mf
Vlc.
sul tasto
p
mf
Synth.
p
mf
p
Pno.
ppp
una corda
tre corde

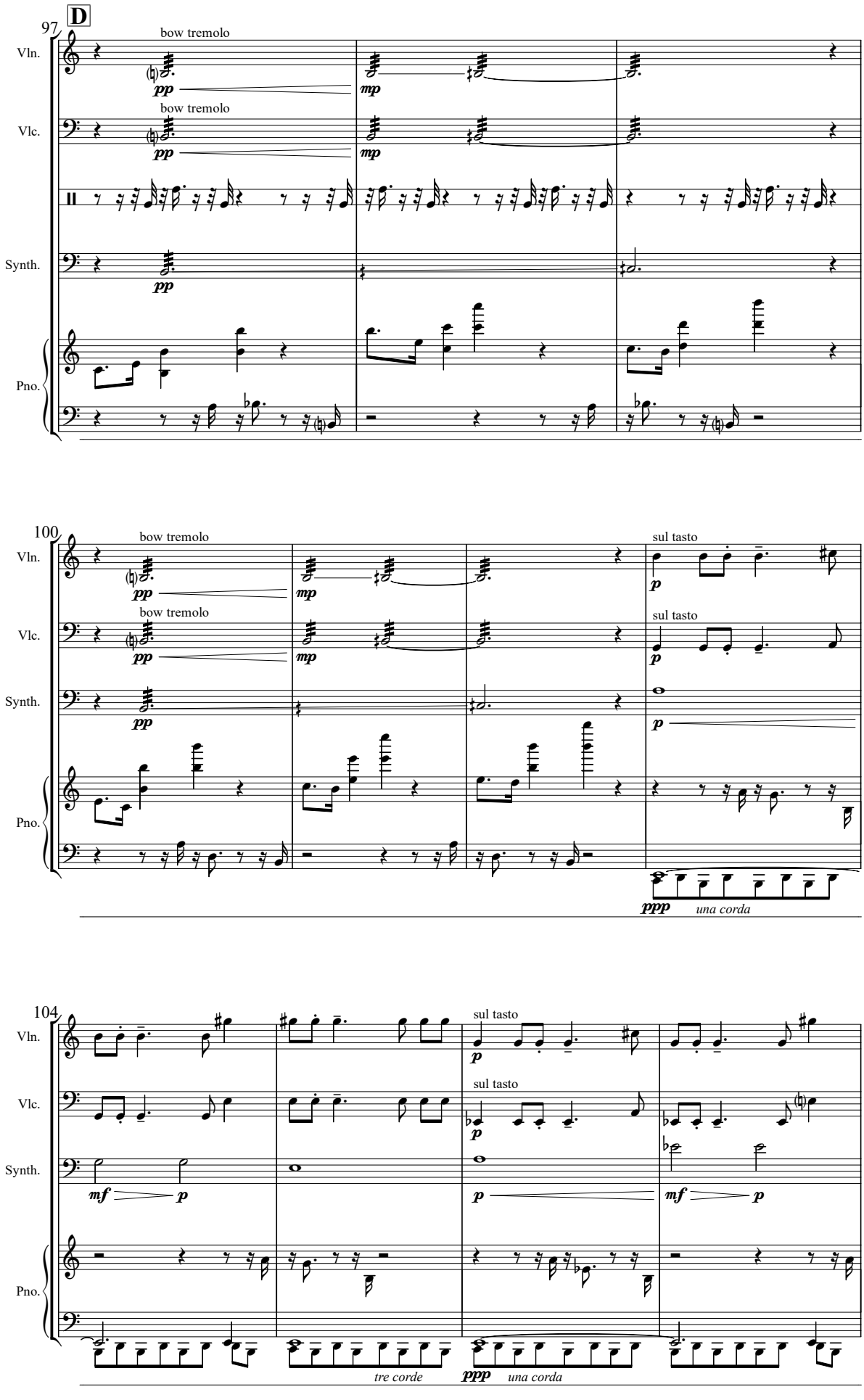

76
Vln.
ord.
pp
Vlc.
ord.
pp
Synth.
pp
Pno.
pp

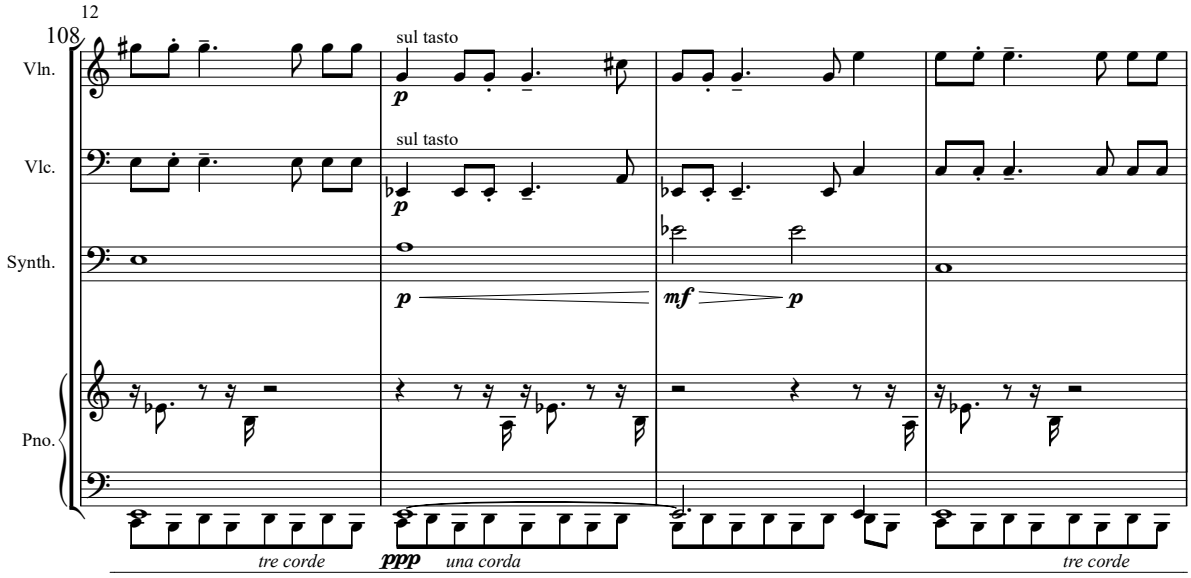

79
Vln.
bow tremolo
pp
mp
Vlc.
bow tremolo
pp
mp
Synth.
pp
Pno.
mf

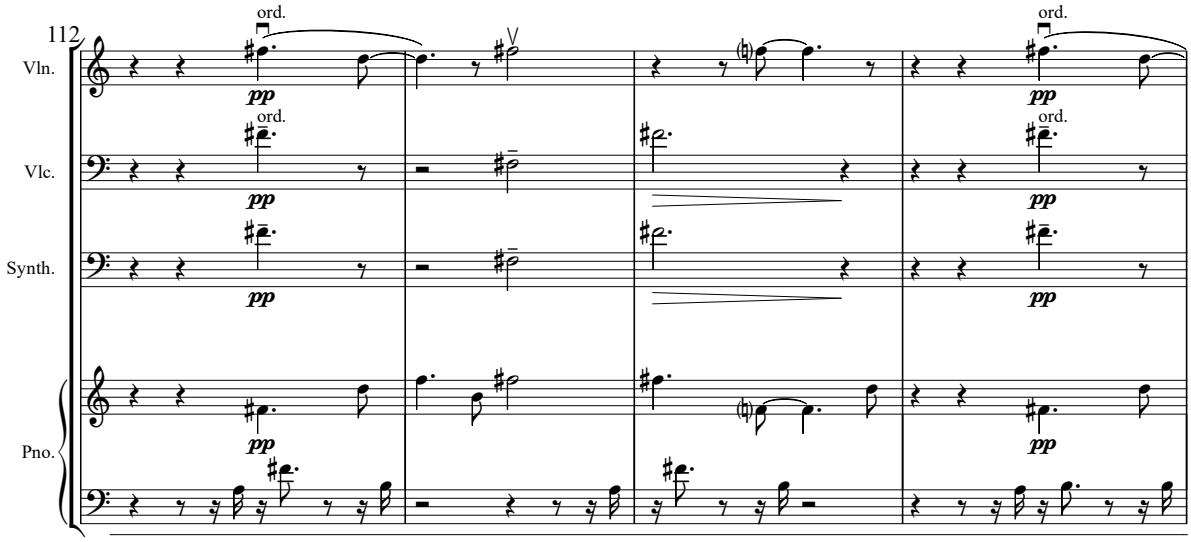

82
Vln.
sul pont.
pp
mp
Vlc.
sul pont.
pp
mp
Synth.
pp
Pno.
mf

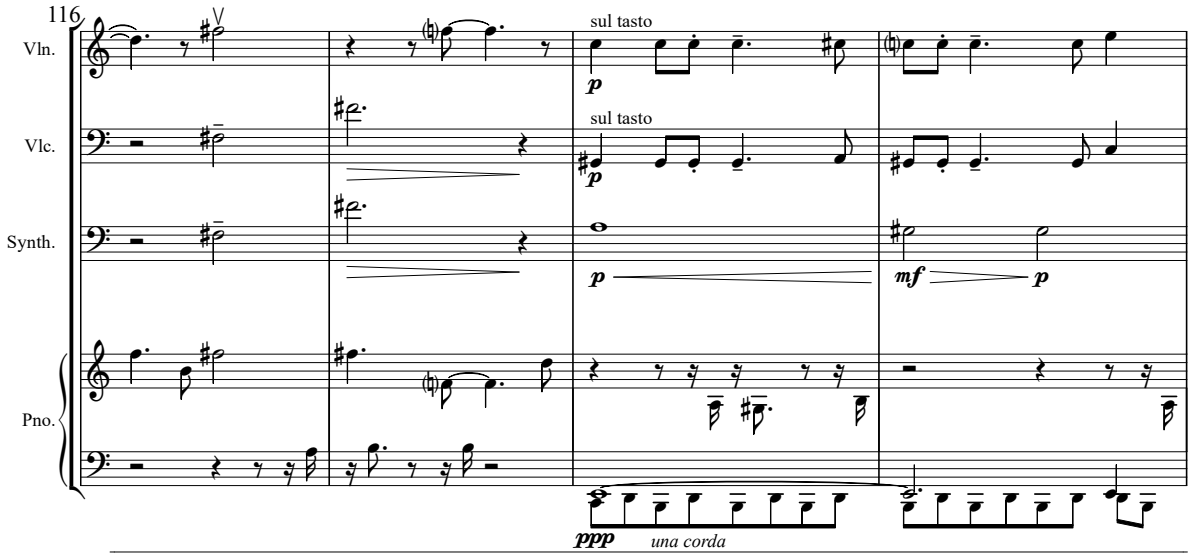

85
Vln.
ord.
pp
Vlc.
ord.
pp
Synth.
pp
Pno.
pp

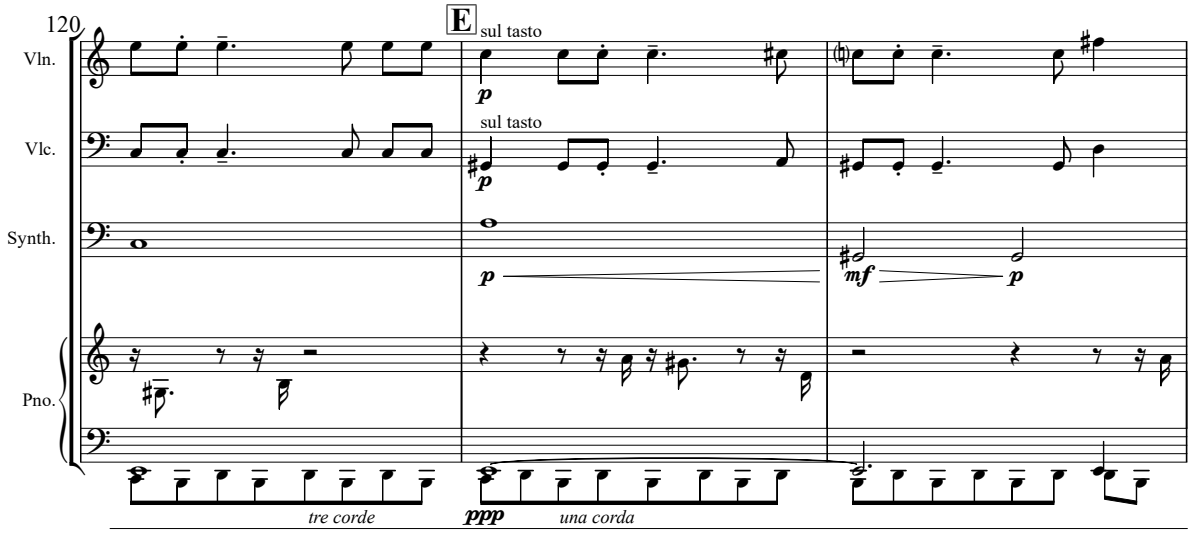

88
Vln.
ord.
pp
Vlc.
ord.
pp
Synth.
pp
Pno.
pp
91
Vln.
bow tremolo
pp
mp
Vlc.
bow tremolo
pp
mp
Synth.
pp
Pno.
94
Vln.
bow tremolo
pp
mp
Vlc.
bow tremolo
pp
mp
Synth.
pp
Pno.

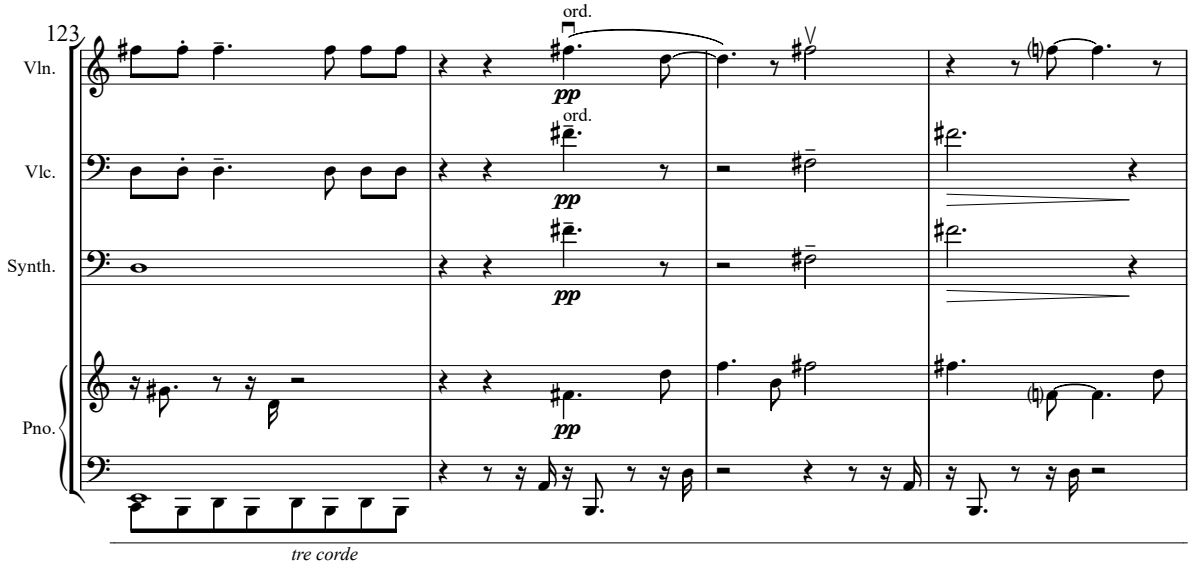

97
D
Vln.
bow tremolo
pp
mp
Vlc.
bow tremolo
pp
mp
Synth.
pp
Pno.
100
Vln.
bow tremolo
pp
mp
sul tasto
p
Vlc.
bow tremolo
pp
mp
sul tasto
p
Synth.
pp
p
Pno.
ppp
una corda
104
Vln.
sul tasto
p
Vlc.
sul tasto
p
Synth.
mf
p
p
mf
p
Pno.
tre corde
ppp
una corda

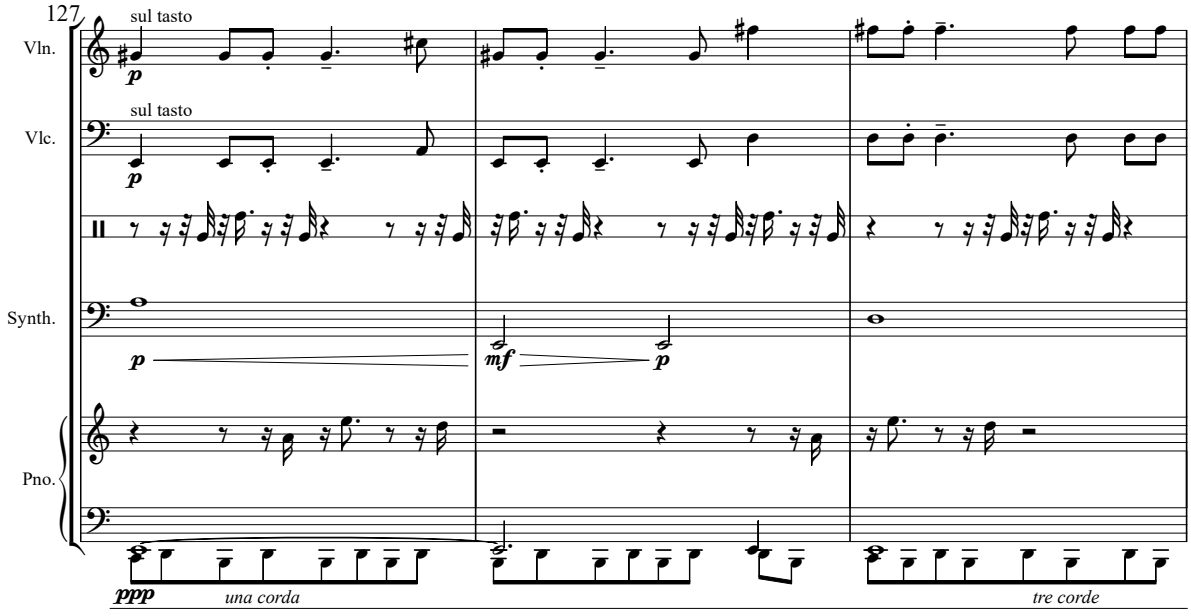

108
Vln.
Vlc.
Synth.
Pno.
sul tasto
sul tasto
p
p
p
mf
p
tre corde
ppp
una corda
tre corde

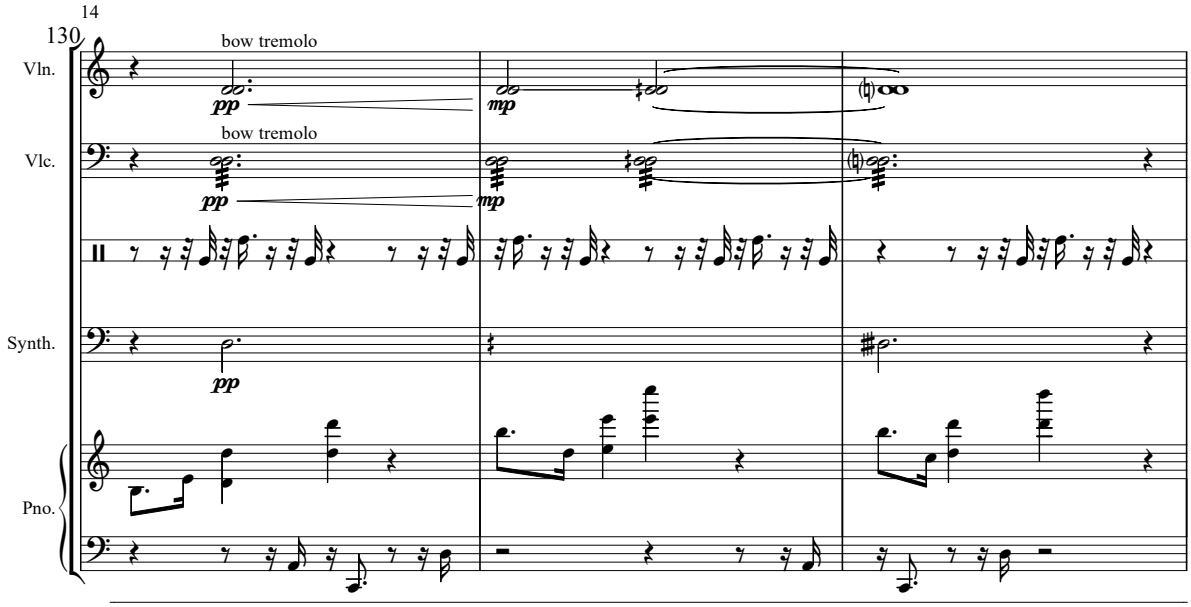

112
Vln.
Vlc.
Synth.
Pno.
ord.
ord.
ord.
ord.
pp

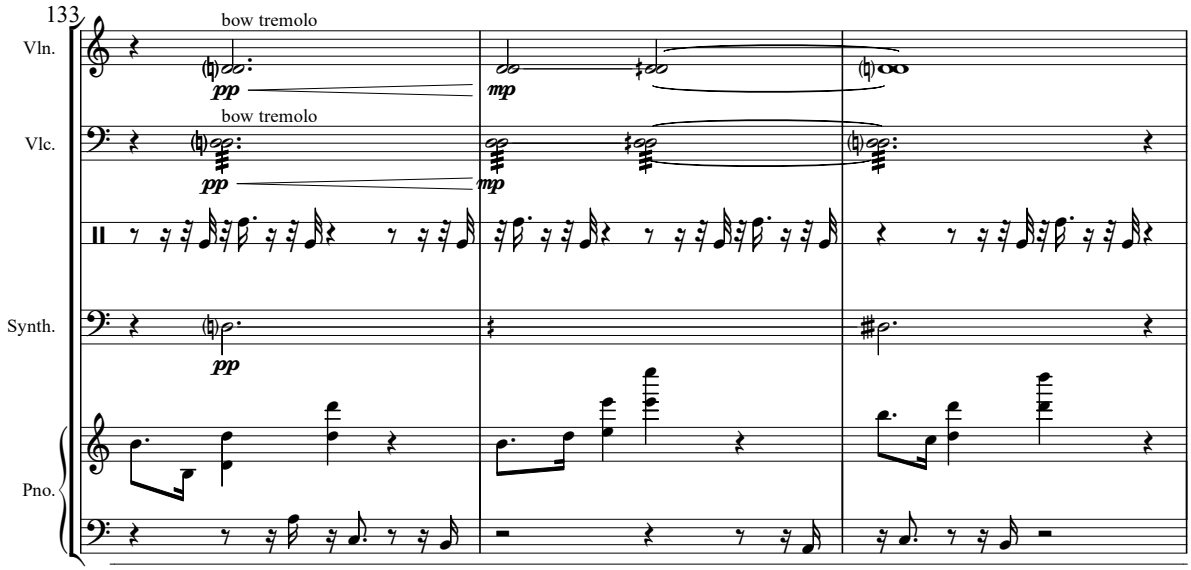

116
Vln.
Vlc.
Synth.
Pno.
sul tasto
sul tasto
p
mf
p
ppp
una corda

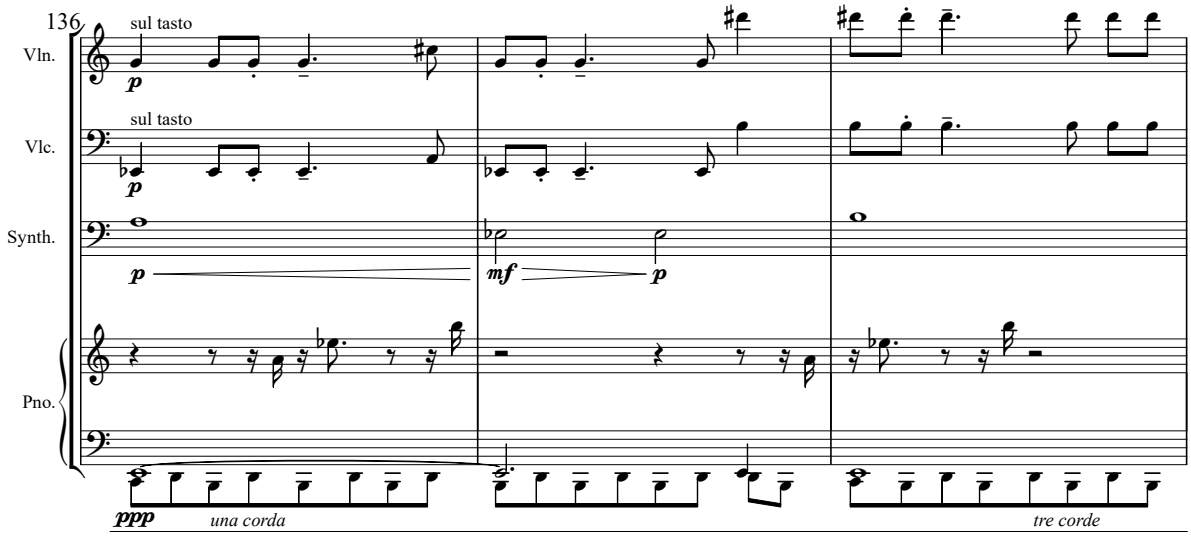

120
E
sul tasto
Vln.
Vlc.
Synth.
Pno.
p
mf
ppp
tre corde
una corda

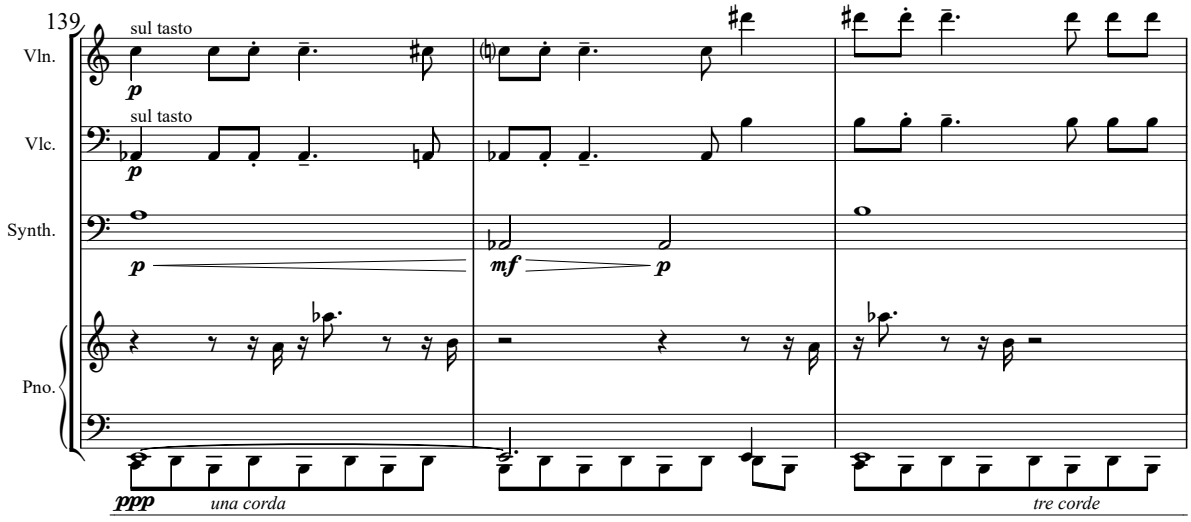

123
ord.
Vln.
Vlc.
Synth.
Pno.
pp
tre corde

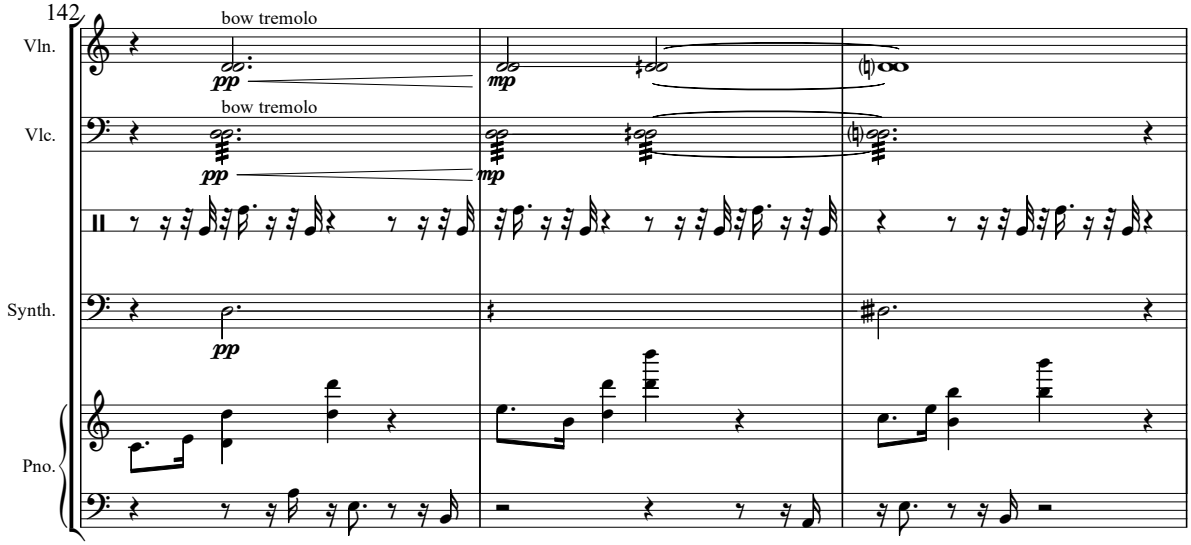

127
sul tasto
Vln.
Vlc.
Synth.
Pno.
p
mf
ppp
una corda
tre corde

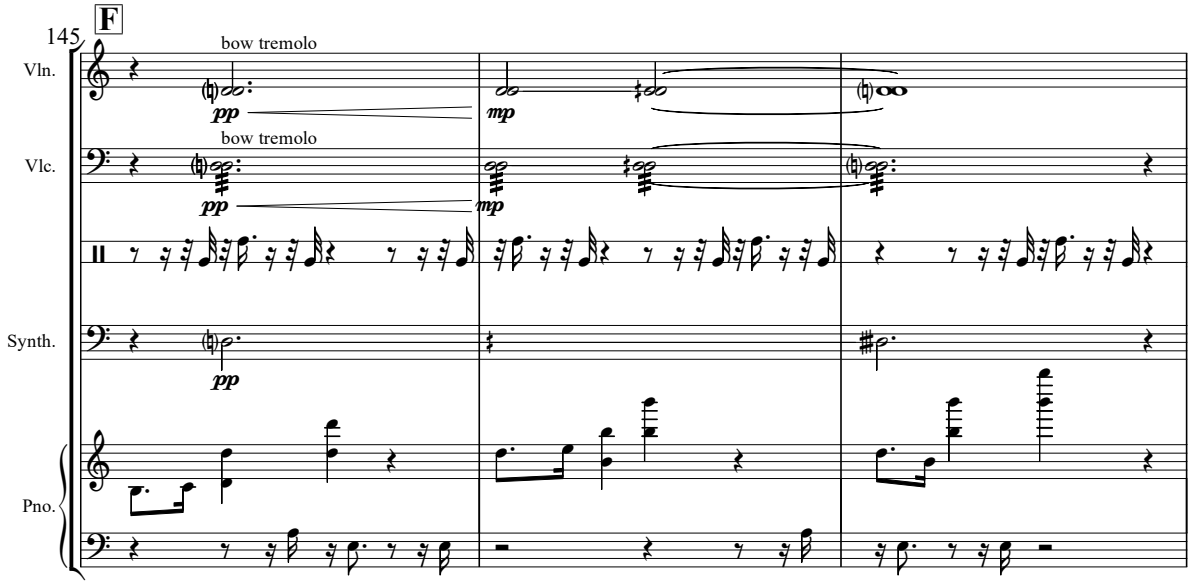

130
Vln.
bow tremolo
pp
mp
Vlc.
bow tremolo
pp
mp
Synth.
pp
Pno.

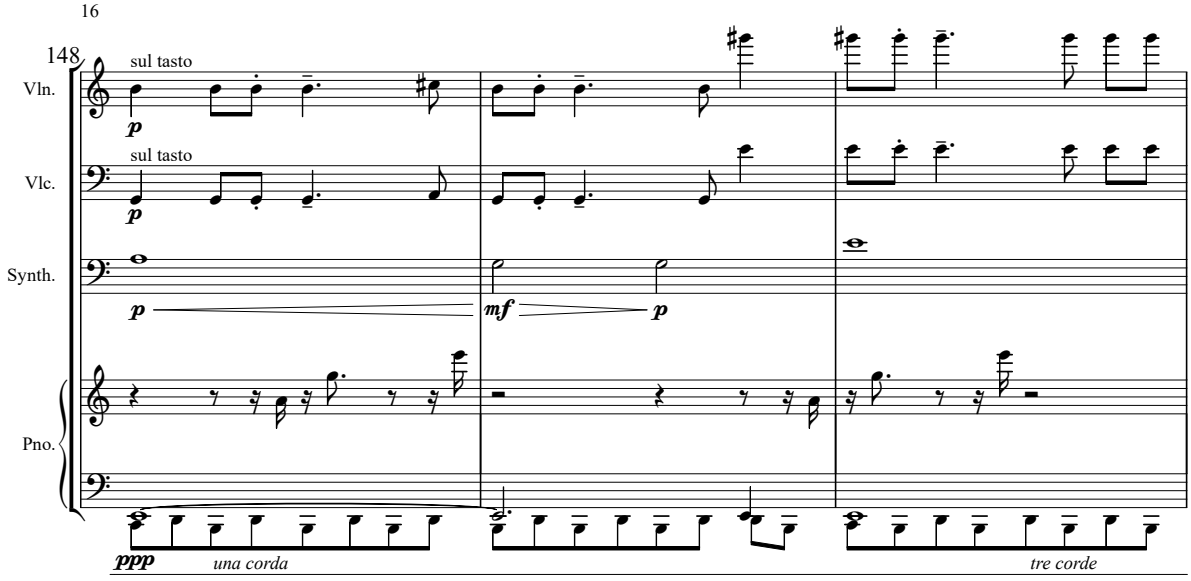

133
Vln.
bow tremolo
pp
mp
Vlc.
bow tremolo
pp
mp
Synth.
pp
Pno.

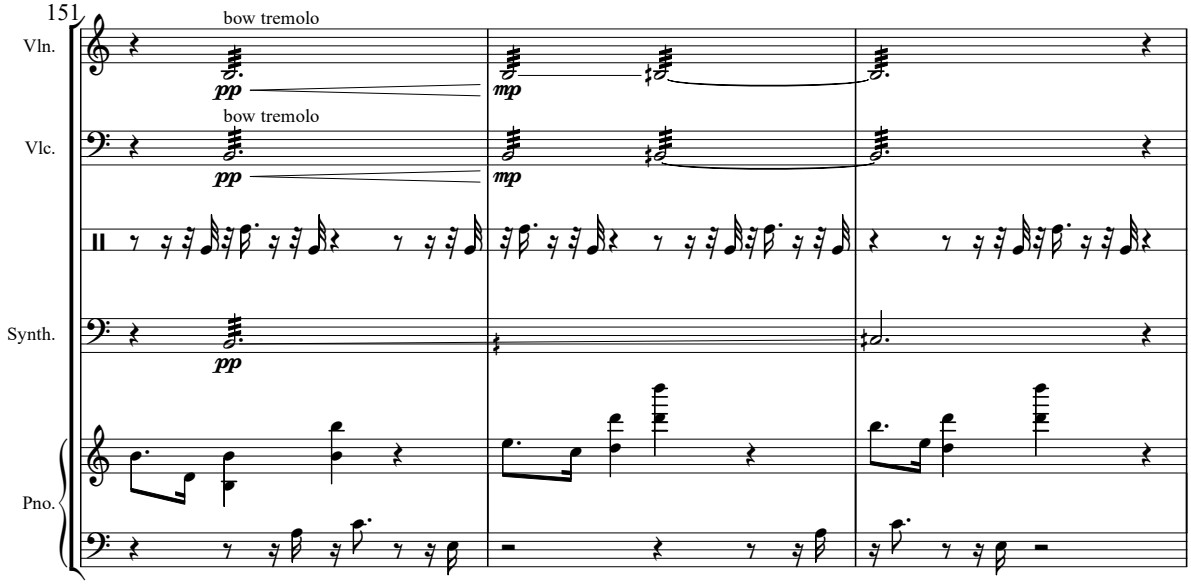

136
Vln.
sul tasto
p
Vlc.
sul tasto
p
Synth.
p
mf
p
Pno.
ppp
una corda
tre corde

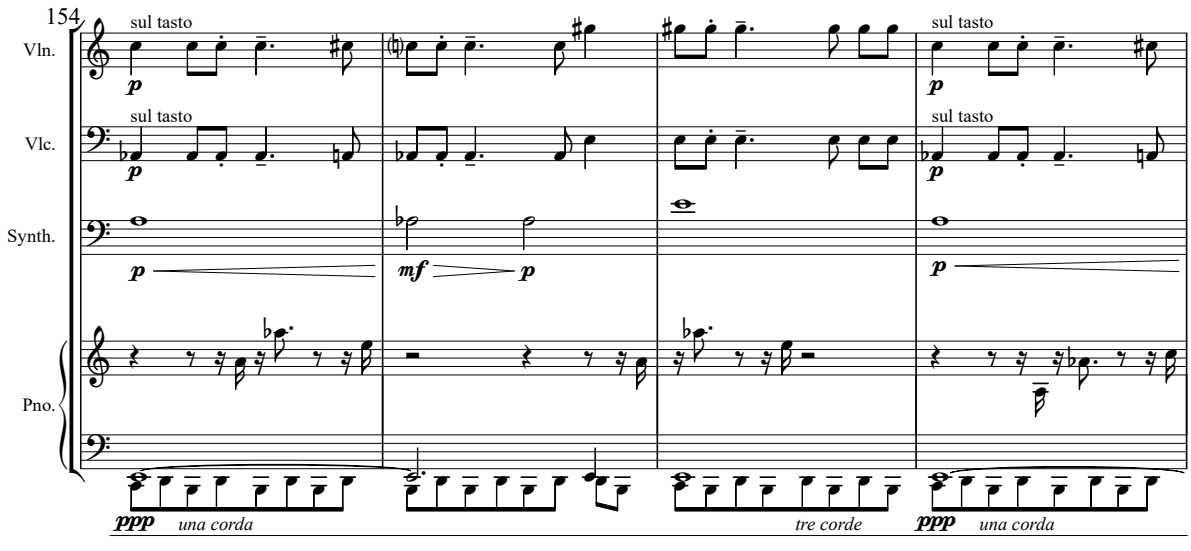

139
Vln.
sul tasto
p
Vlc.
sul tasto
p
Synth.
p
mf
p
Pno.
ppp
una corda
tre corde

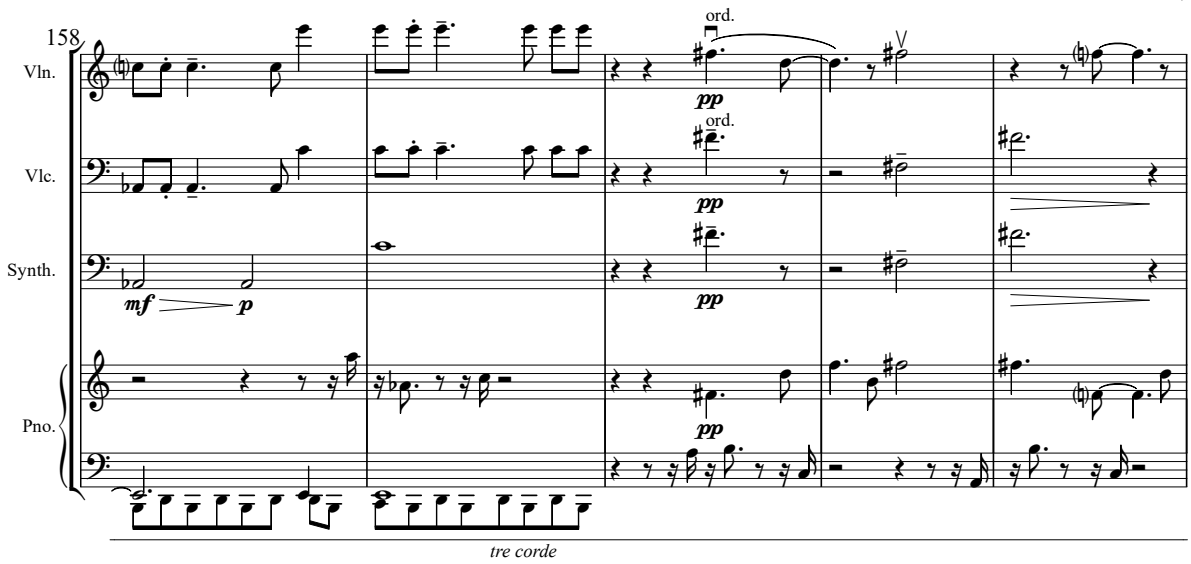

142
Vln.
bow tremolo
pp
mp
Vlc.
bow tremolo
pp
mp
Synth.
pp
Pno.

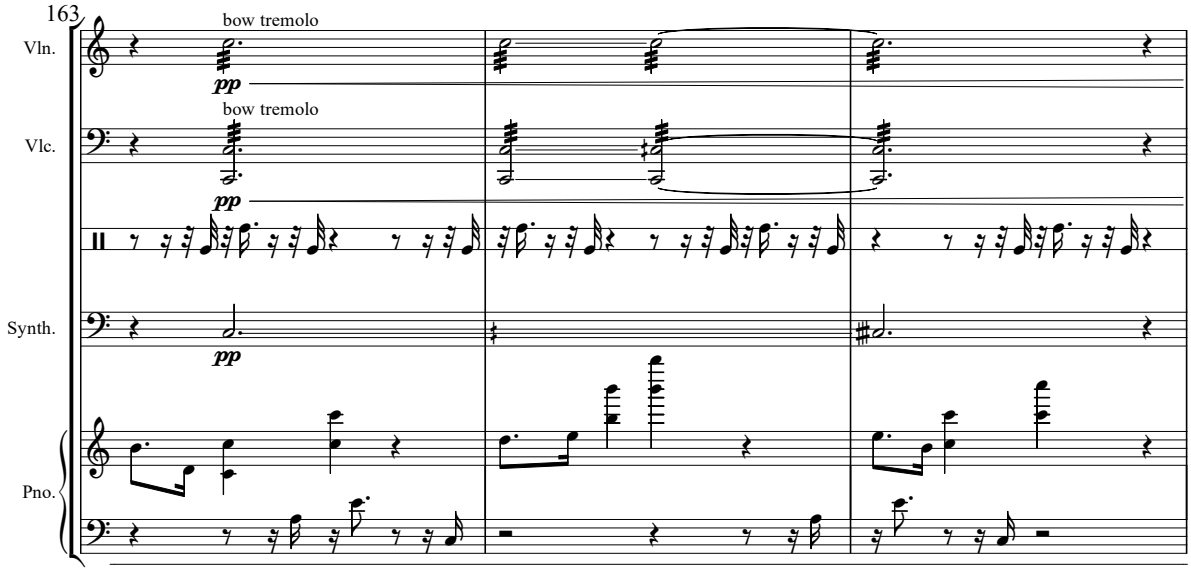

145
F
Vln.
bow tremolo
pp
mp
Vlc.
bow tremolo
pp
mp
Synth.
pp
Pno.

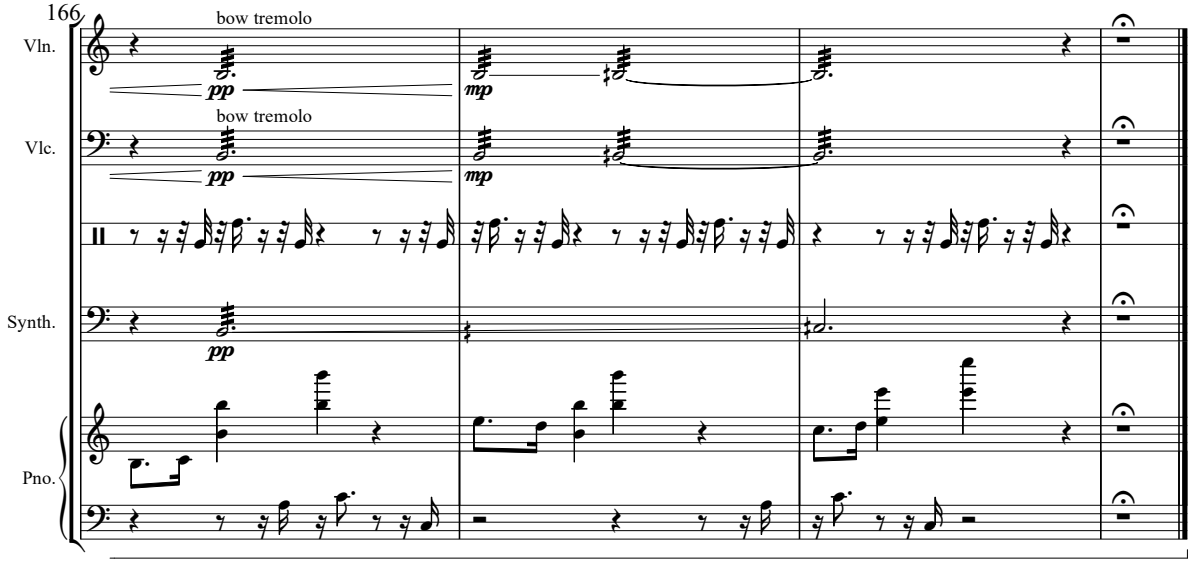

148
Vln.
sul tasto
p
Vlc.
sul tasto
p
Synth.
p
mf
p
Pno.
ppp
una corda
tre corde


151
Vln.
bow tremolo
pp
mp
Vlc.
bow tremolo
pp
mp
Synth.
pp
Pno.


154
Vln.
sul tasto
p
sul tasto
p
Vlc.
sul tasto
p
sul tasto
p
Synth.
p
mf
p
p
Pno.
ppp
una corda
tre corde
ppp
una corda


158
Vln.
Vlc.
Synth.
Pno.
ord.
pp
mf
p
tre corde


163
Vln.
Vlc.
Synth.
Pno.
bow tremolo
pp


166
Vln.
Vlc.
Synth.
Pno.
bow tremolo
pp
mp

0.3 Parts

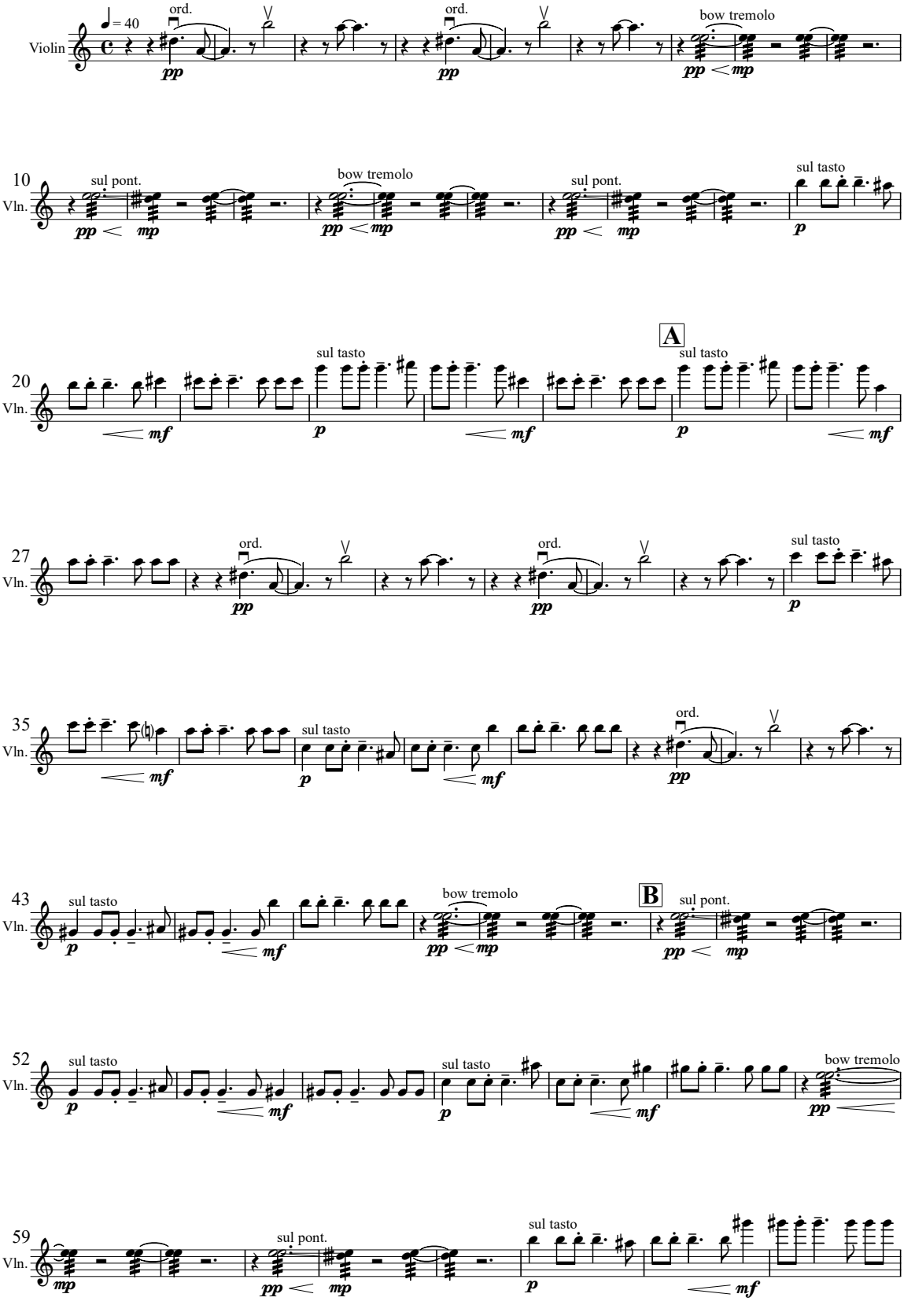
blankpage

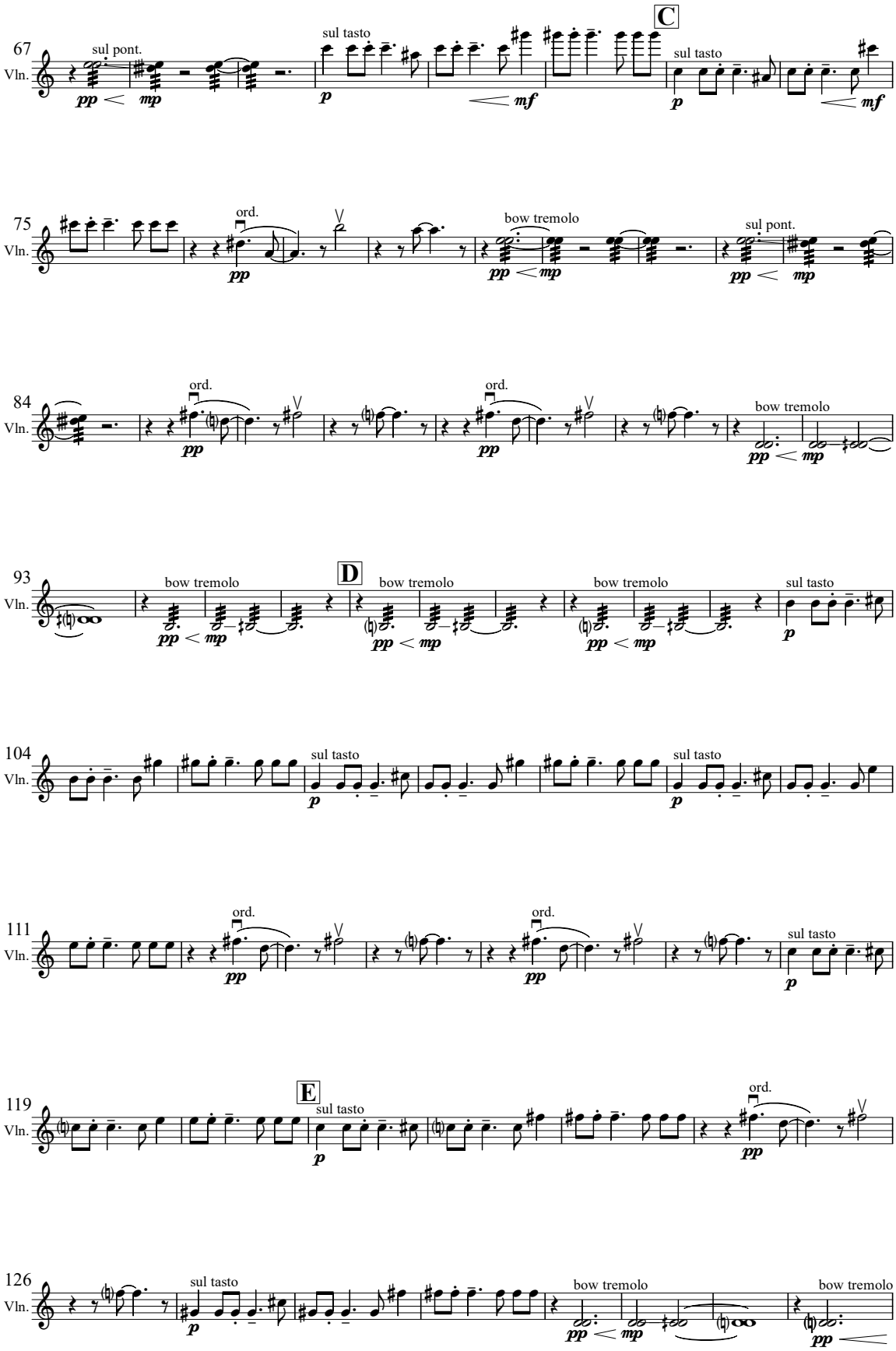
0.3.1 Violin

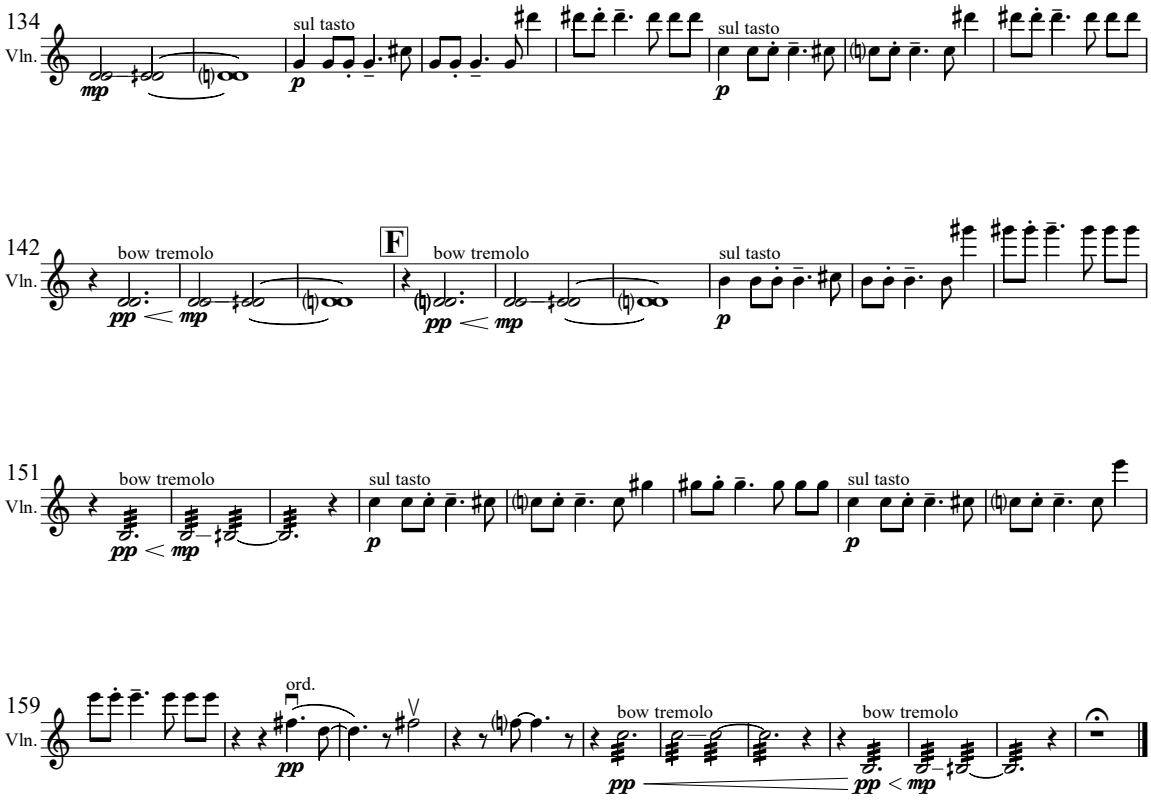
all of old

violin part

adam mccartney




67
Vln.
sul pont.
pp
mp
sul tasto
p
mf
C
sul tasto
p
mf
75
Vln.
ord.
pp
bow tremolo
pp
mp
sul pont.
pp
mp
84
Vln.
ord.
pp
ord.
pp
bow tremolo
pp
mp
93
Vln.
bow tremolo
pp
mp
D
bow tremolo
pp
mp
bow tremolo
pp
mp
sul tasto
p
104
Vln.
sul tasto
p
sul tasto
p
111
Vln.
ord.
pp
ord.
pp
sul tasto
p
119
Vln.
E
sul tasto
p
ord.
pp
126
Vln.
sul tasto
p
bow tremolo
pp
mp
bow tremolo
pp

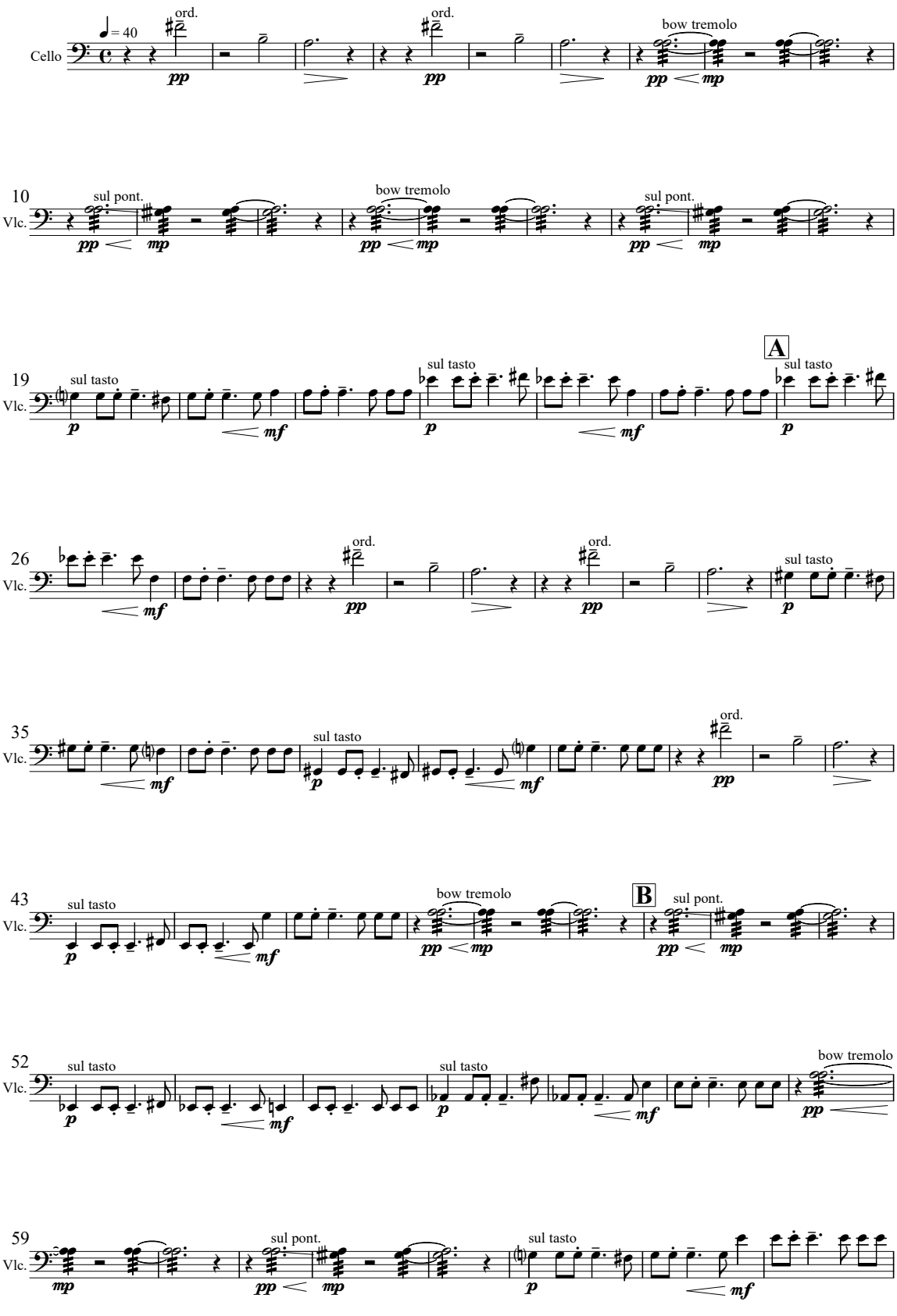

134
Vln.
mp
sul tasto
p
sul tasto
p
142
Vln.
bow tremolo
pp < mp
F
bow tremolo
pp < mp
sul tasto
p
151
Vln.
bow tremolo
pp < mp
sul tasto
p
sul tasto
p
159
Vln.
ord.
pp
bow tremolo
pp
bow tremolo
pp < mp

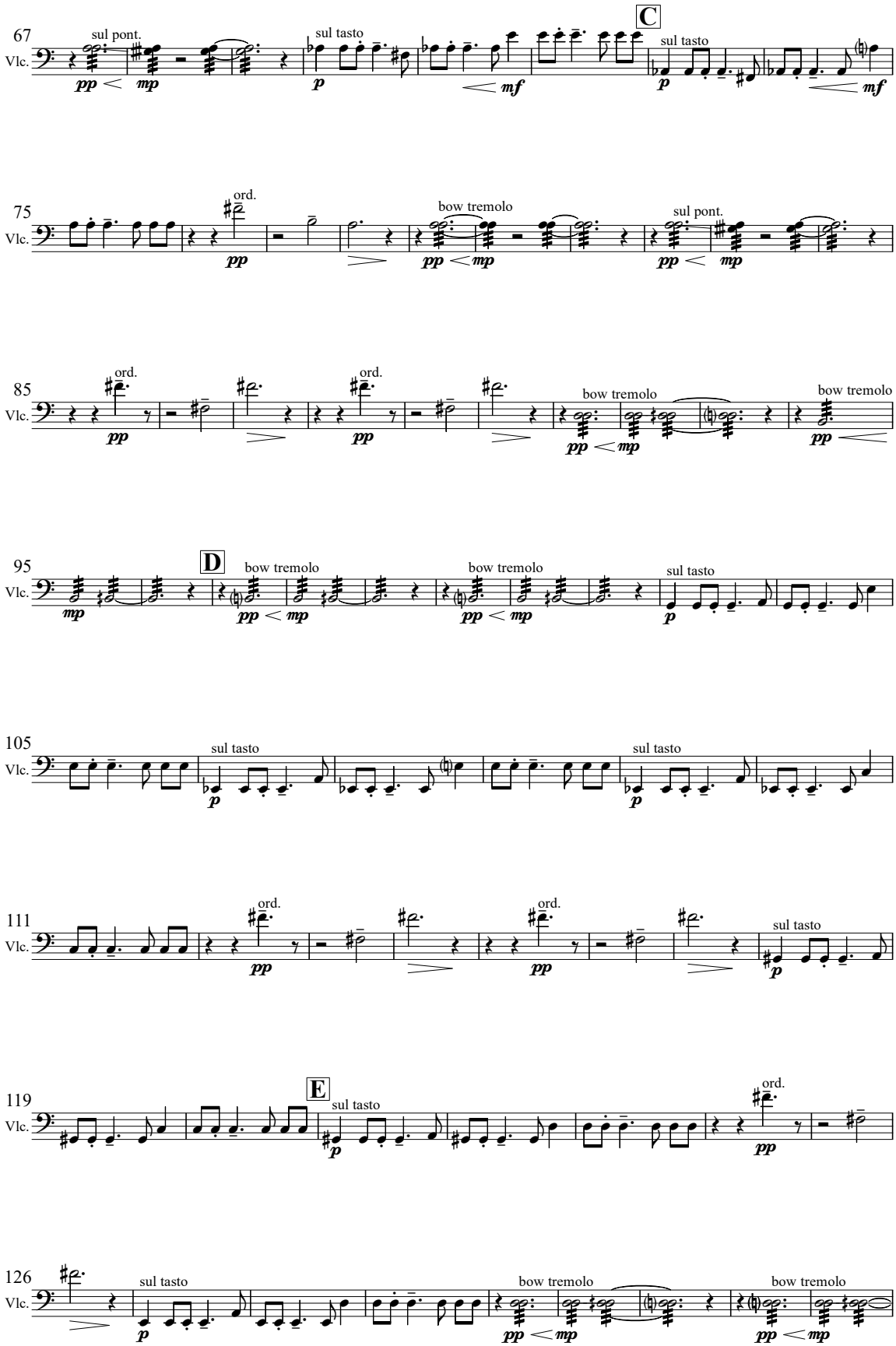
0.3.2 Cello

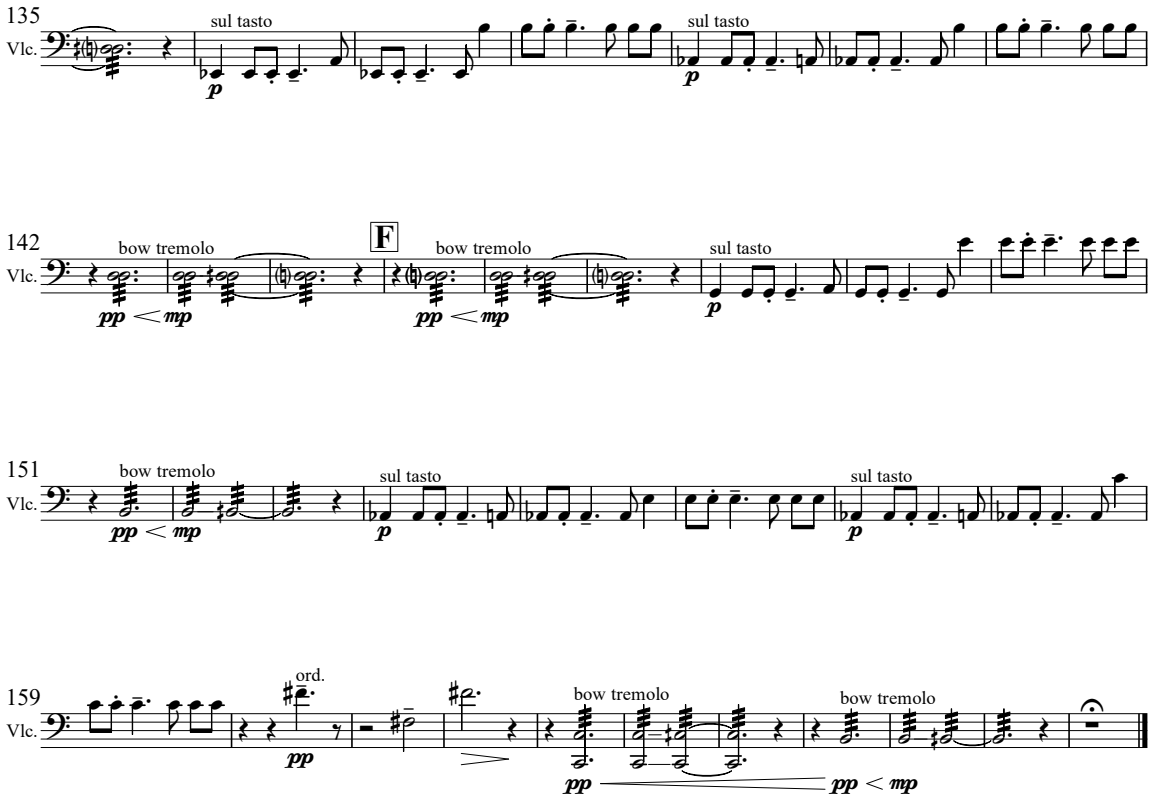
all of old

cello part

adam mccartney




67
Vlc.
sul pont.
pp
mp
sul tasto
p
mf
C
sul tasto
p
mf
75
Vlc.
ord.
pp
bow tremolo
pp
mp
sul pont.
pp
mp
85
Vlc.
ord.
pp
ord.
pp
bow tremolo
pp
mp
bow tremolo
pp
95
Vlc.
mp
D
bow tremolo
pp
mp
bow tremolo
pp
mp
sul tasto
p
105
Vlc.
sul tasto
p
sul tasto
p
111
Vlc.
ord.
pp
ord.
pp
sul tasto
p
119
Vlc.
E
sul tasto
p
ord.
pp
126
Vlc.
sul tasto
p
bow tremolo
pp
mp
bow tremolo
pp
mp

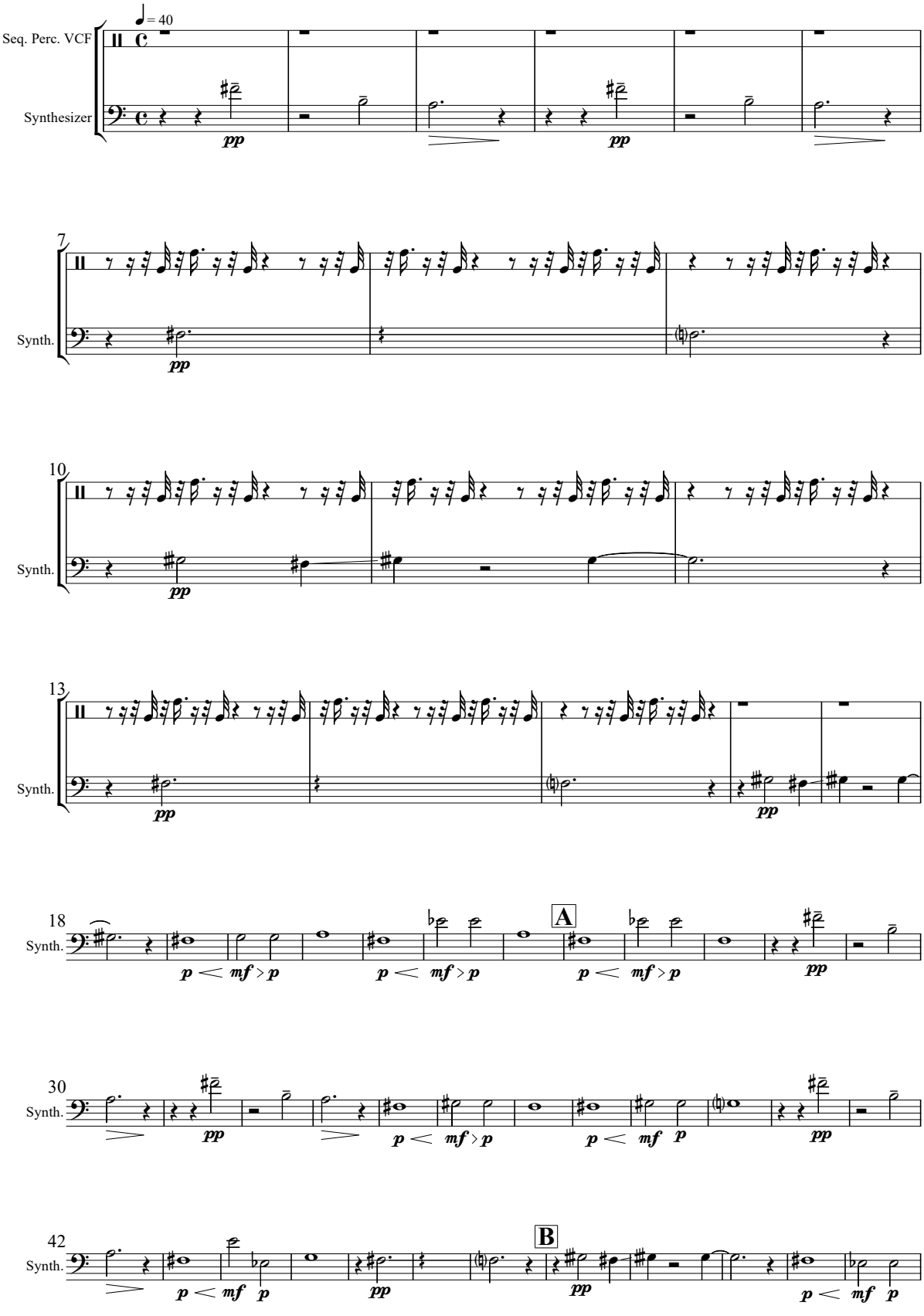

135
Vlc.
sul tasto
sul tasto
142
bow tremolo
F
bow tremolo
sul tasto
151
bow tremolo
sul tasto
sul tasto
159
ord.
bow tremolo
bow tremolo

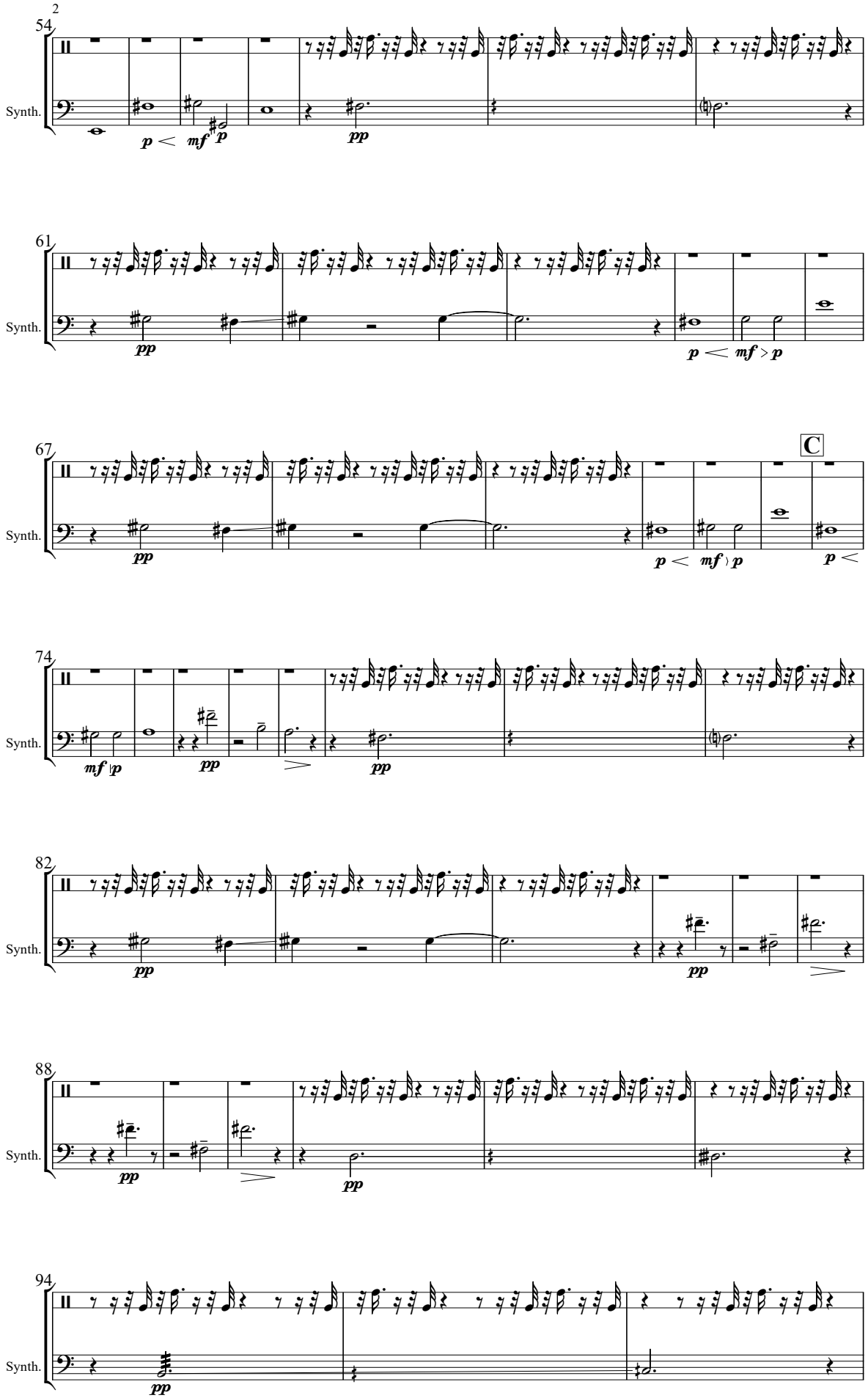
0.3.3 Synthesizer

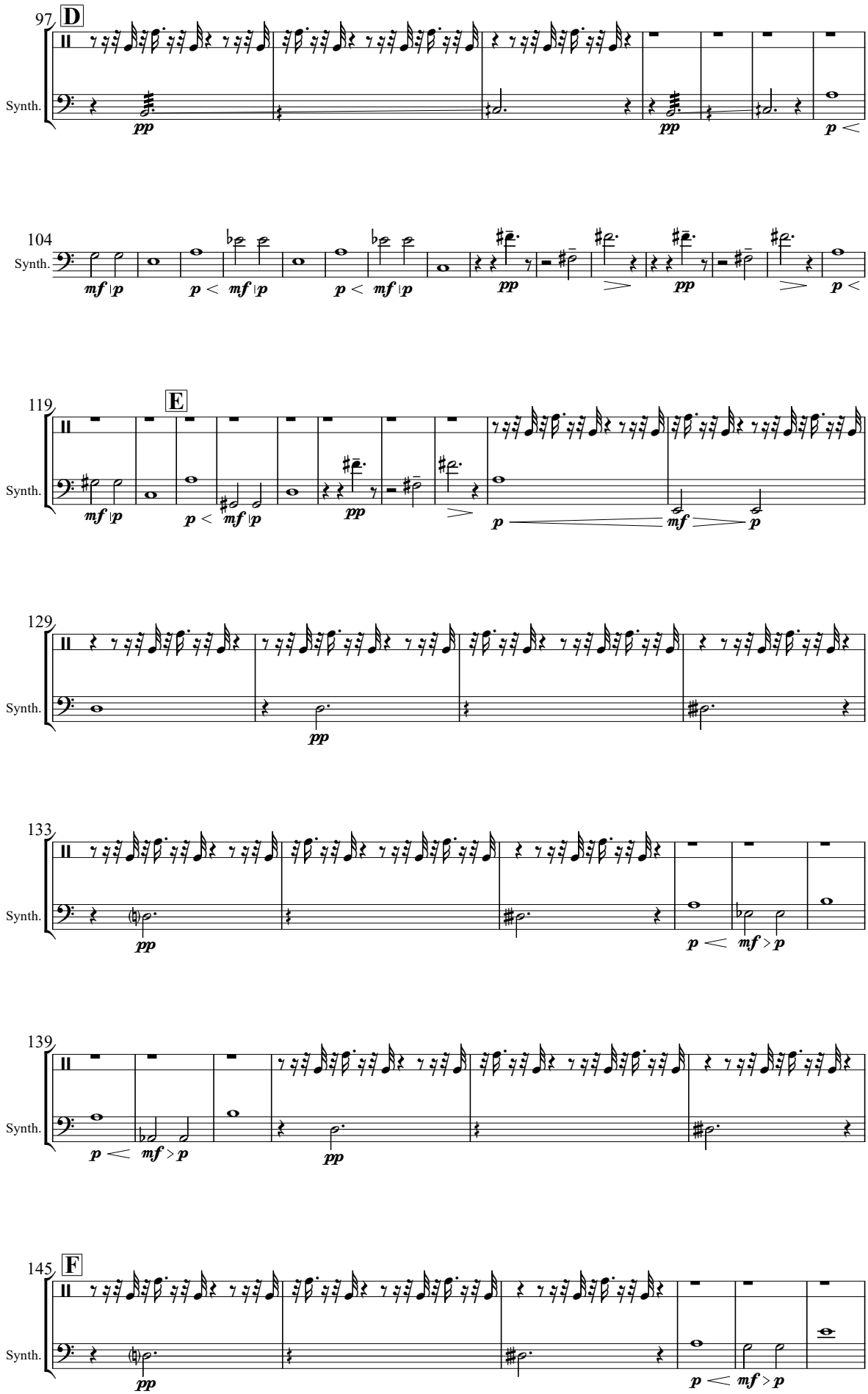
all of old

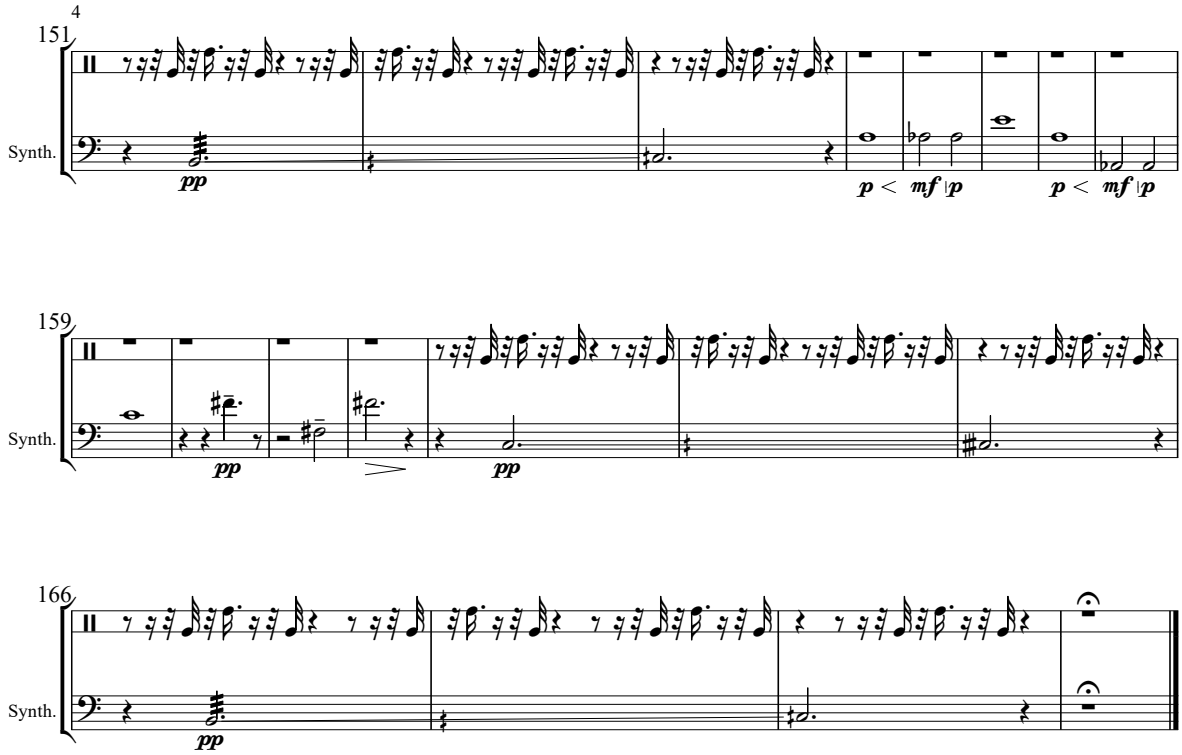
modular synth

adam mccartney




54
Synth.
p < mf p
pp
61
Synth.
pp
p < mf > p
67
C
Synth.
pp
p < mf > p
p <
74
Synth.
mf > p
pp
pp
82
Synth.
pp
pp
88
Synth.
pp
pp
94
Synth.
pp


97
D
Synth.
pp
pp
p <
104
Synth.
mf | p
p < mf | p
p < mf | p
pp
pp
p <
119
E
Synth.
mf | p
p < mf | p
pp
p
mf
p
129
Synth.
pp
133
Synth.
pp
p < mf > p
139
Synth.
p < mf > p
pp
145
F
Synth.
pp
p < mf > p

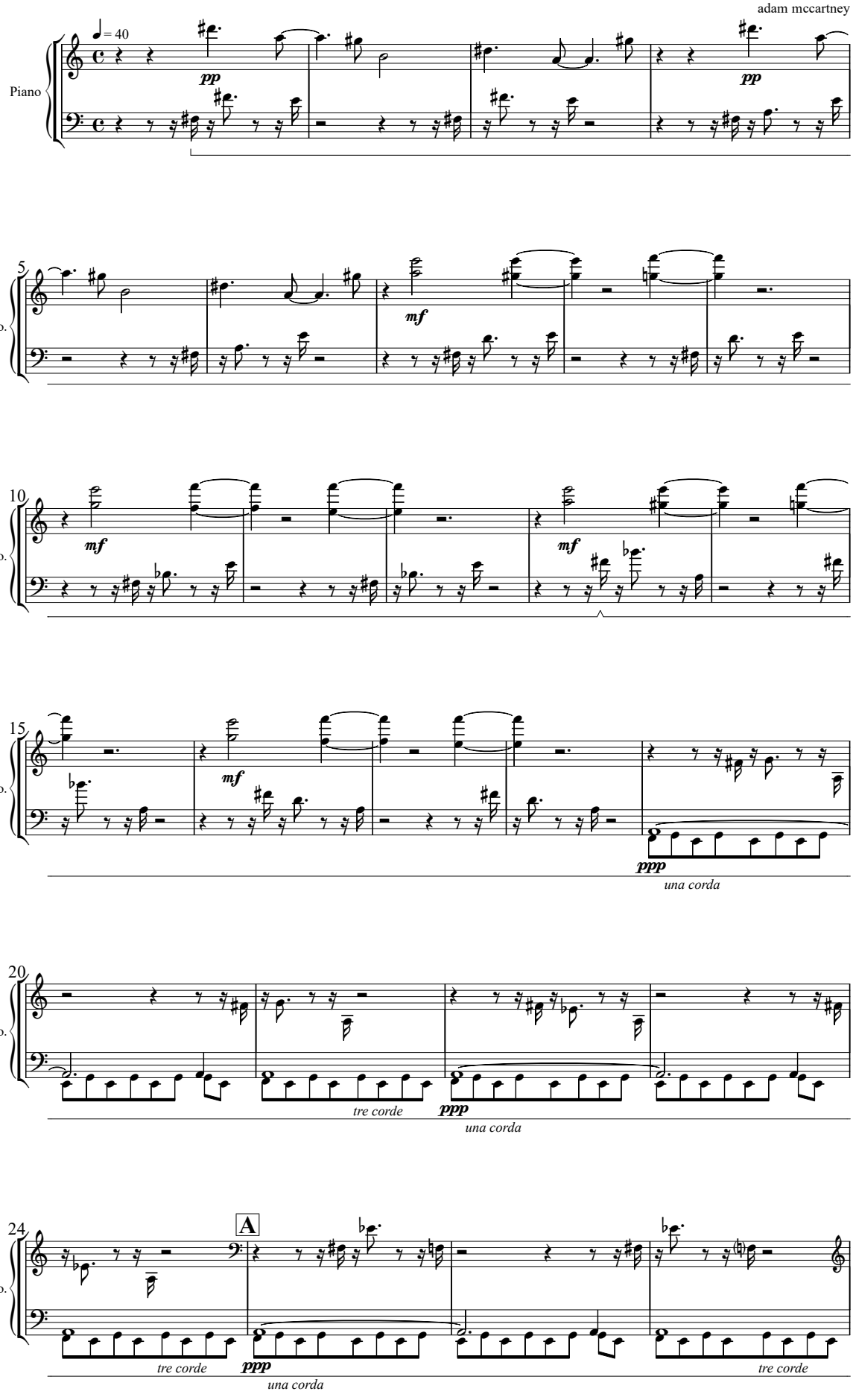

151
Synth.
pp
p < mf |p
p < mf |p
159
Synth.
pp
pp
166
Synth.
pp

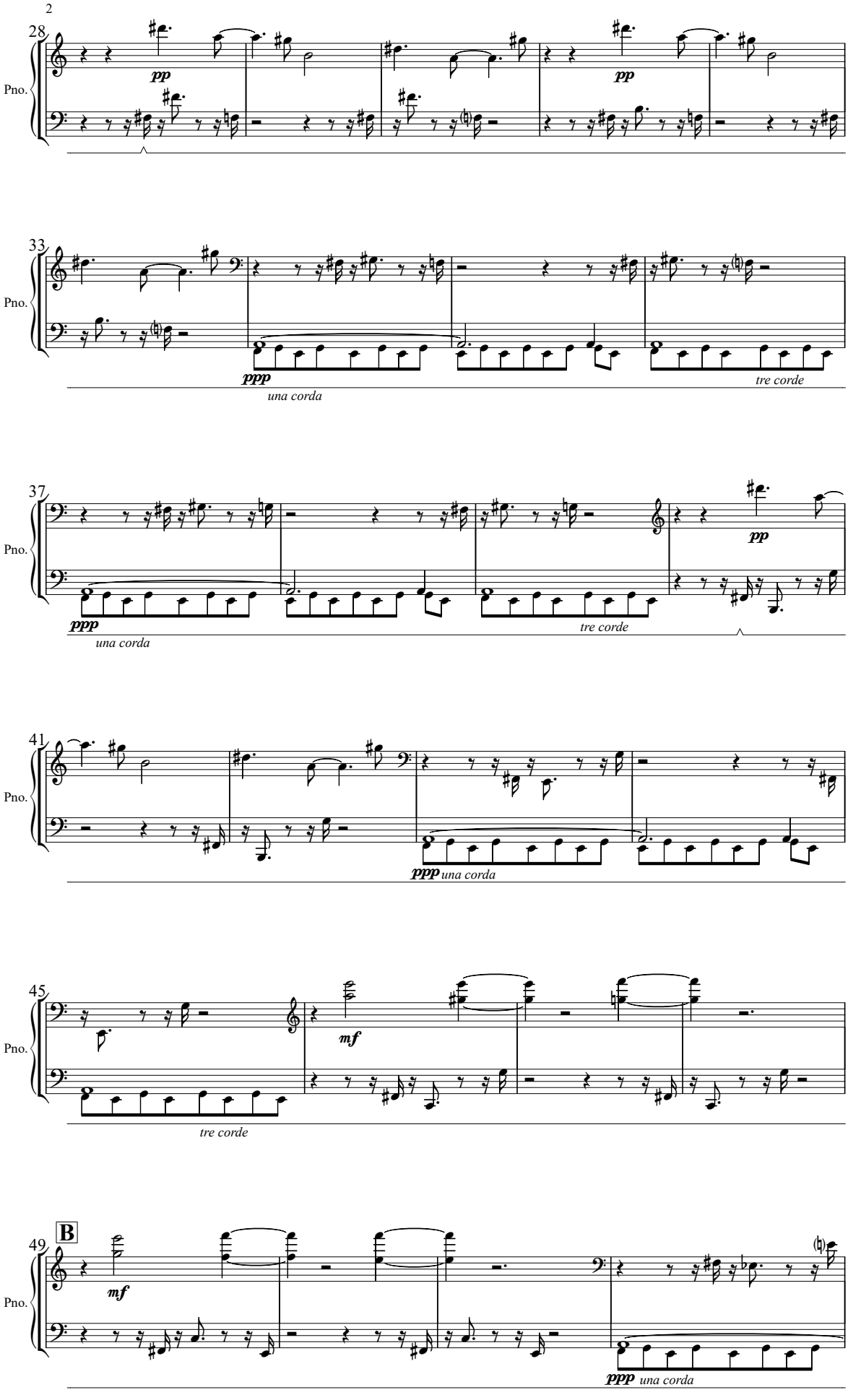
0.3.4 Piano

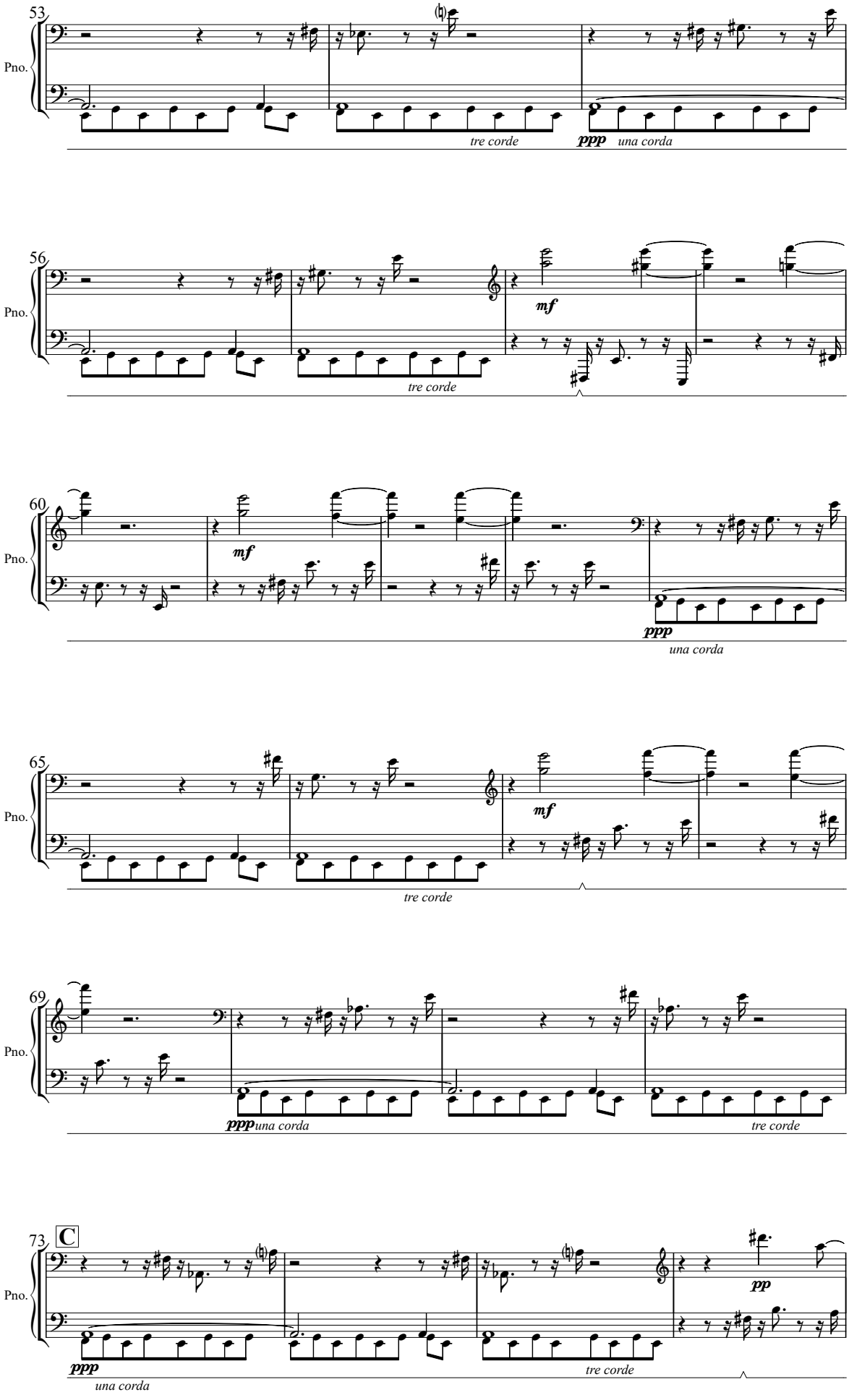
all of old

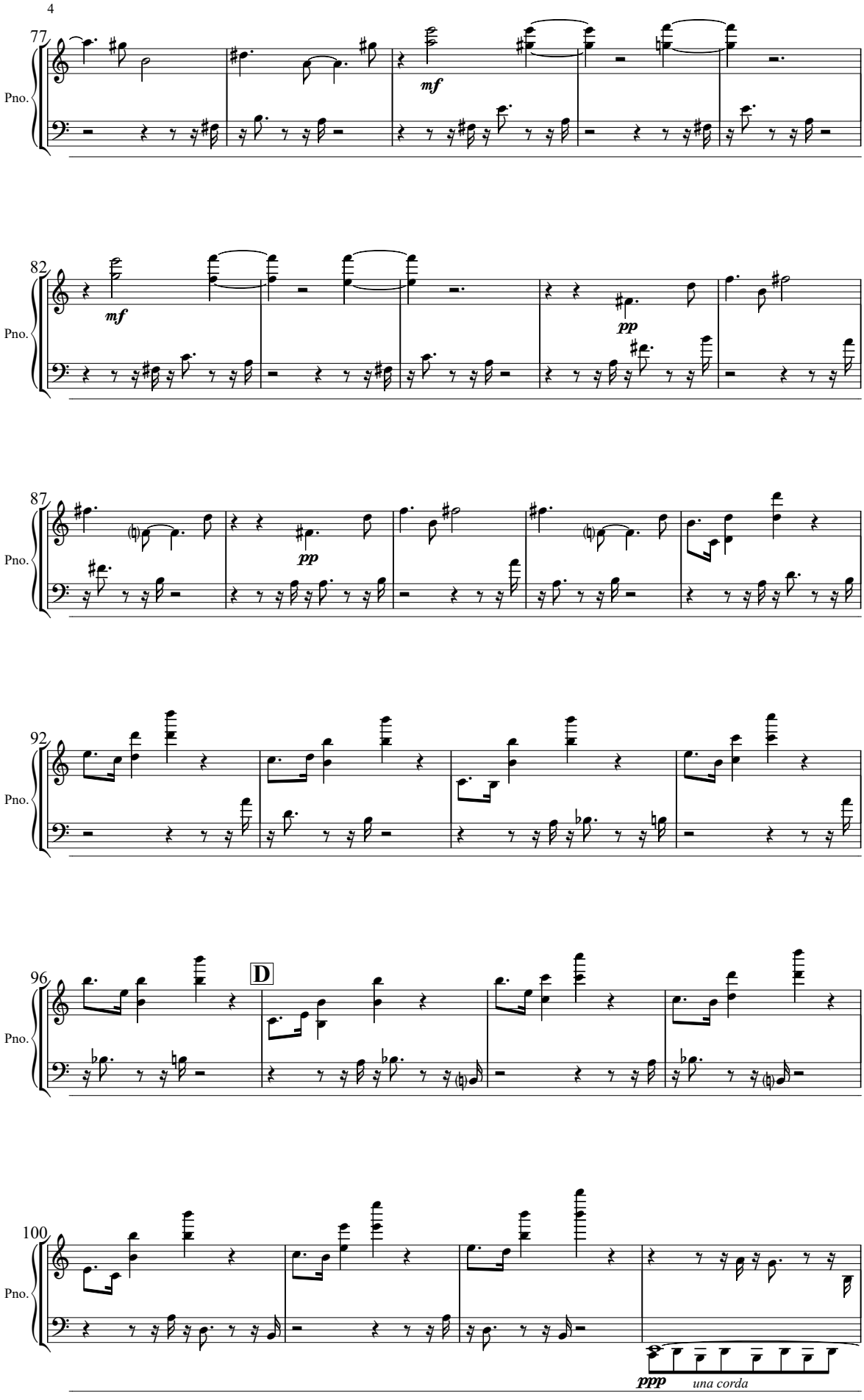
piano part

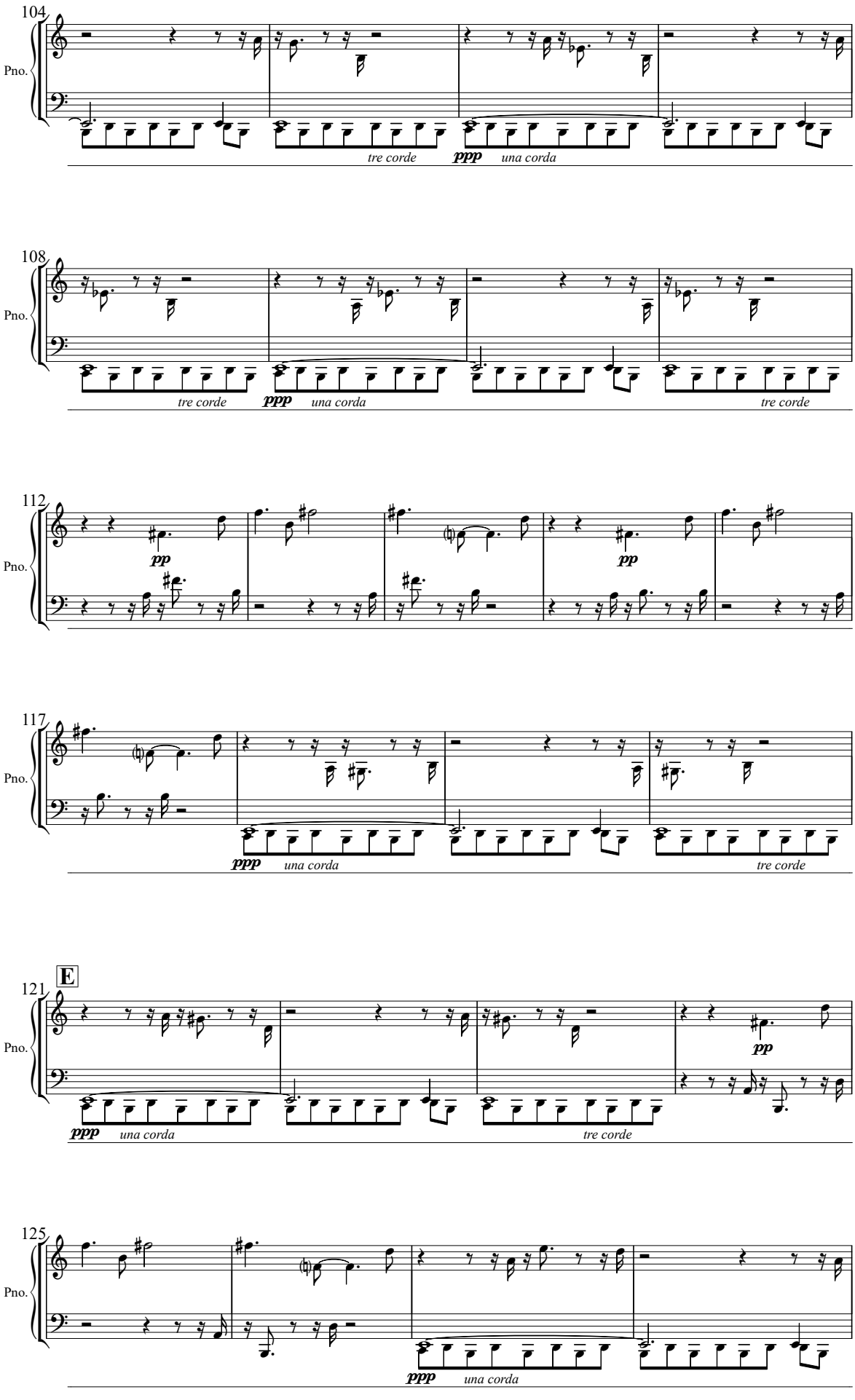
adam mccartney

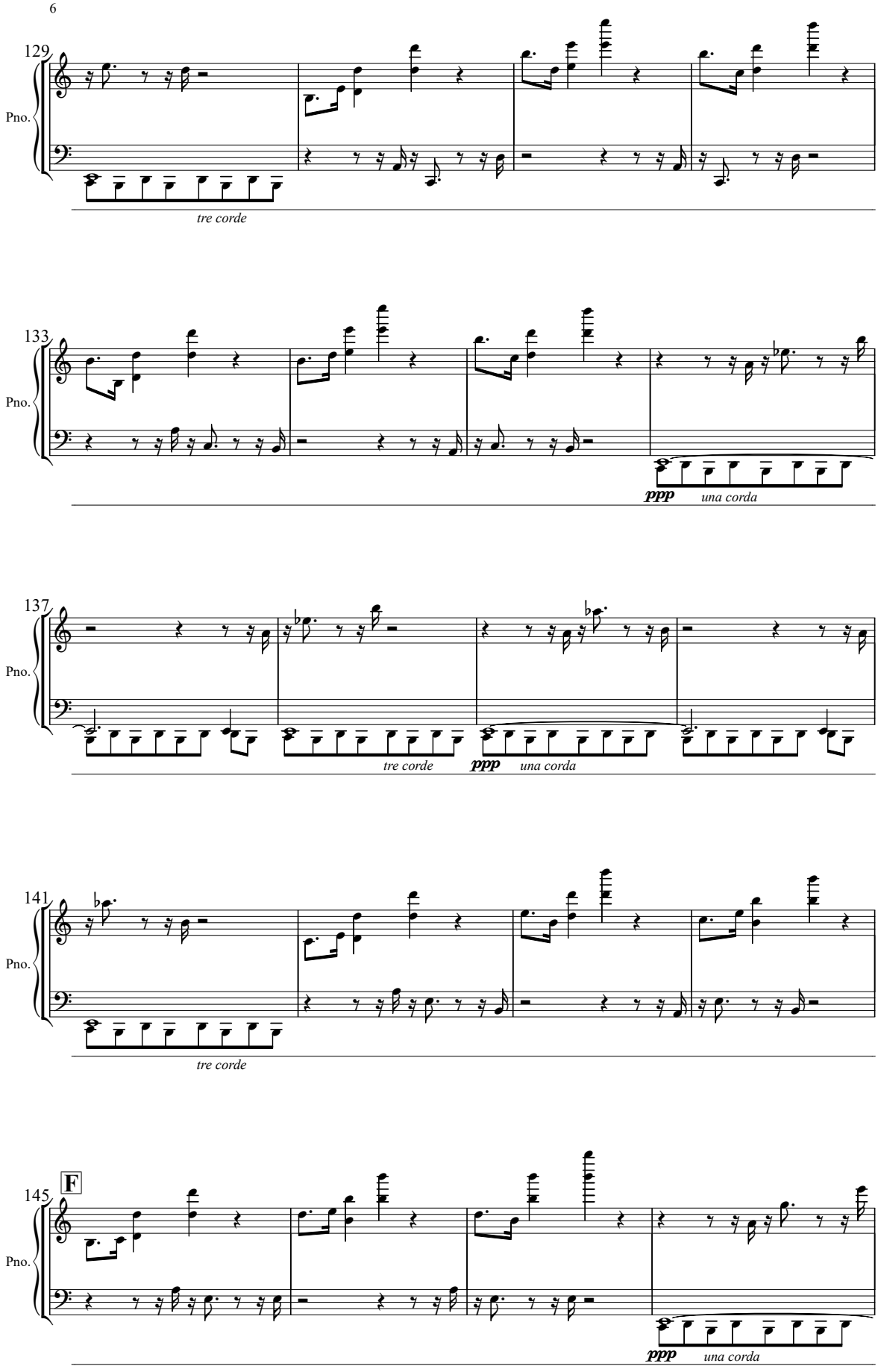


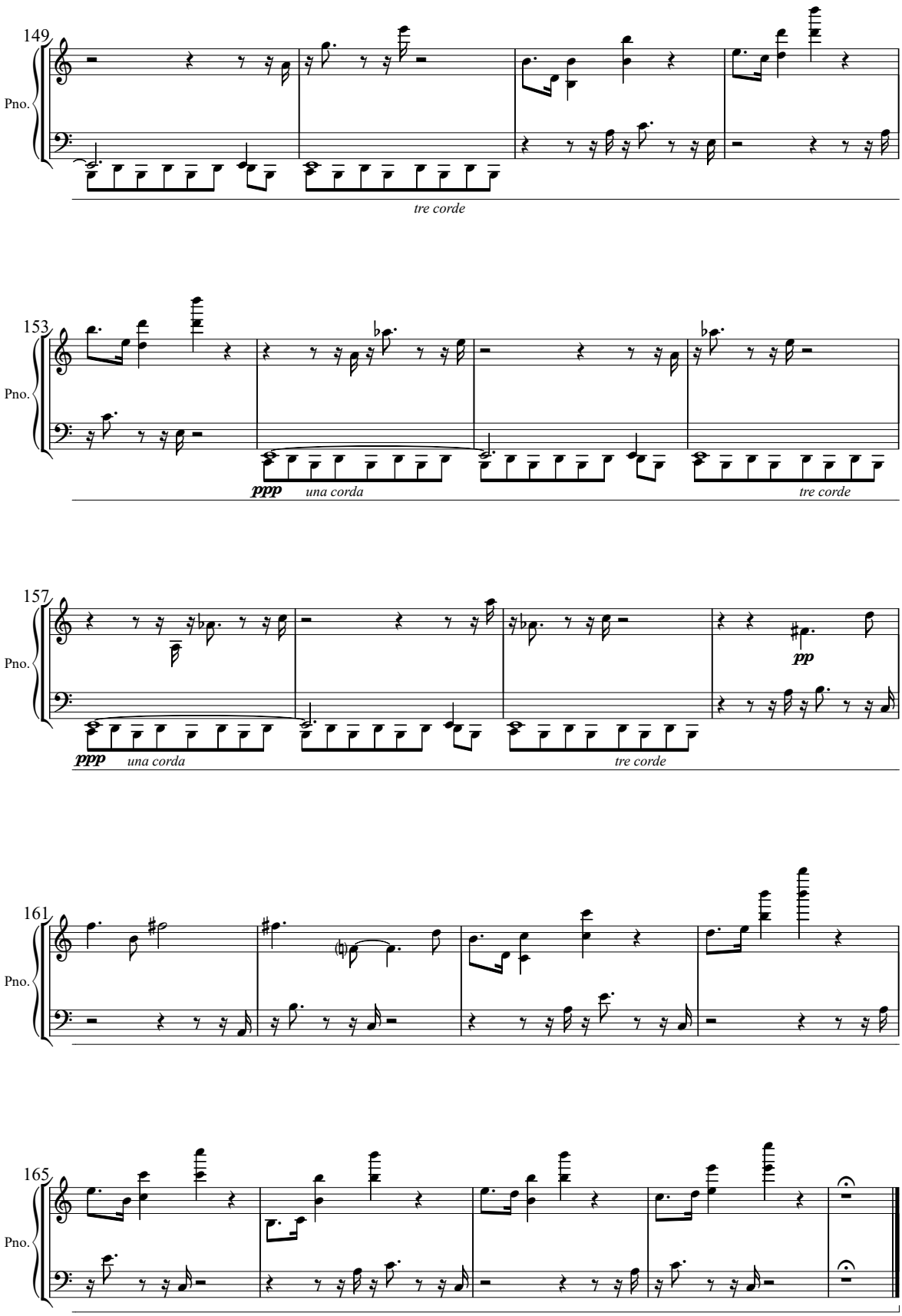

28
Pno.
pp
pp
33
Pno.
ppp
una corda
tre corde
37
Pno.
ppp
una corda
tre corde
pp
41
Pno.
ppp una corda
45
Pno.
mf
tre corde
49
B
Pno.
mf
ppp una corda


53
Pno.
tre corde
ppp una corda
56
Pno.
mf
tre corde
60
Pno.
mf
ppp
una corda
65
Pno.
mf
tre corde
69
Pno.
ppp una corda
tre corde
73
C
Pno.
ppp
una corda
tre corde
pp


77
Pno.
mf
82
Pno.
mf
pp
87
Pno.
pp
92
Pno.
96
Pno.
D
100
Pno.
ppp
una corda


104
Pno.
tre corde
ppp
una corda
108
Pno.
tre corde
ppp
una corda
tre corde
112
Pno.
pp
pp
117
Pno.
ppp
una corda
tre corde
E
121
Pno.
ppp
una corda
tre corde
pp
125
Pno.
ppp
una corda


129
Pno.
tre corde
133
Pno.
ppp
una corda
137
Pno.
tre corde
ppp
una corda
141
Pno.
tre corde
145
F
Pno.
ppp
una corda


149
Pno.
tre corde
153
Pno.
ppp
una corda
tre corde
157
Pno.
ppp
una corda
tre corde
pp
161
Pno.
165
Pno.