Flatland

For 8 voices

Alex Hills, January 2014
Duration c. 10 minutes

Performance Instructions

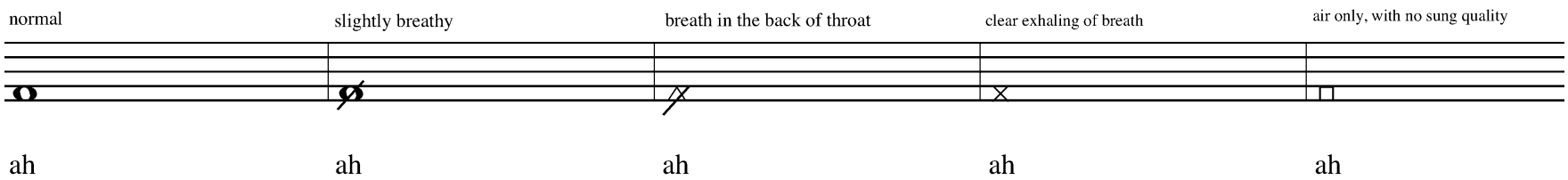
All abbreviations are standard. Accidentals carry throughout the bar.

Microtones are conceived spectrally, but based on both a harmonic series and its inversion. Effectively this results in all intervals being justly tuned around the central middle C. Standard notation is used (arrows on accidentals representing a deviation of c.1/6th tone, 𝅘𝅥 and ♯ quarter-tones).

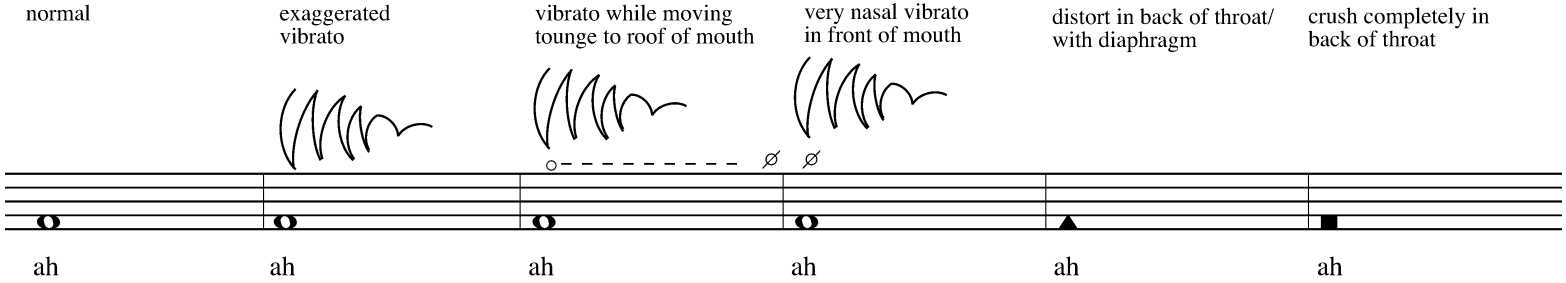
Symbols/Noteheads:

Various types of note head and symbol are used to indicate variations in vocal production and timbre. While each one indicates a unique sound (described below), they are best considered part of 3 different trajectories. Each of these moves towards pitchless-ness, one through increasingly breathy sounds, one through distortion and one through percussiveness. In all cases, timbral considerations should take precedence over both the possible dynamic level and producing the indicated pitch, which will necessarily be increasingly approximate as the sounds become more extreme. This will necessarily change somewhat based on the phoneme ('ah/at' given below as an example) being sung but timbres should be as consistent as possible. The 3 'paths' are as follows:

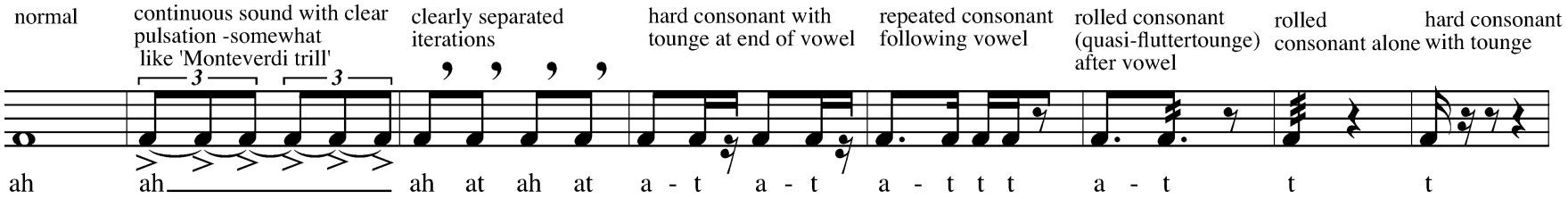
'Breathiness':



‘Distortion’



‘Percussiveness’ (this largely moves to detached consonants)



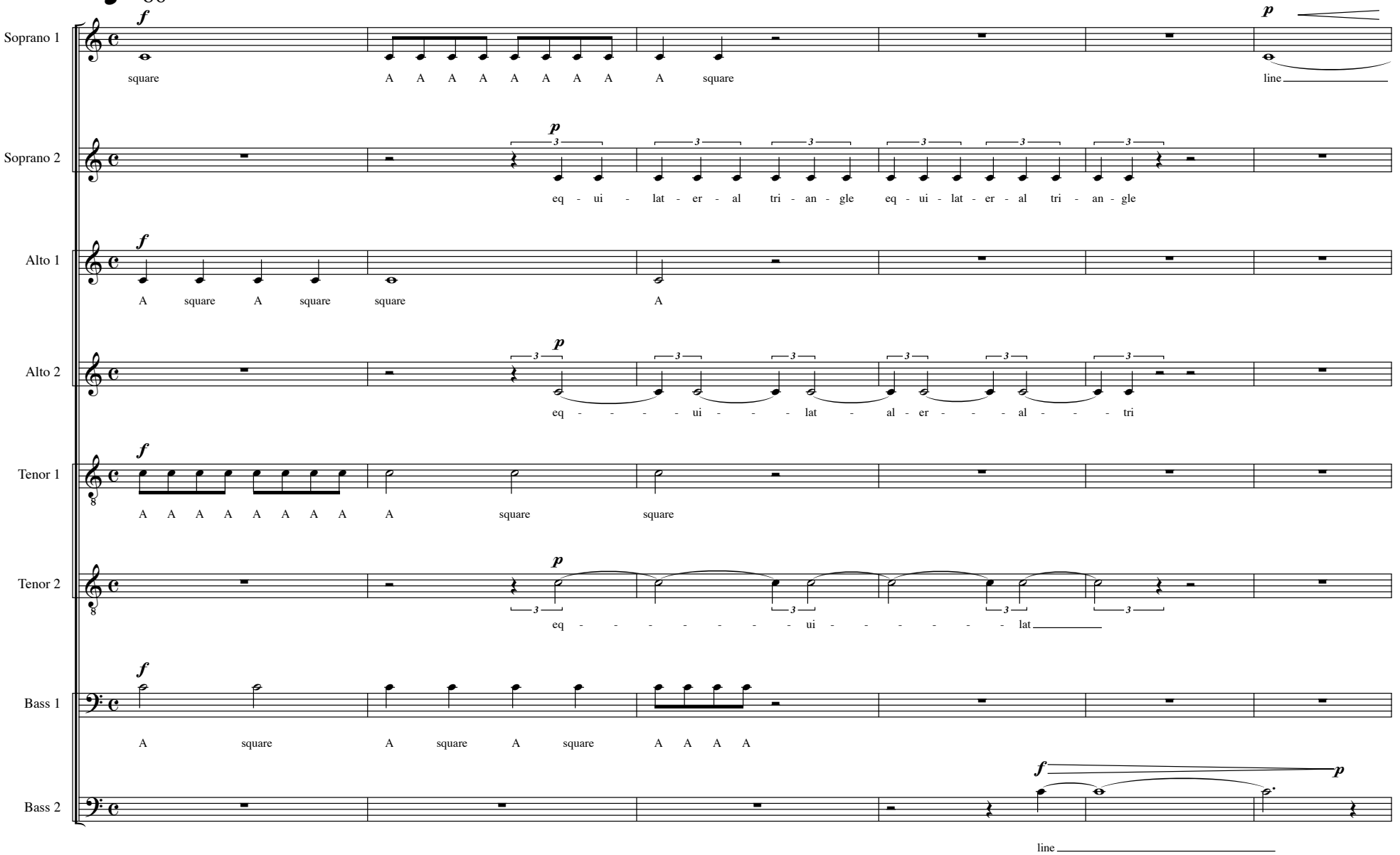
Programme Note

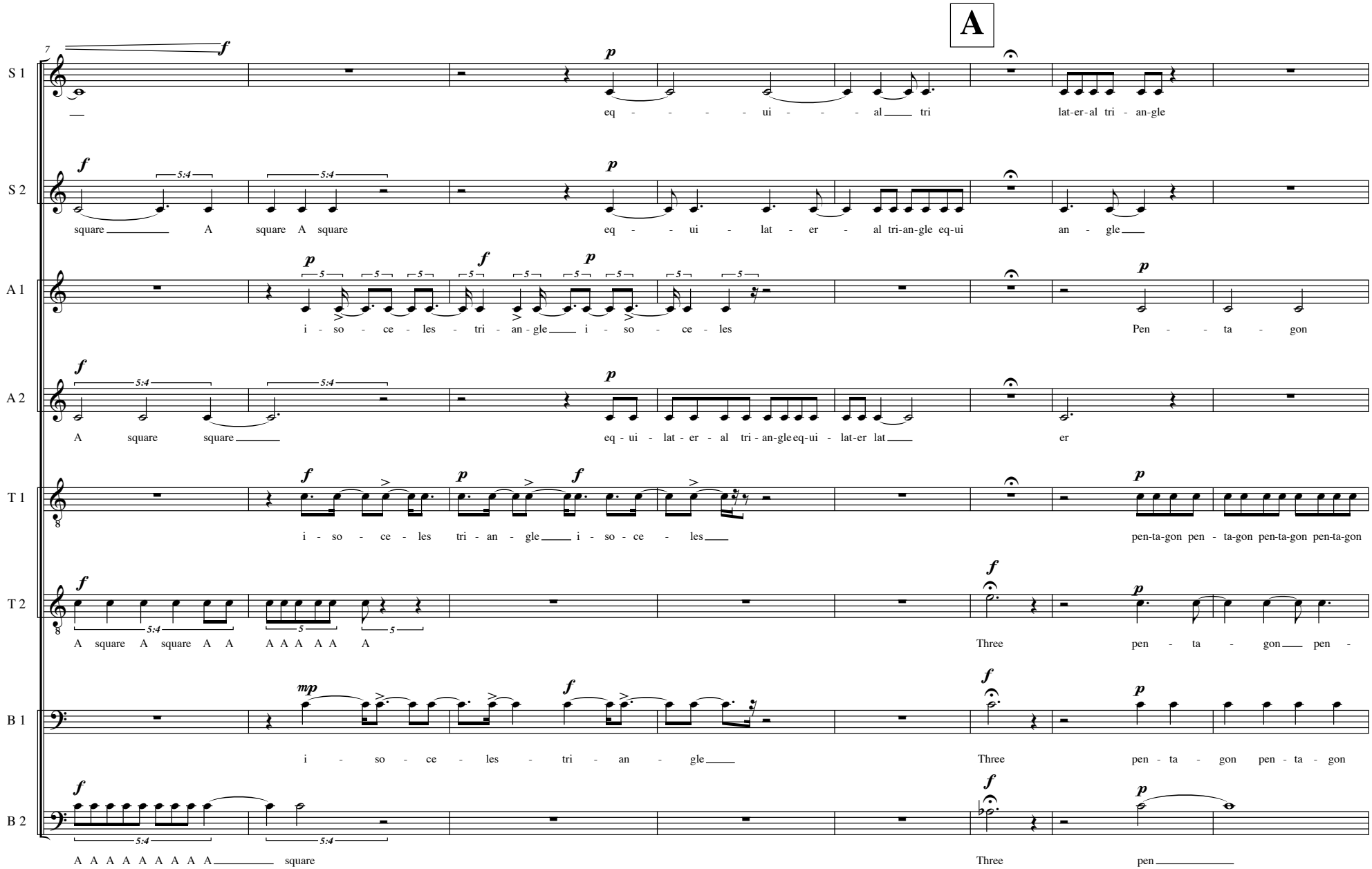
E.A Abbott’s remarkable proto-science fiction novel of 1884, ‘Flatland’, imagines a two-dimensional world constituted only of flat shapes. How would this Euclidian hallucination work – he creates a brutally satirical social hierarchy based on the number of sides one has, and the regularity of those side – and what would happen when its inhabitants encountered a third, vertical, dimension, or the one- and two- dimensional nightmares of Line- and Pointland? This piece tries to embody this, both as sets of restrictions placed on musical materials (what makes music flat?) and as a structural narrative, exploring how dimensions might be introduced and withdrawn. I’m enormously grateful to the generosity of Peter Corcoran and Timothy Hill in supporting this piece and its first performance.

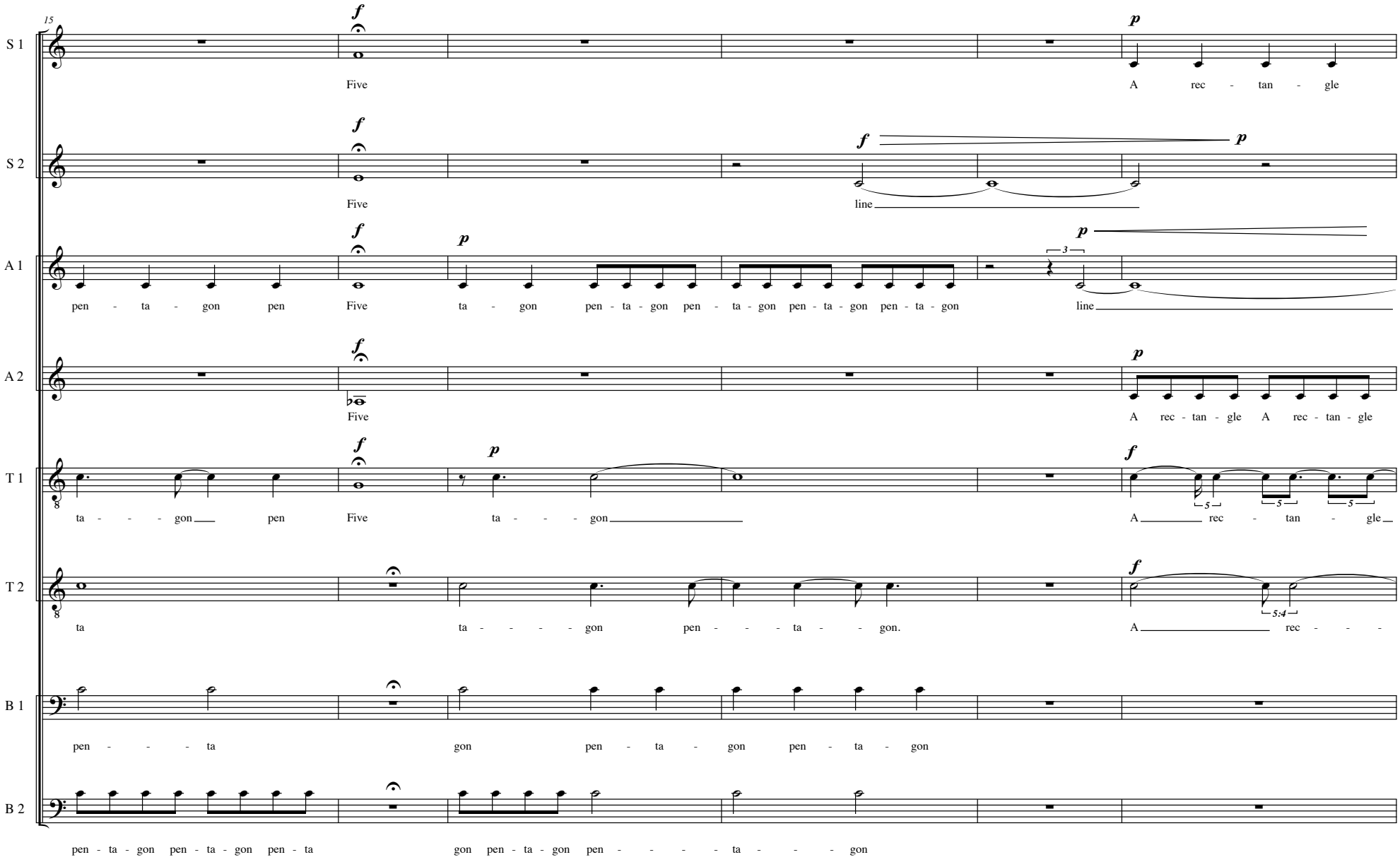
For Exaudi, with special thanks to Peter Corcoran and Timothy Hill

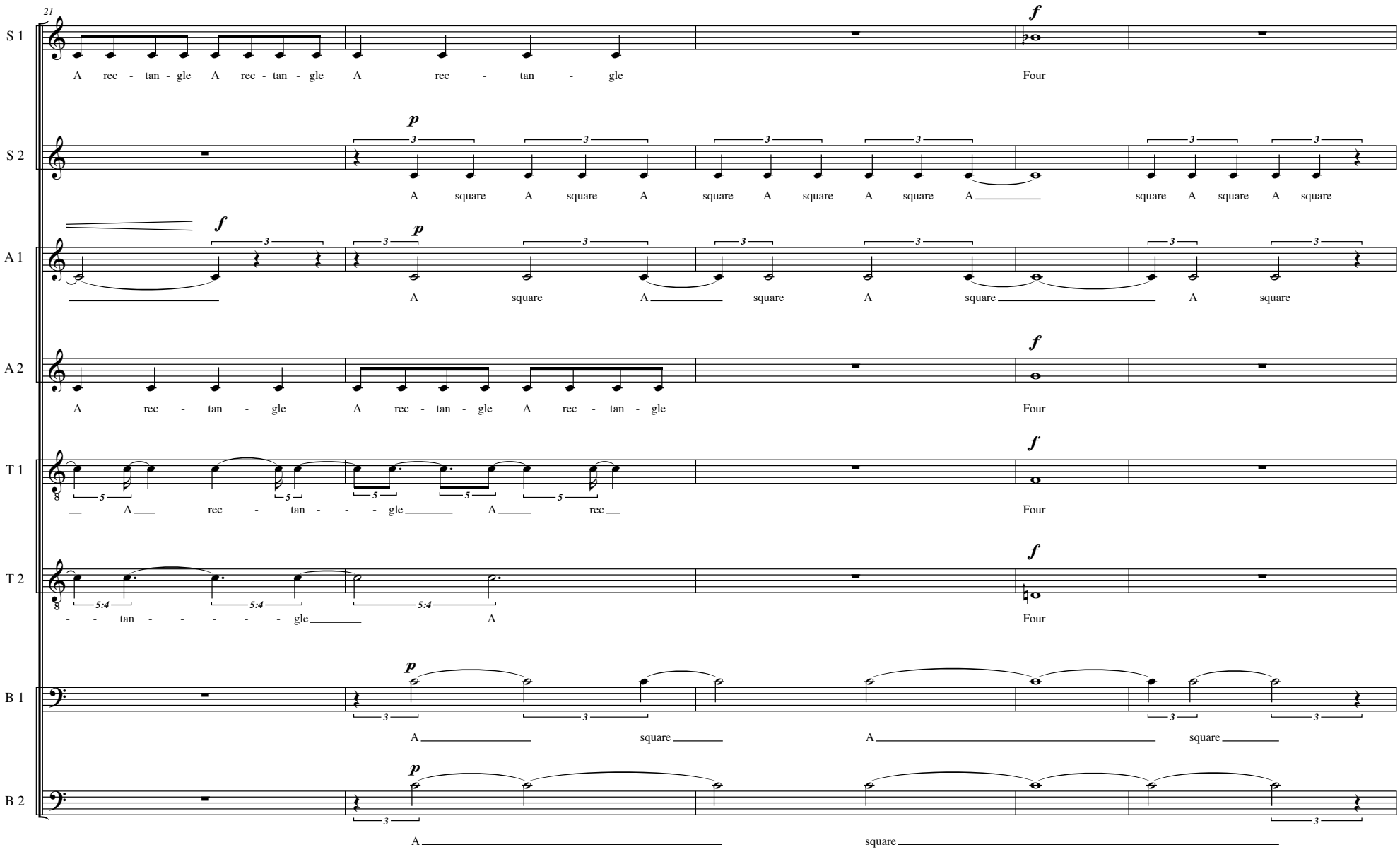
strict and mechanical but
without metric stress

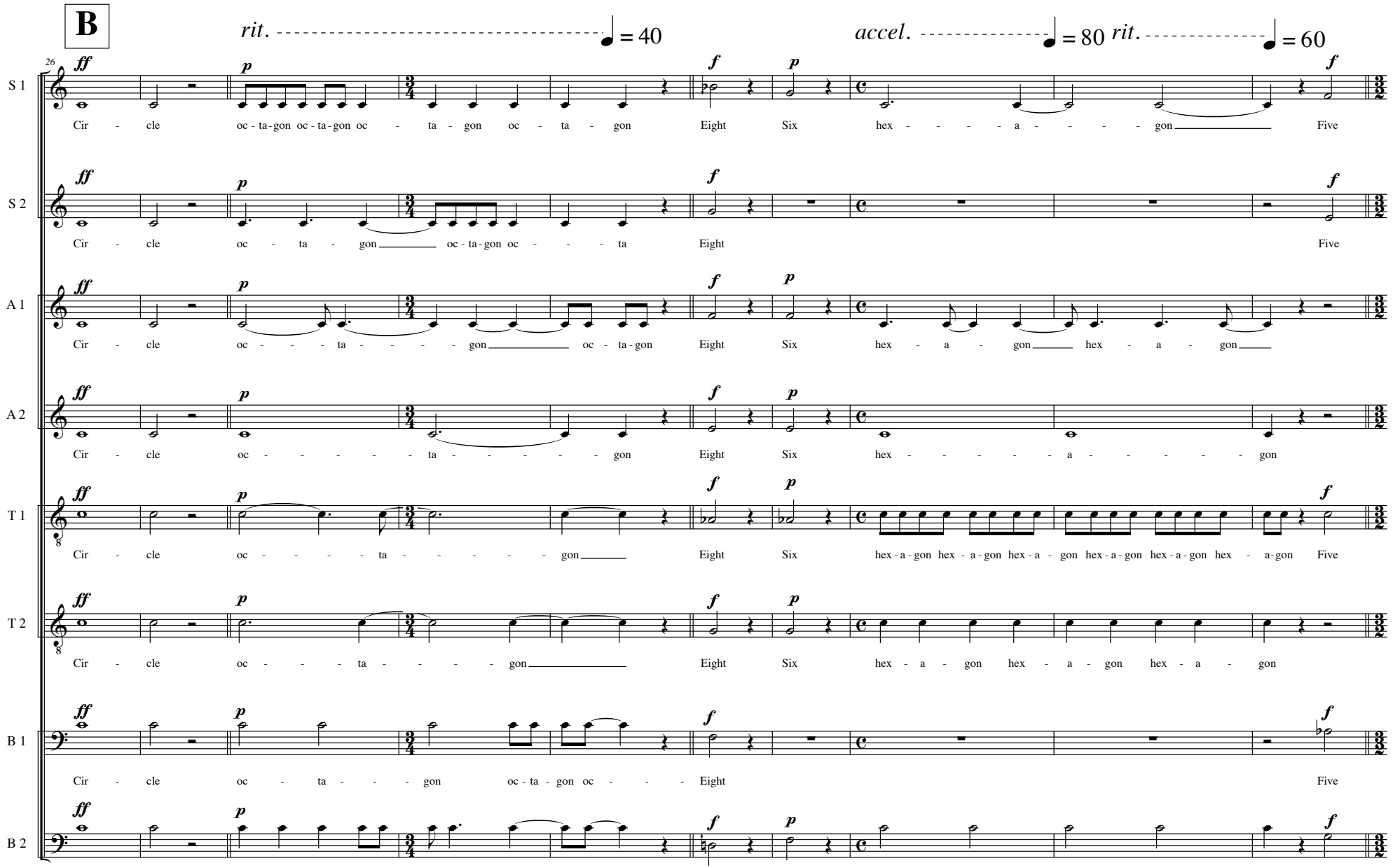
♩ = 80

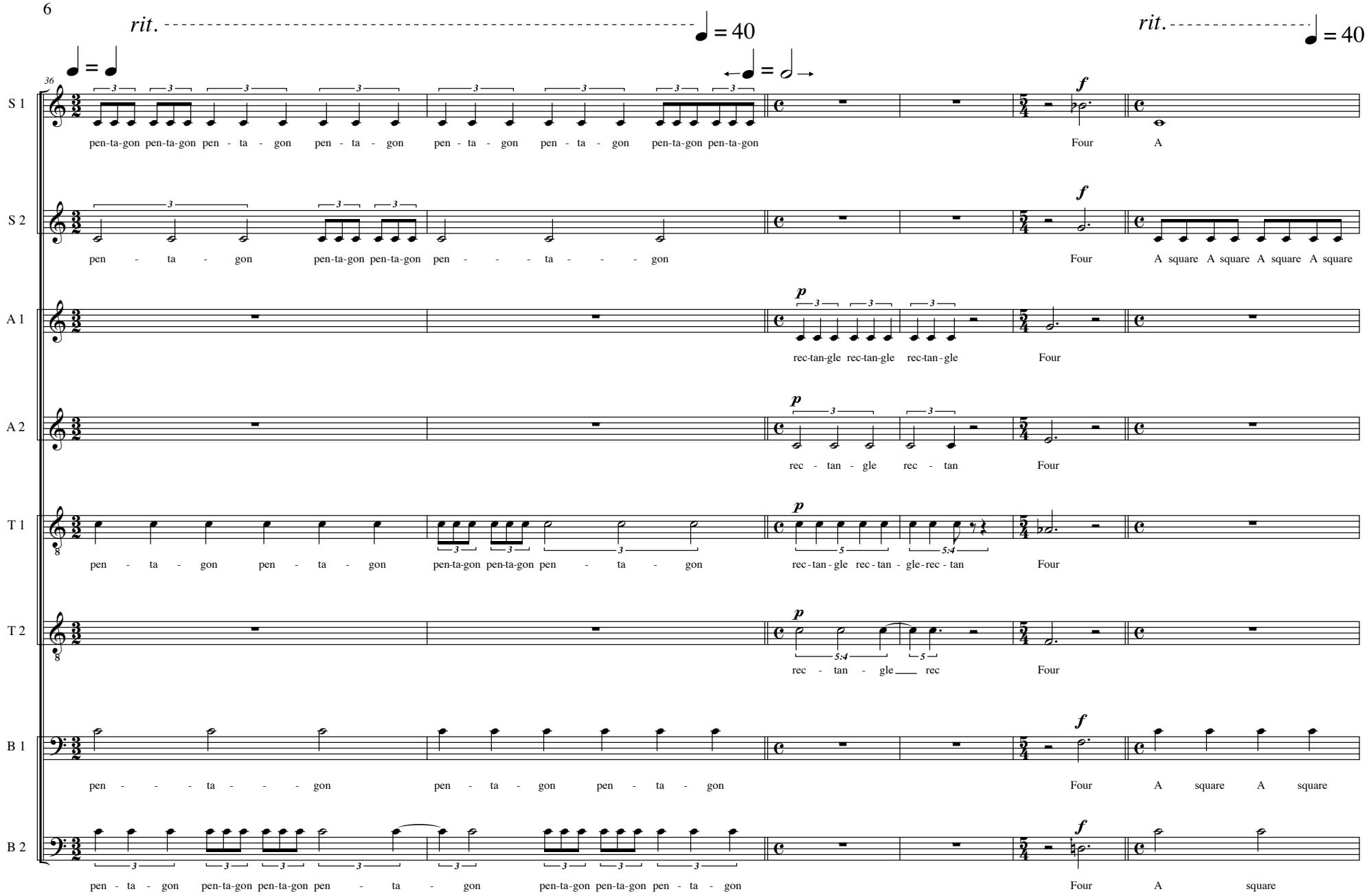


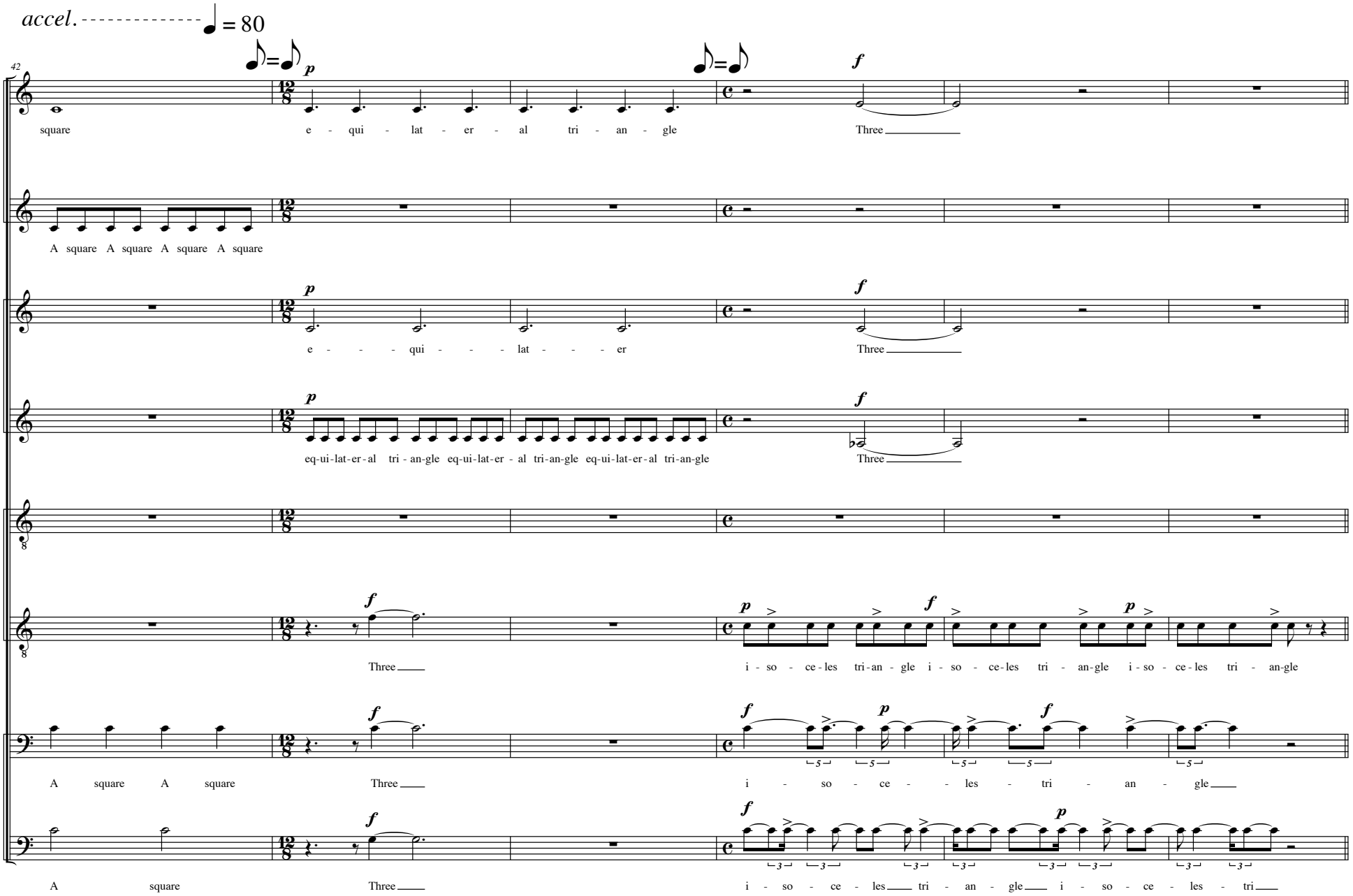

A
S 1
S 2
A 1
A 2
T 1
T 2
B 1
B 2
eq - - - - ui - - - al tri
lat-er-al tri - an-gle
square A square A square
eq - - ui - lat - er - al tri-an-gle eq-ui
an - gle
i - so - ce - les - tri - an-gle i - so - ce - les
Pen - - ta - gon
A square square
eq - ui - lat - er - al tri - an-gle eq-ui - lat-er lat
er
i - so - ce - les tri - an - gle i - so - ce - les
pen-ta-gon pen - ta-gon pen-ta-gon pen-ta-gon
A square A square A A
A A A A A A
Three
pen - ta - gon pen -
i - so - ce - les - tri - an - gle
Three
pen - ta - gon pen - ta - gon
A A A A A A A A A
square
Three
pen

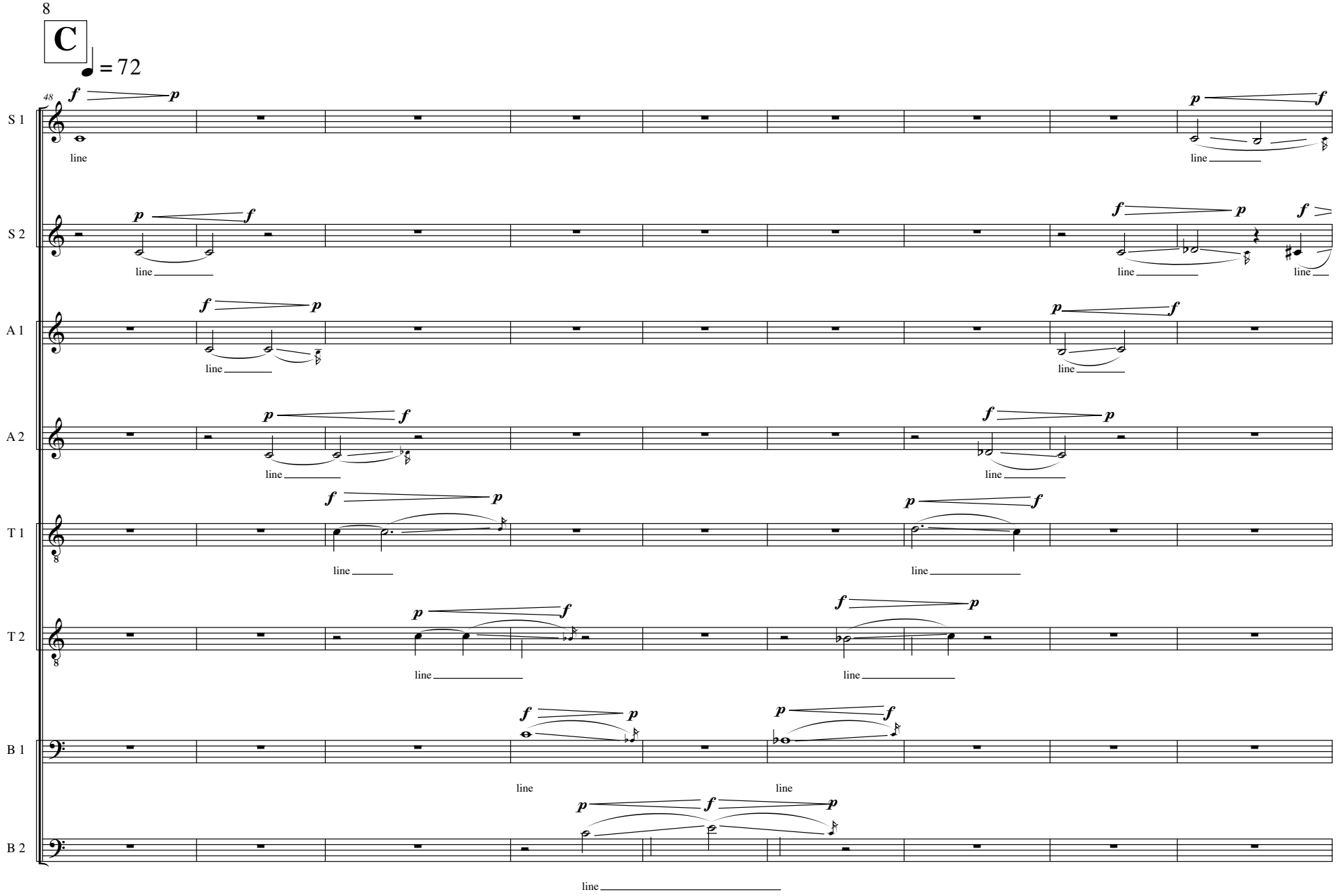

15
S 1
S 2
A 1
A 2
T 1
T 2
B 1
B 2
Five
A rec - tan - gle
line
pen - ta - gon pen
ta - gon pen - ta - gon pen - ta - gon pen - ta - gon pen - ta - gon
A rec - tan - gle A rec - tan - gle
ta - - - gon pen
A rec - tan - gle
ta
ta - - - - gon pen - - - ta - - gon.
A rec - - -
pen - - - ta
gon pen - ta - gon pen - ta - gon
pen - ta - gon pen - ta - gon pen - ta
gon pen - ta - gon pen - - - - ta - - - gon

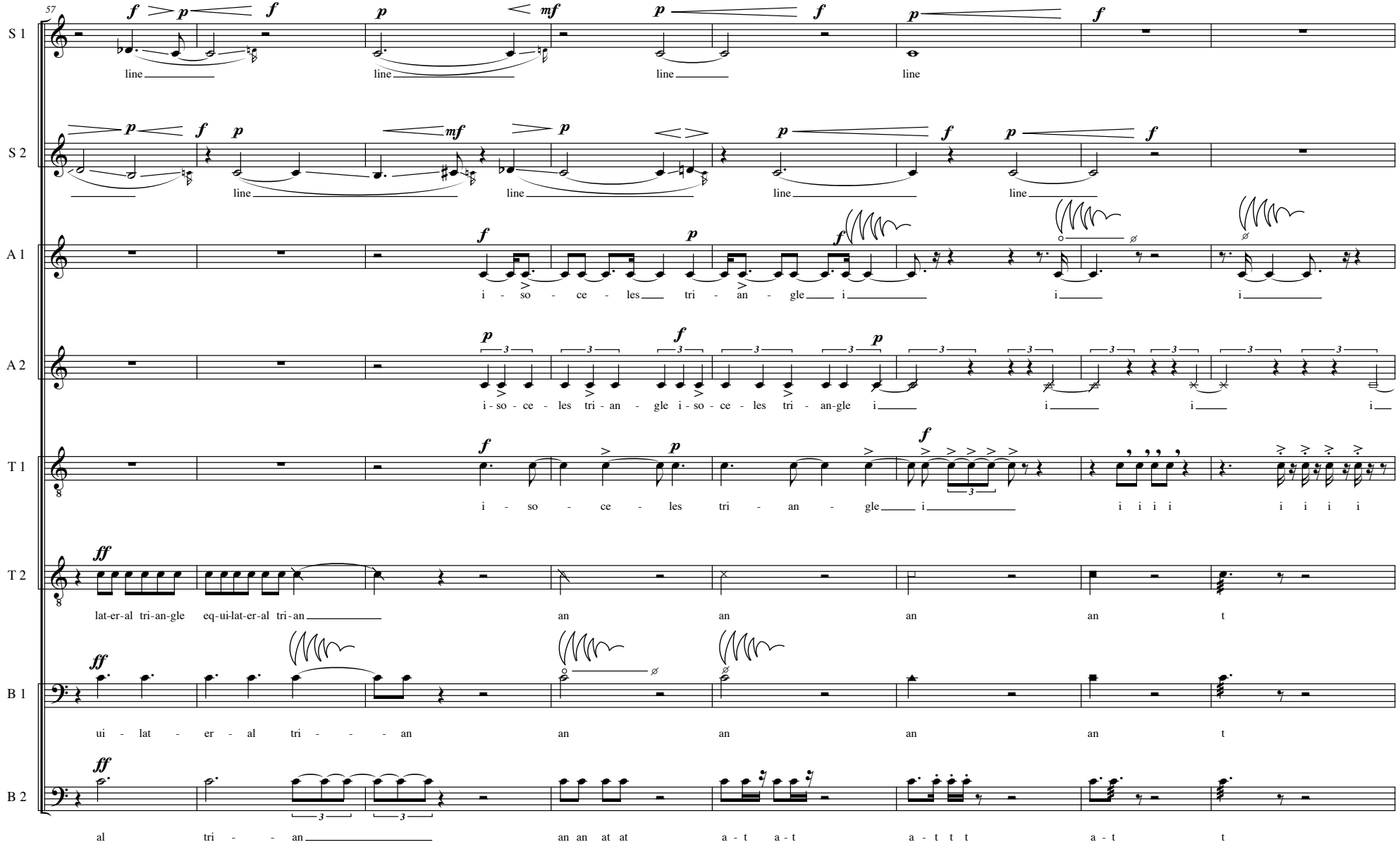

21
S 1
A rec - tan - gle A rec - tan - gle A rec - tan - gle
Four
S 2
A square A square A square A square A square A
square A square A square
A 1
A square A square A square
A square
A 2
A rec - tan - gle A rec - tan - gle A rec - tan - gle
Four
T 1
A rec - tan - - - gle A rec
Four
T 2
- - tan - - - - - - gle A
Four
B 1
A square A square
B 2
A square

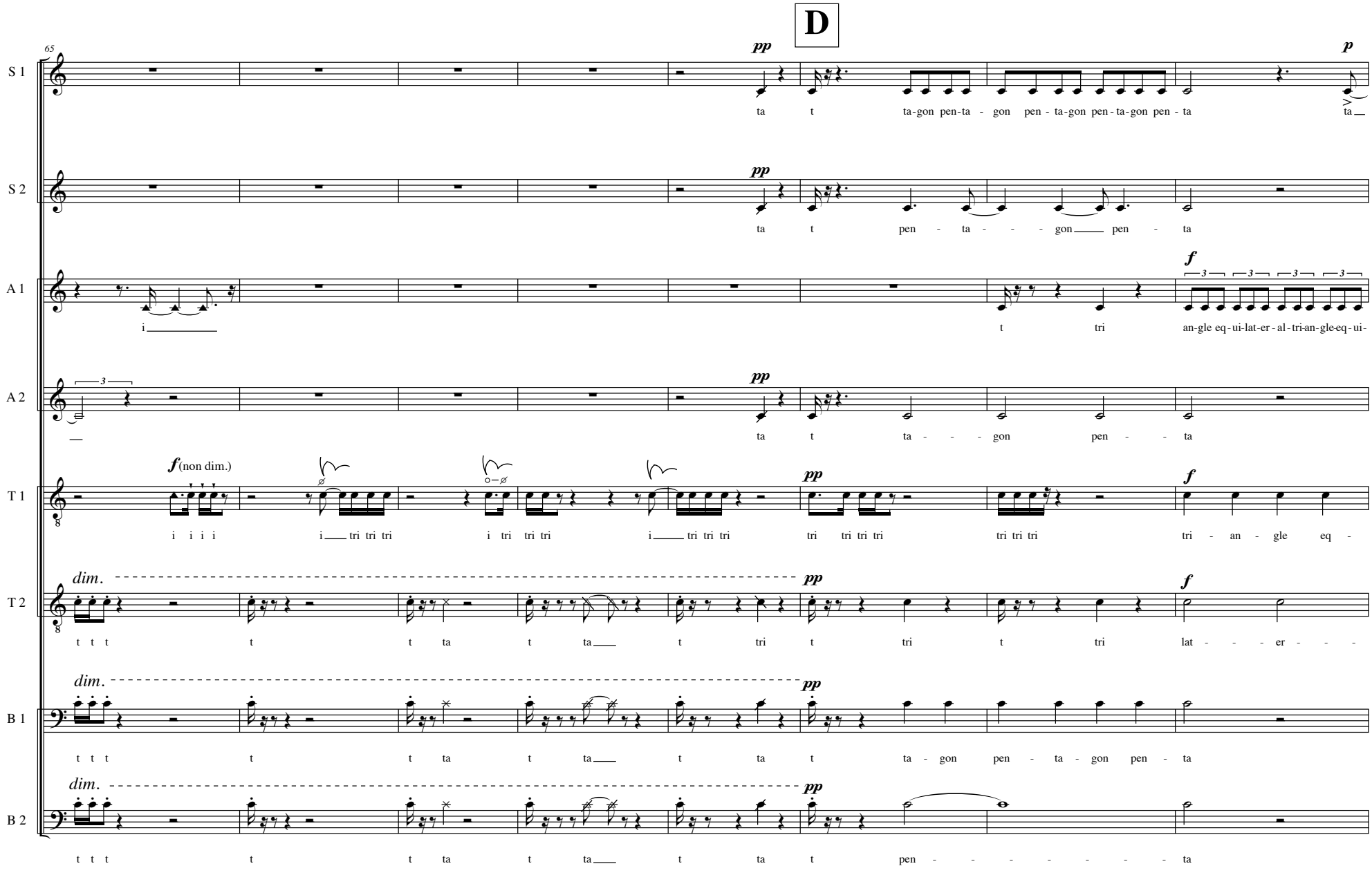

B
rit. ♩ = 40
accel. ♩ = 80
rit. ♩ = 60
26
S 1
S 2
A 1
A 2
T 1
T 2
B 1
B 2
Cir - cle oc - ta - gon oc - ta - gon oc - ta - gon oc - ta - gon Eight Six hex - - - - a - - - - gon Five
Cir - cle oc - ta - gon oc - ta - gon oc - - - - ta Eight Five
Cir - cle oc - - - - ta - - - - gon oc - ta - gon Eight Six hex - a - gon hex - a - gon
Cir - cle oc - - - - - - ta - - - - - - gon Eight Six hex - - - - - - a - - - - - - gon
Cir - cle oc - - - - - ta - - - - - gon Eight Six hex - a - gon hex - a - gon hex - a - gon hex - a - gon hex - a - gon hex - a - gon Five
Cir - cle oc - - - - - ta - - - - - gon Eight Six hex - a - gon hex - a - gon hex - a - gon
Cir - cle oc - ta - - - gon oc - ta - gon oc - - - - Eight Five
Cir - cle oc - ta - gon oc - ta - gon oc - ta - gon Eight Six hex - - - a - - - gon hex - - - a Five

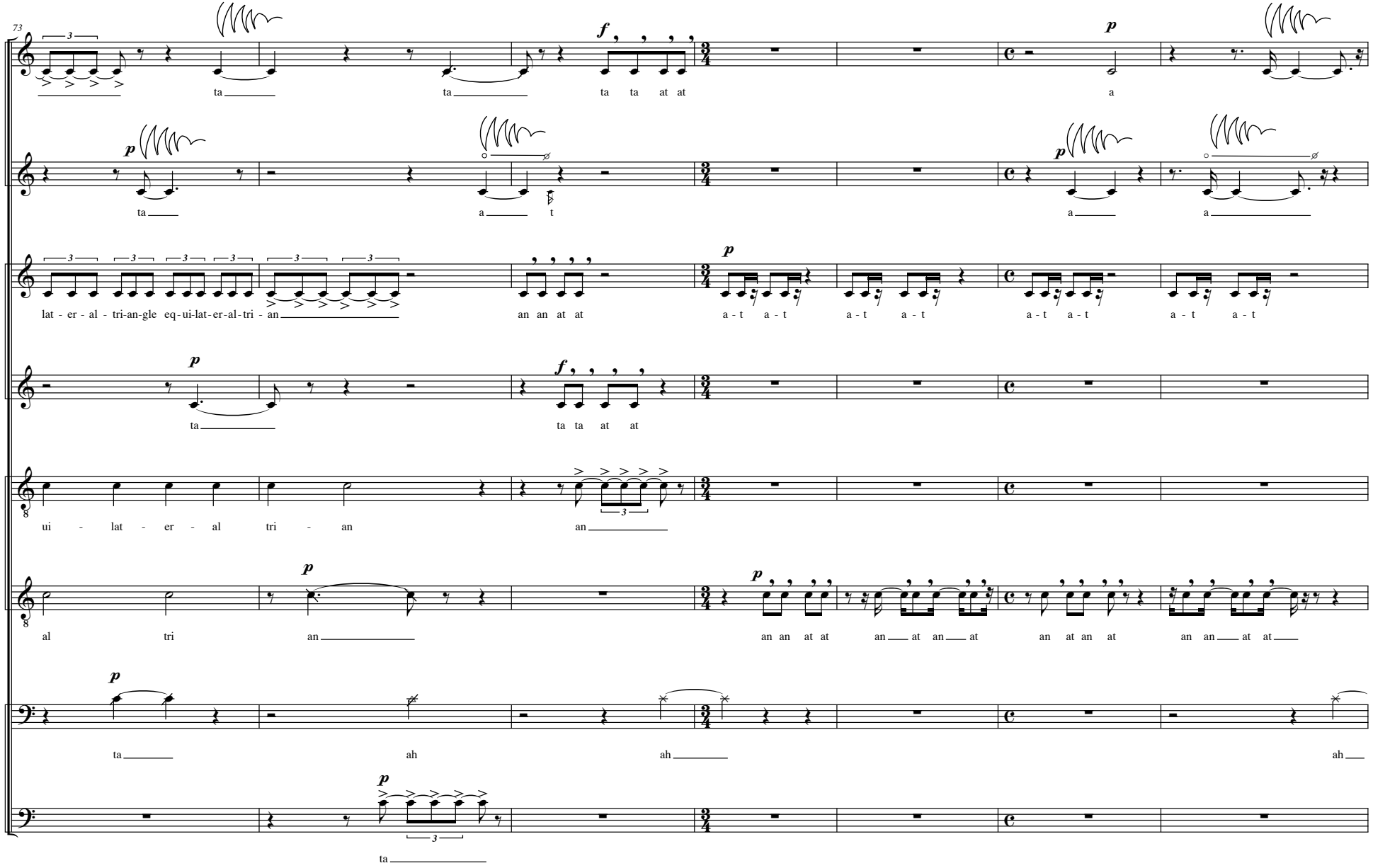

rit.
= 40
= 40
rit.
= 40
36
S 1
pen-ta-gon pen-ta-gon pen - ta - gon pen - ta - gon pen - ta - gon pen - ta - gon pen-ta-gon pen-ta-gon
Four A
S 2
pen - ta - gon pen-ta-gon pen-ta-gon pen - - - ta - - - gon
Four A square A square A square A square
A 1
rec-tan-gle rec-tan-gle rec-tan - gle
Four
A 2
rec - tan - gle rec - tan
Four
T 1
pen - ta - gon pen - ta - gon pen-ta-gon pen-ta-gon pen - ta - gon
rec - tan - gle rec - tan - gle - rec - tan
Four
T 2
rec - tan - gle rec
Four
B 1
pen - - - ta - - - gon pen - ta - gon pen - ta - gon
Four A square A square
B 2
pen - ta - gon pen-ta-gon pen-ta-gon pen - ta - gon pen-ta-gon pen-ta-gon pen - ta - gon
Four A square

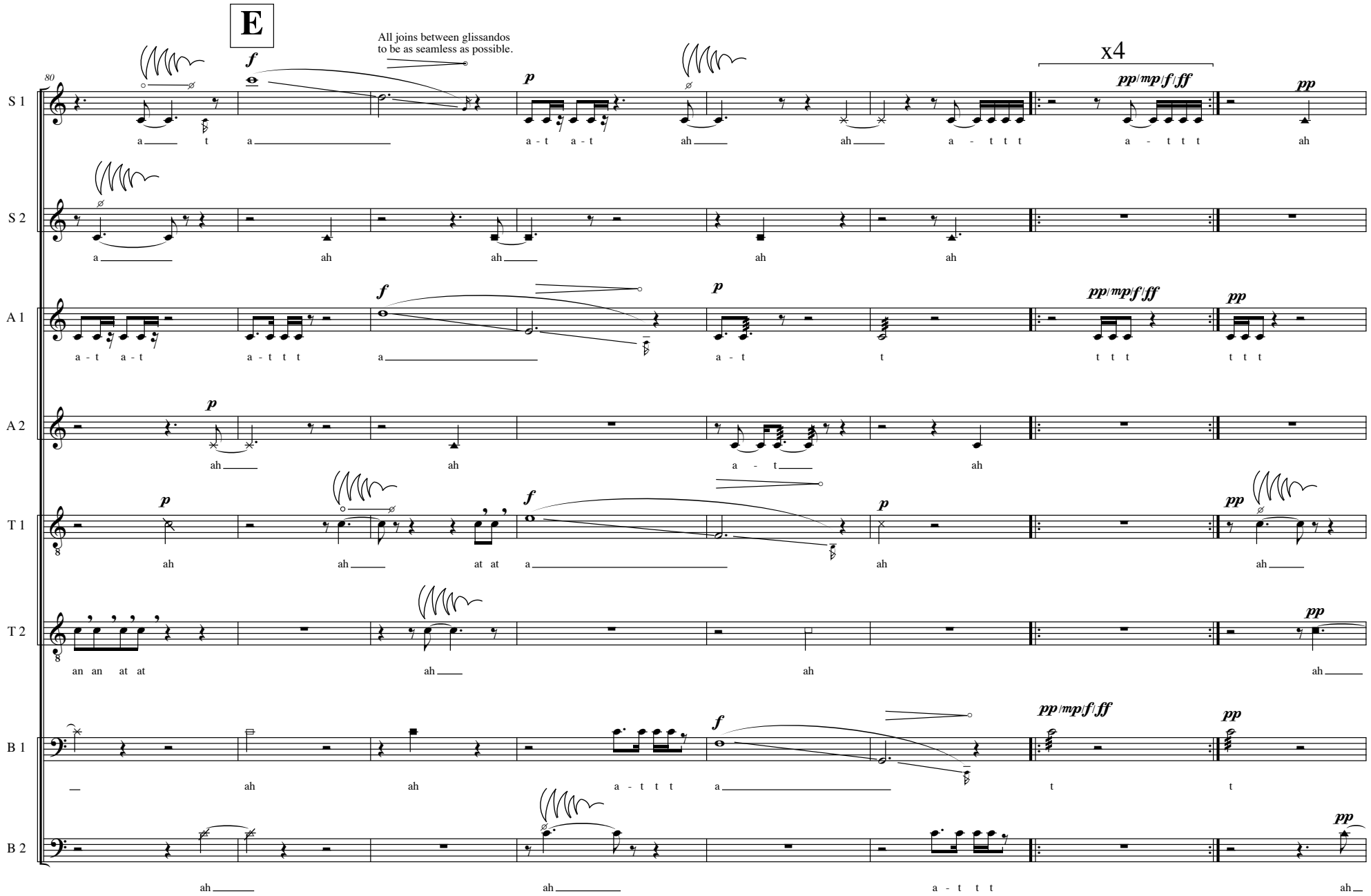

accel. ---------- ♩ = 80
42
S 1
square
e - qui - lat - er - al tri - an - gle
Three
S 2
A square A square A square A square
A 1
e - - - qui - - - lat - - - er
Three
A 2
eq-ui-lat-er-al tri - an-gle eq-ui-lat-er - al tri-an-gle eq-ui-lat-er-al tri-an-gle
Three
T 1
T 2
Three
i - so - ce-les tri-an - gle i - so - ce-les tri - an-gle i - so - ce-les tri - an-gle
B 1
A square A square
Three
i - so - ce - - les - tri - an - gle
B 2
A square
Three
i - so - ce - les tri - an - gle i - so - ce - les - tri

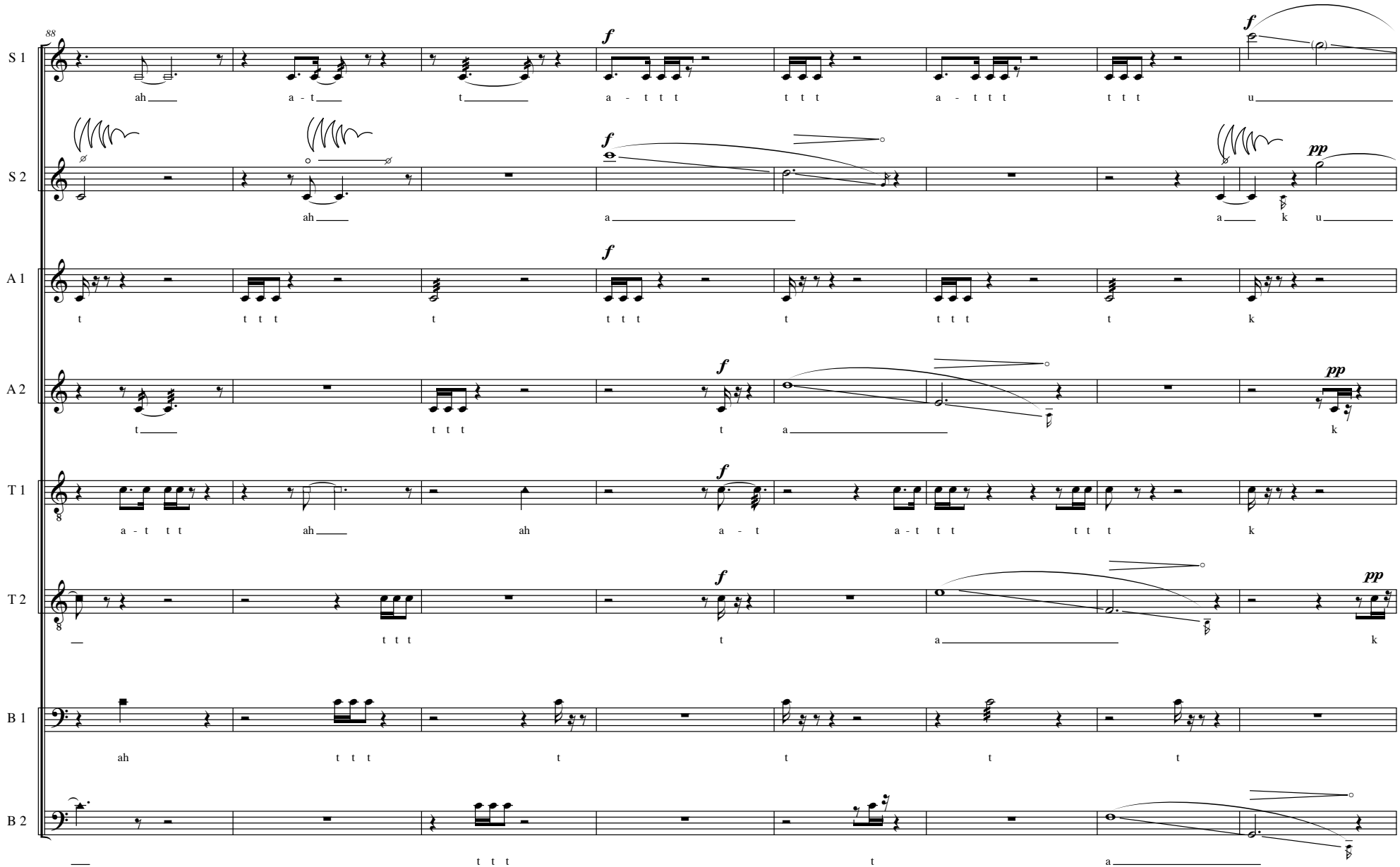

C
= 72
48
S 1
S 2
A 1
A 2
T 1
T 2
B 1
B 2
line

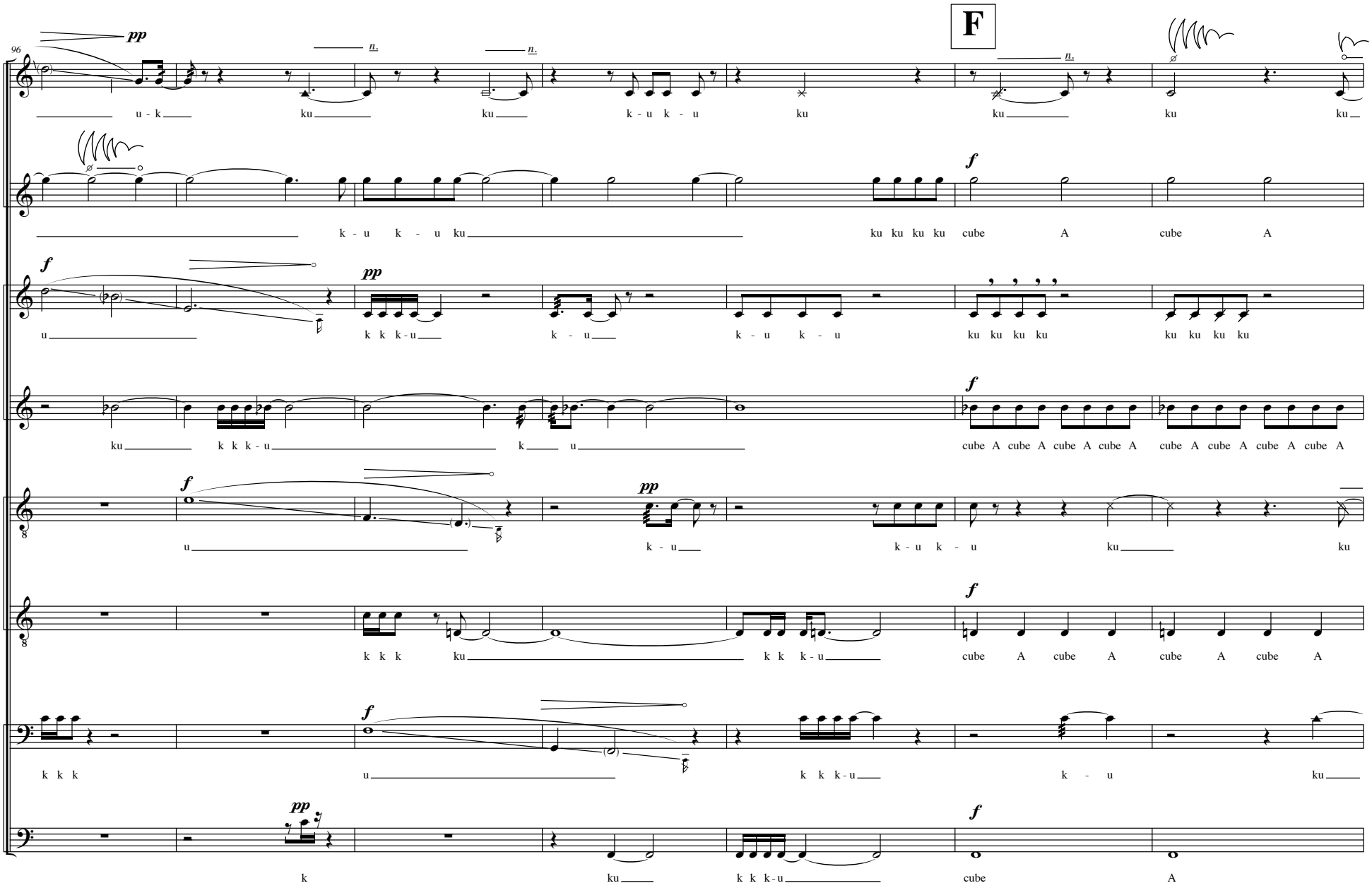

57
S 1
line
S 2
line
A 1
i - so - ce - les tri - an - gle i
A 2
i - so - ce - les tri - an - gle i - so - ce - les tri - an-gle i
T 1
i - so - ce - les tri - an - gle i
T 2
lat-er-al tri-an-gle eq-ui-lat-er-al tri-an an an an t
B 1
ui - lat - er - al tri - - - an an an an t
B 2
al tri - - an an an at at a - t a - t a - t t t a - t t

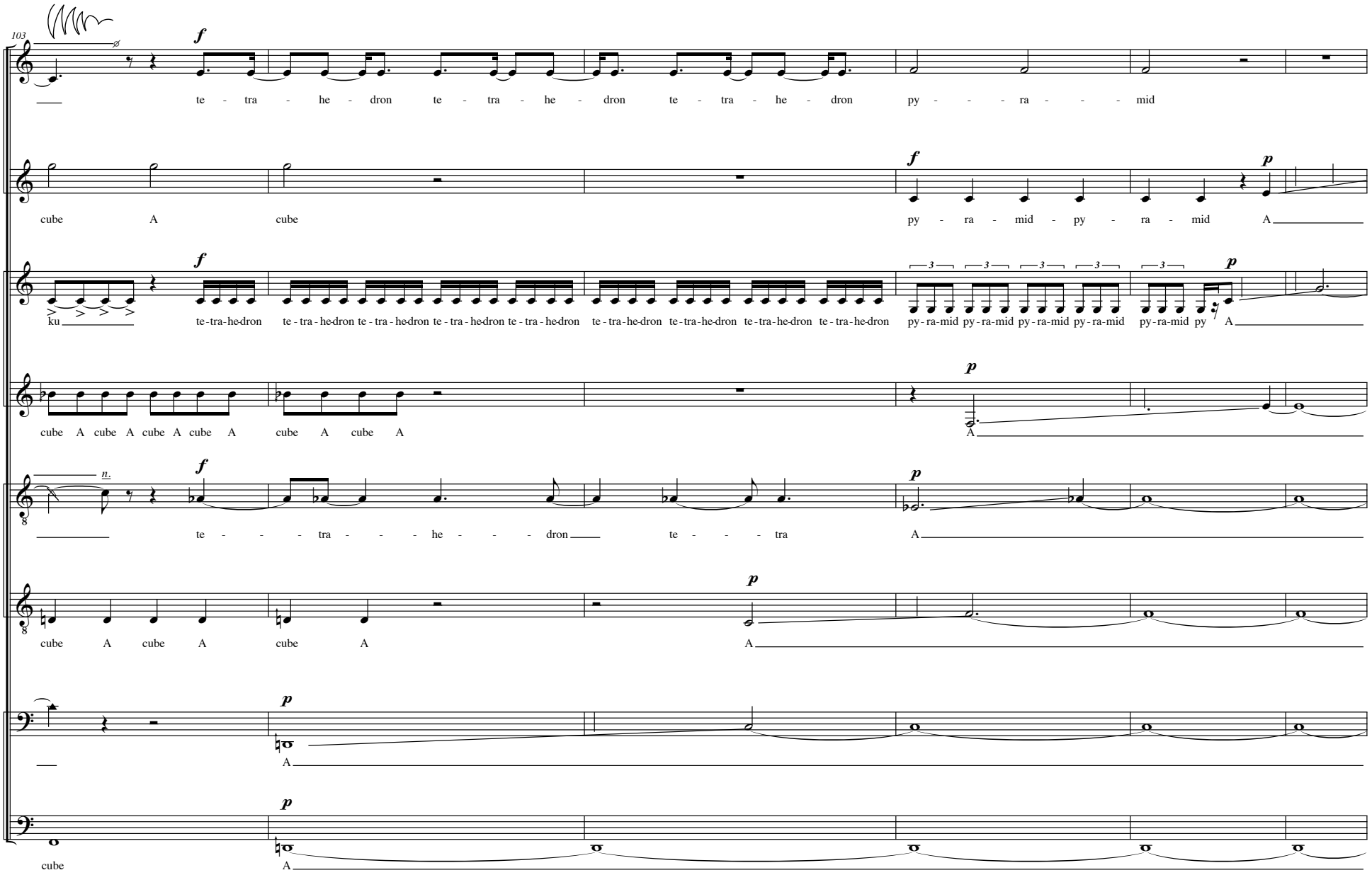

D
65
S 1
S 2
A 1
A 2
T 1
T 2
B 1
B 2
pp
p
f
dim.
(non dim.)
ta t ta-gon pen-ta - gon pen - ta-gon pen-ta-gon pen - ta ta
ta t pen - ta - - - gon pen - ta
i t tri an-gle eq-ui-lat-er-al-tri-an-gle-eq-ui-
ta t ta - - - gon pen - - ta
i i i i i tri tri tri i tri tri tri i tri tri tri tri tri tri tri tri tri tri an - gle eq -
t t t t t ta t ta t tri t tri t tri lat - - - er - - -
t t t t t ta t ta t ta - gon pen - ta - gon pen - ta
t t t t t ta t ta t ta pen - - - - - - - ta

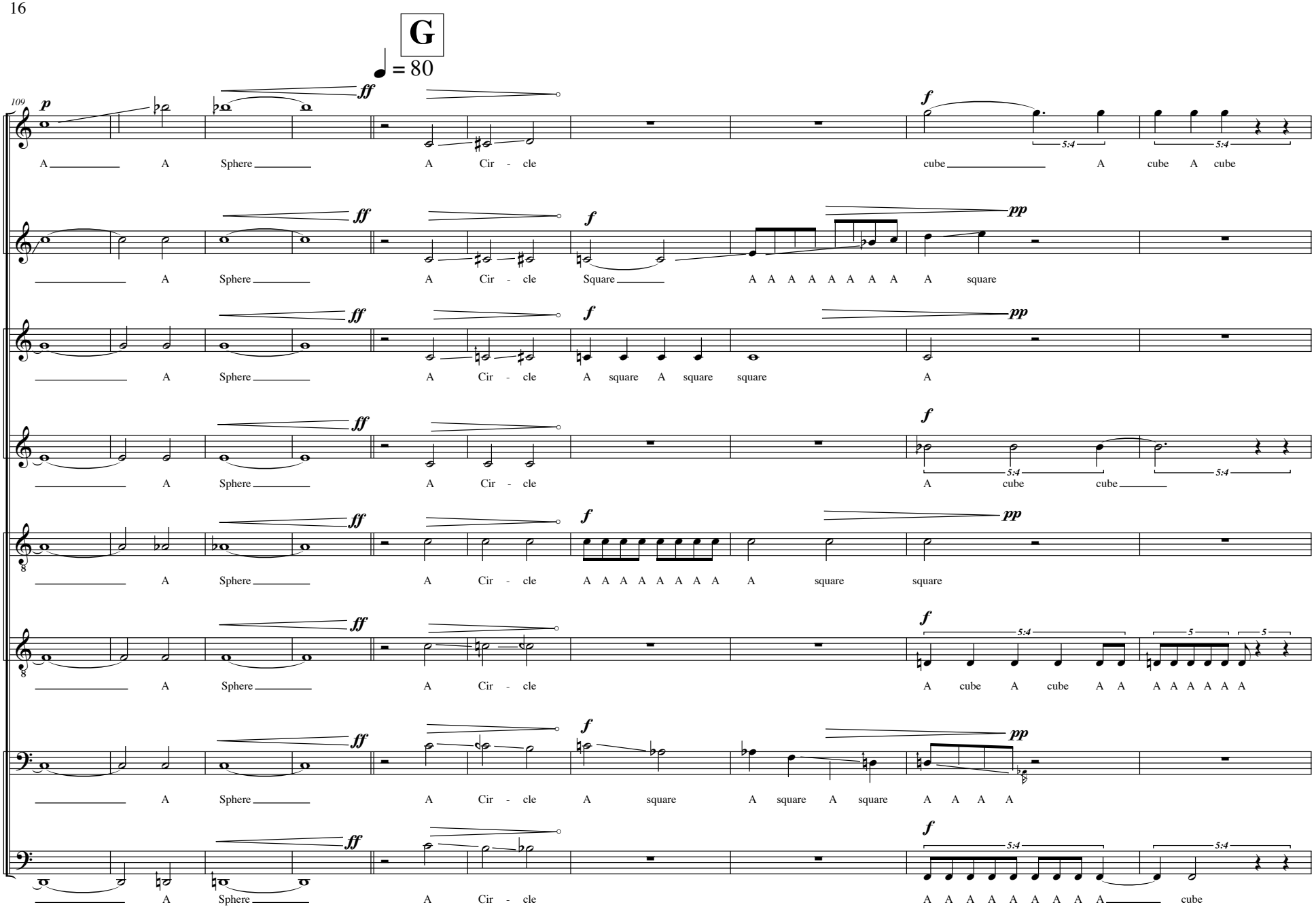

73
S 1
S 2
A 1
A 2
T 1
T 2
B 1
B 2
ta ta ta ta at at a
ta a t a a
lat - er - al - tri-an-gle eq-ui-lat-er-al-tri - an an an at at a - t a - t a - t a - t a - t a - t a - t a - t
ta ta ta at at
ui - lat - er - al tri - an an
al tri an an an at at an at an at an at an at an an at at
ta ah ah ah
ta

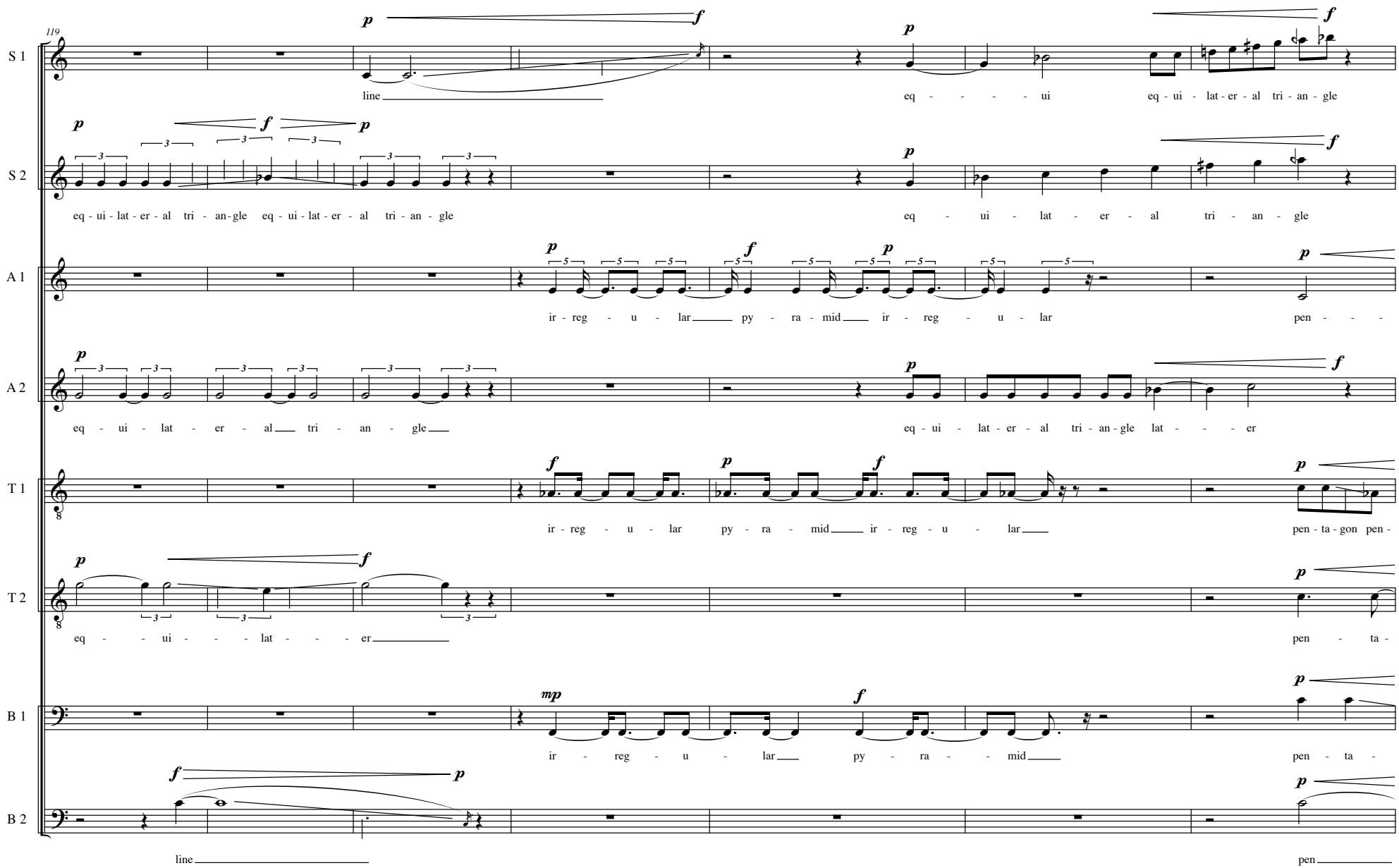

E
All joins between glissandos to be as seamless as possible.
x4
80
S 1
S 2
A 1
A 2
T 1
T 2
B 1
B 2
f
p
pp/mp/f/ff
pp
a t a a-t a-t ah ah a-t t t a-t t t ah
a ah ah ah ah
a-t a-t a-t t t a a-t t t t t t
ah ah a-t ah
ah ah at at a ah ah
an an at at ah ah ah
ah ah a-t t t a t t
ah ah a-t t t ah

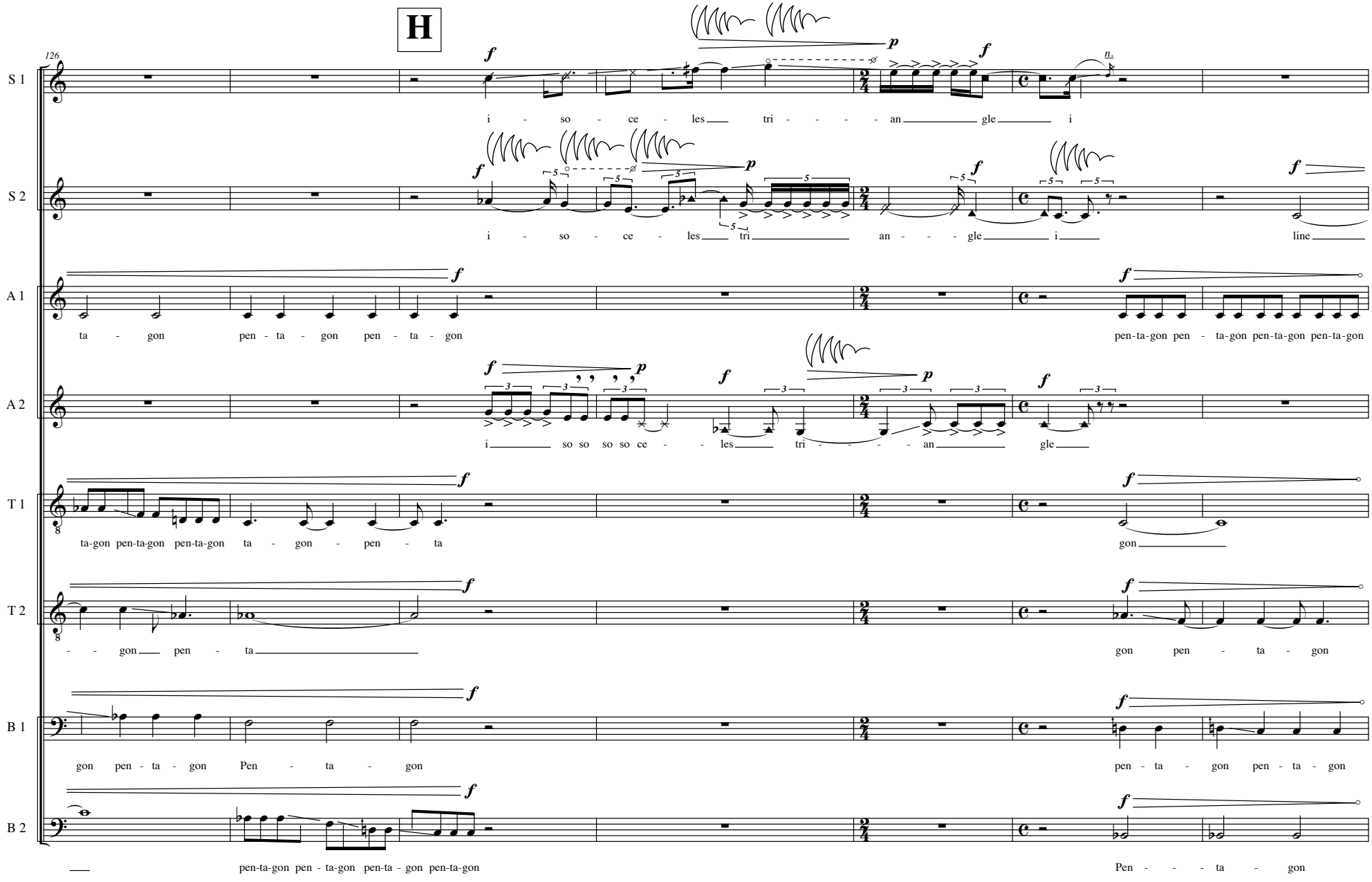

88
S 1
S 2
A 1
A 2
T 1
T 2
B 1
B 2
f
pp
ah a - t t a - t t t t t t a - t t t t t t u
ah a a k u
t t t t t t t t t t t t k
t t t t a k
a - t t t ah ah a - t a - t t t t t k
t t t t a k
ah t t t t t t t
t t t t a

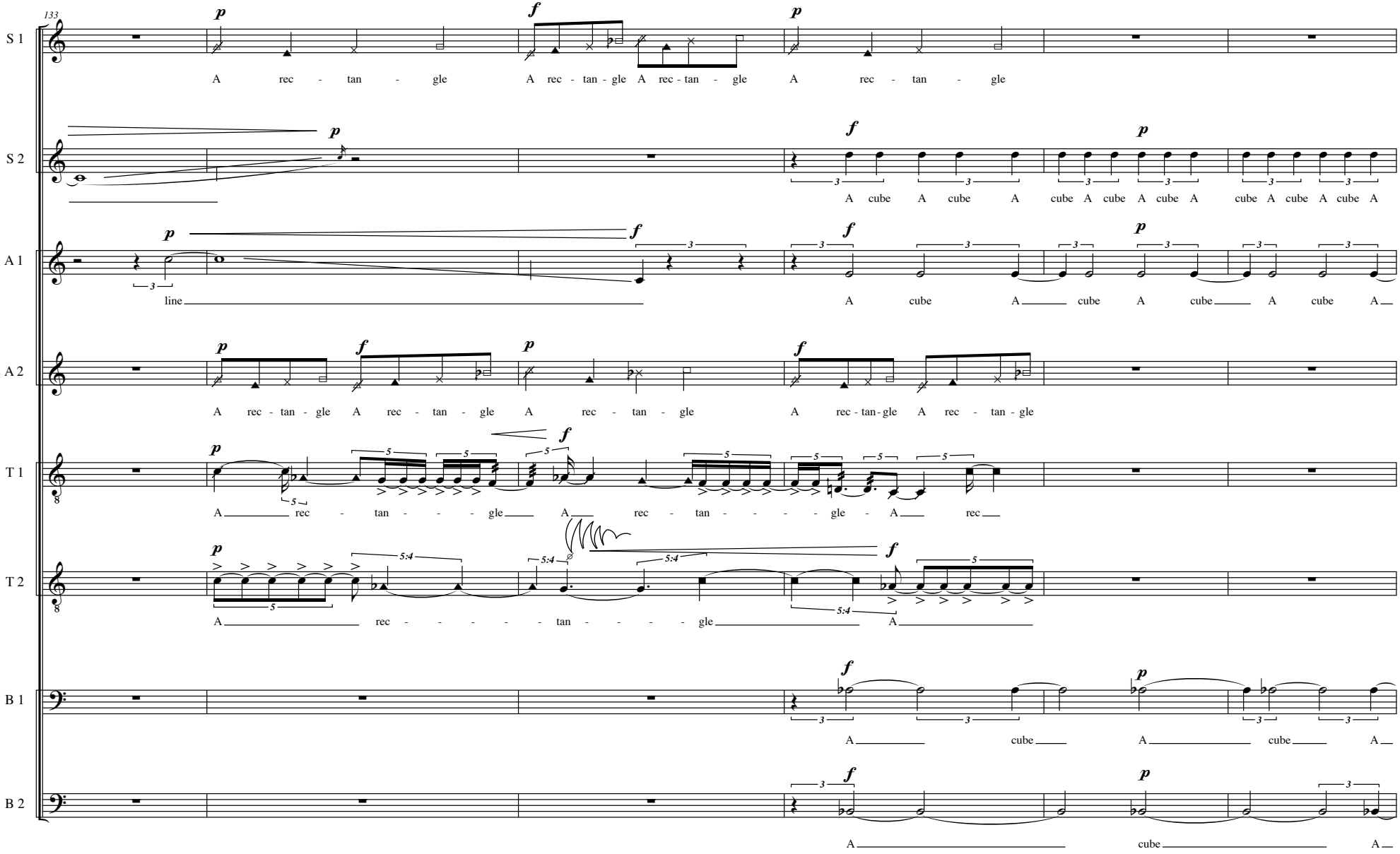

F
S 1
S 2
A 1
A 2
T 1
T 2
B 1
B 2
pp
f
u - k ku ku k - u k - u ku ku ku ku
k - u k - u ku ku ku ku cube A cube A
u k k k - u k - u k - u k - u ku ku ku ku ku ku ku ku
ku k k k - u k u cube A cube A cube A cube A cube A cube A cube A cube A
u k - u k - u k - u ku ku
k k k ku k k k - u cube A cube A cube A cube A
k k k u k k k - u k - u ku
k ku k k k - u cube A

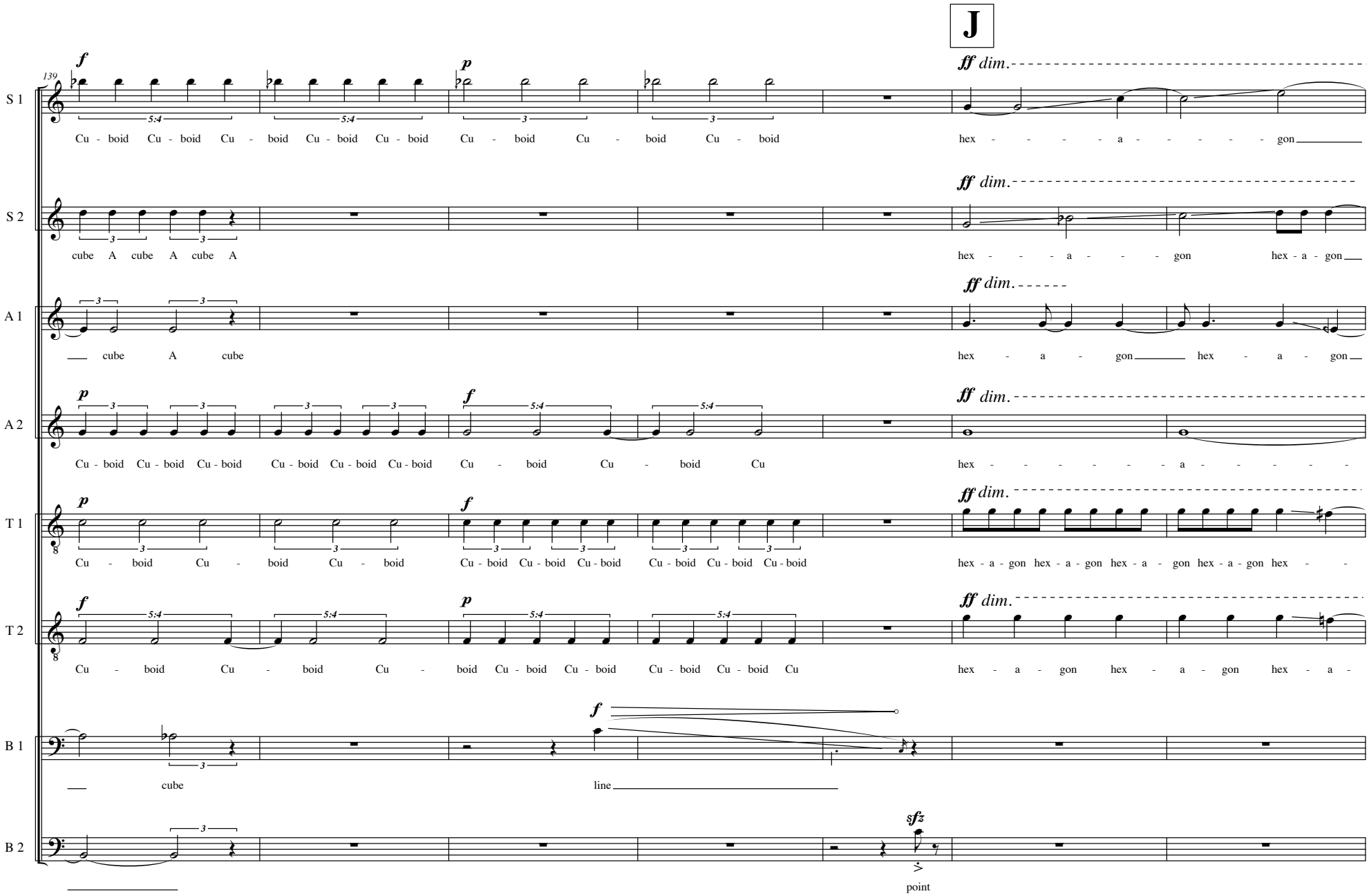

103
S 1
te - tra - he - dron te - tra - he - dron te - tra - he - dron py - - - ra - - - mid
S 2
cube A cube py - ra - mid - py - ra - mid A
A 1
ku te-tra-he-dron te - tra - he-dron te - tra - he-dron te - tra - he-dron te - tra - he-dron te - tra-he-dron te-tra-he-dron te - tra-he-dron te-tra-he-dron py-ra-mid py-ra-mid py-ra-mid py-ra-mid py-ra-mid py A
A 2
cube A cube A cube A cube A cube A cube A
T 1
te - - - - tra - - - - he - - - - dron te - - - tra A
T 2
cube A cube A cube A A
B 1
A
B 2
cube A

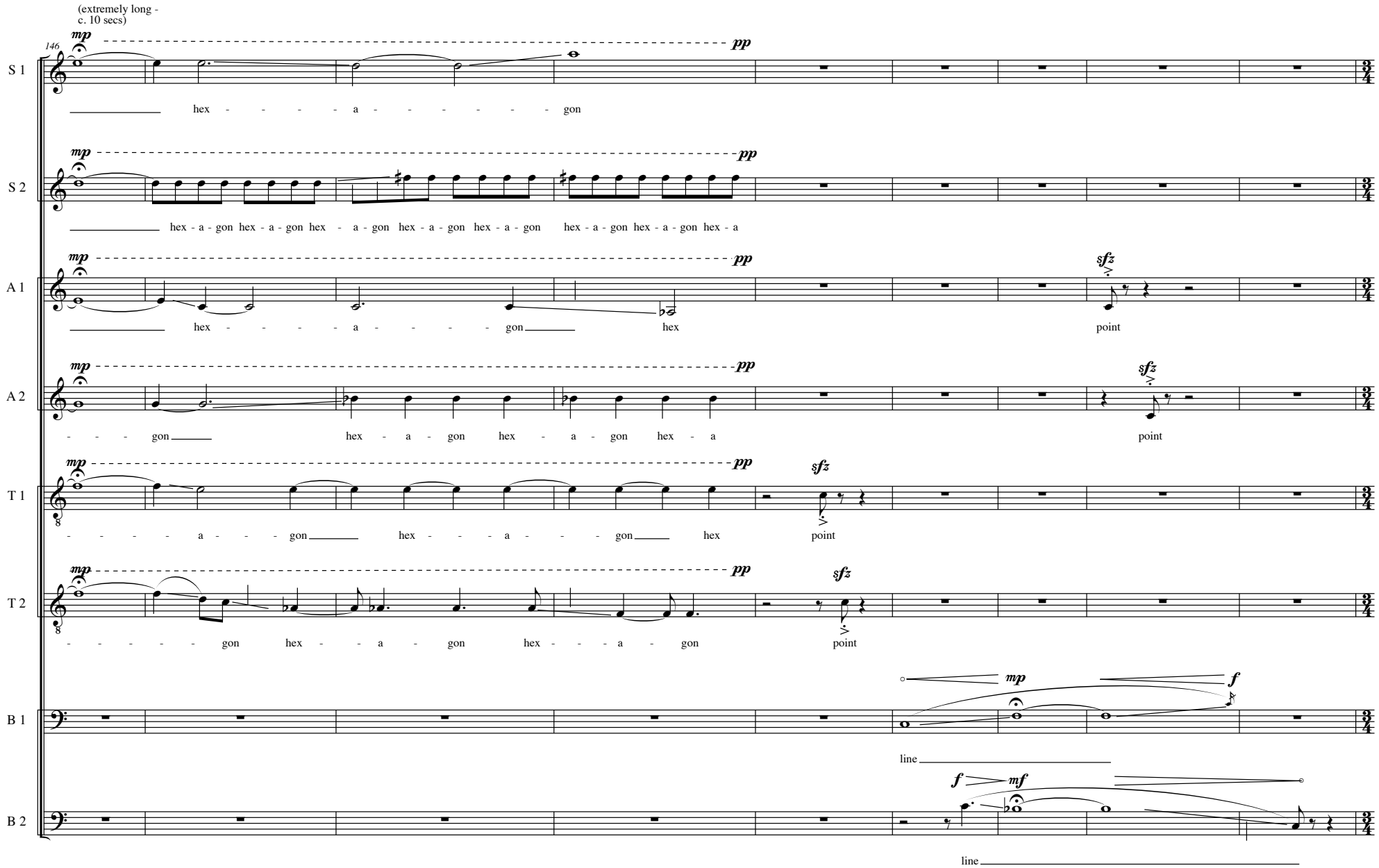

G
♩ = 80
109
S 1
S 2
A 1
A 2
T 1
T 2
B 1
B 2
p
ff
f
pp
5:4
5
A Sphere A Cir - cle
A Sphere A Cir - cle Square A A A A A A A A square
A Sphere A Cir - cle A square A square square A
A Sphere A Cir - cle A cube cube
A Sphere A Cir - cle A A A A A A A A square square
A Sphere A Cir - cle A cube A cube A A A A A A A
A Sphere A Cir - cle A square A square A square A A A A
A Sphere A Cir - cle A A A A A A A A A cube

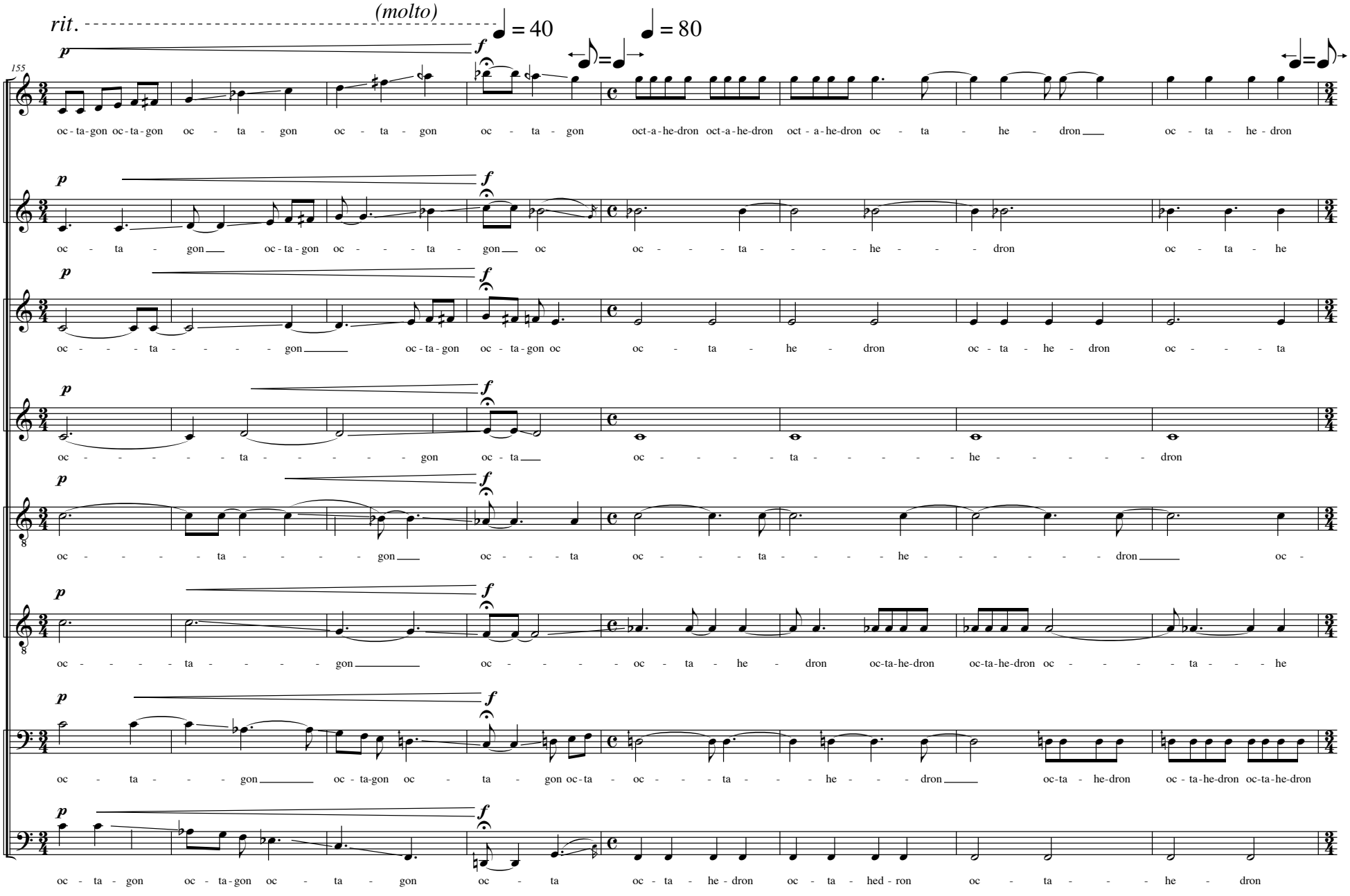

119
S 1
line
eq - - - - - ui
eq - ui - lat - er - al tri - an - gle
S 2
eq - ui - lat - er - al tri - an - gle eq - ui - lat - er - al tri - an - gle
eq - ui - lat - er - al tri - an - gle
A 1
ir - reg - u - lar py - ra - mid ir - reg - u - lar
pen - - -
A 2
eq - ui - lat - er - al tri - an - gle
eq - ui - lat - er - al tri - an - gle lat - - - er
T 1
ir - reg - u - lar py - ra - mid ir - reg - u - lar
pen - ta - gon pen -
T 2
eq - - ui - - - lat - - - er
pen - ta -
B 1
ir - reg - u - lar py - ra - mid
pen - ta -
B 2
line
pen

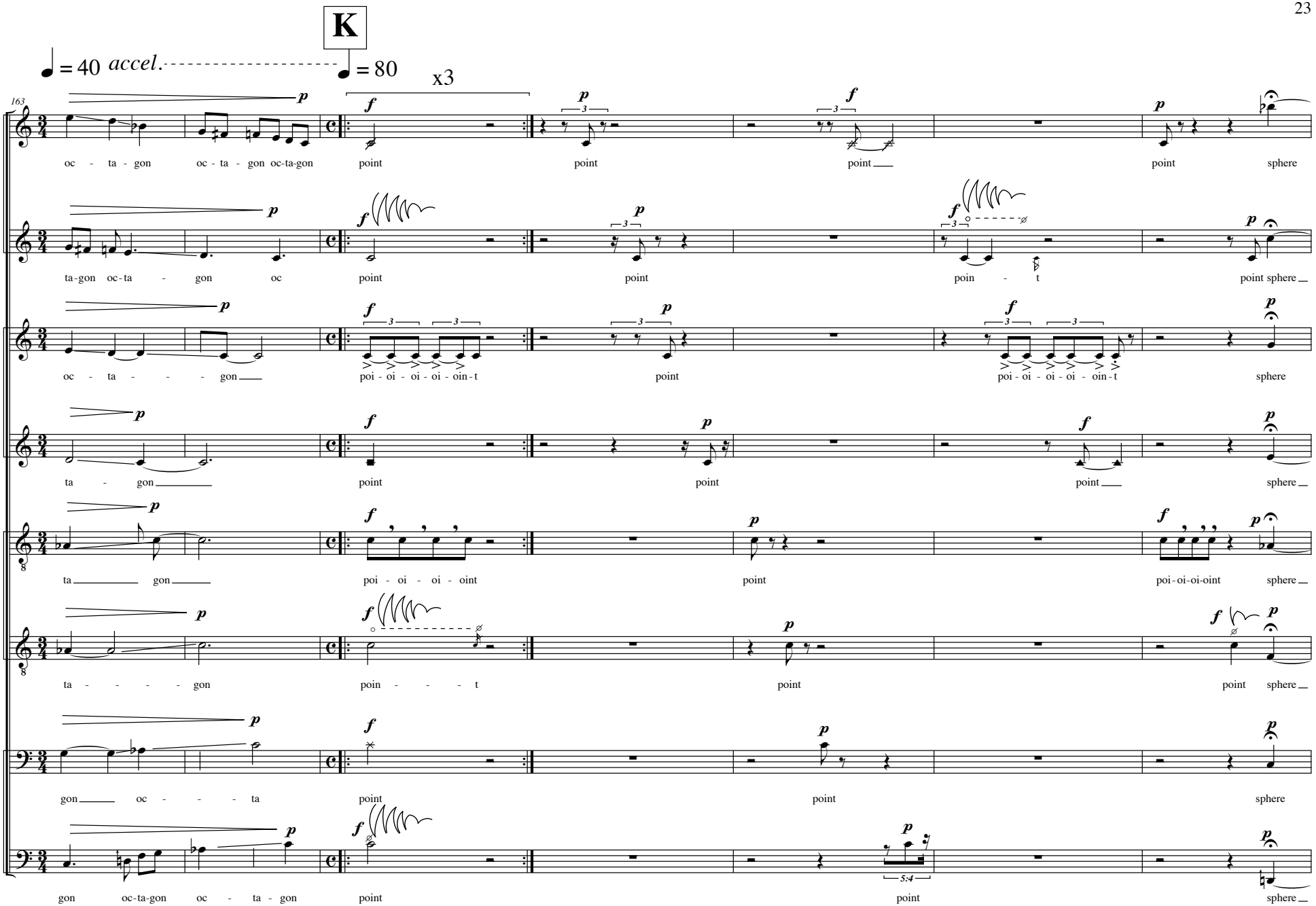

H
126
S 1
i - so - ce - les tri - - - - an gle i
S 2
i - so - ce - les tri an - - - gle i line
A 1
ta - gon pen - ta - gon pen - ta - gon pen-ta-gon pen - ta-gon pen-ta-gon pen-ta-gon
A 2
i so so so so ce - - les tri - - - - an gle
T 1
ta-gon pen-ta-gon pen-ta-gon ta - gon - pen - ta gon
T 2
- - gon pen - ta gon pen - ta - gon
B 1
gon pen - ta - gon Pen - ta - gon pen - ta - gon pen - ta - gon
B 2
pen-ta-gon pen - ta-gon pen-ta - gon pen-ta-gon Pen - - - ta - gon

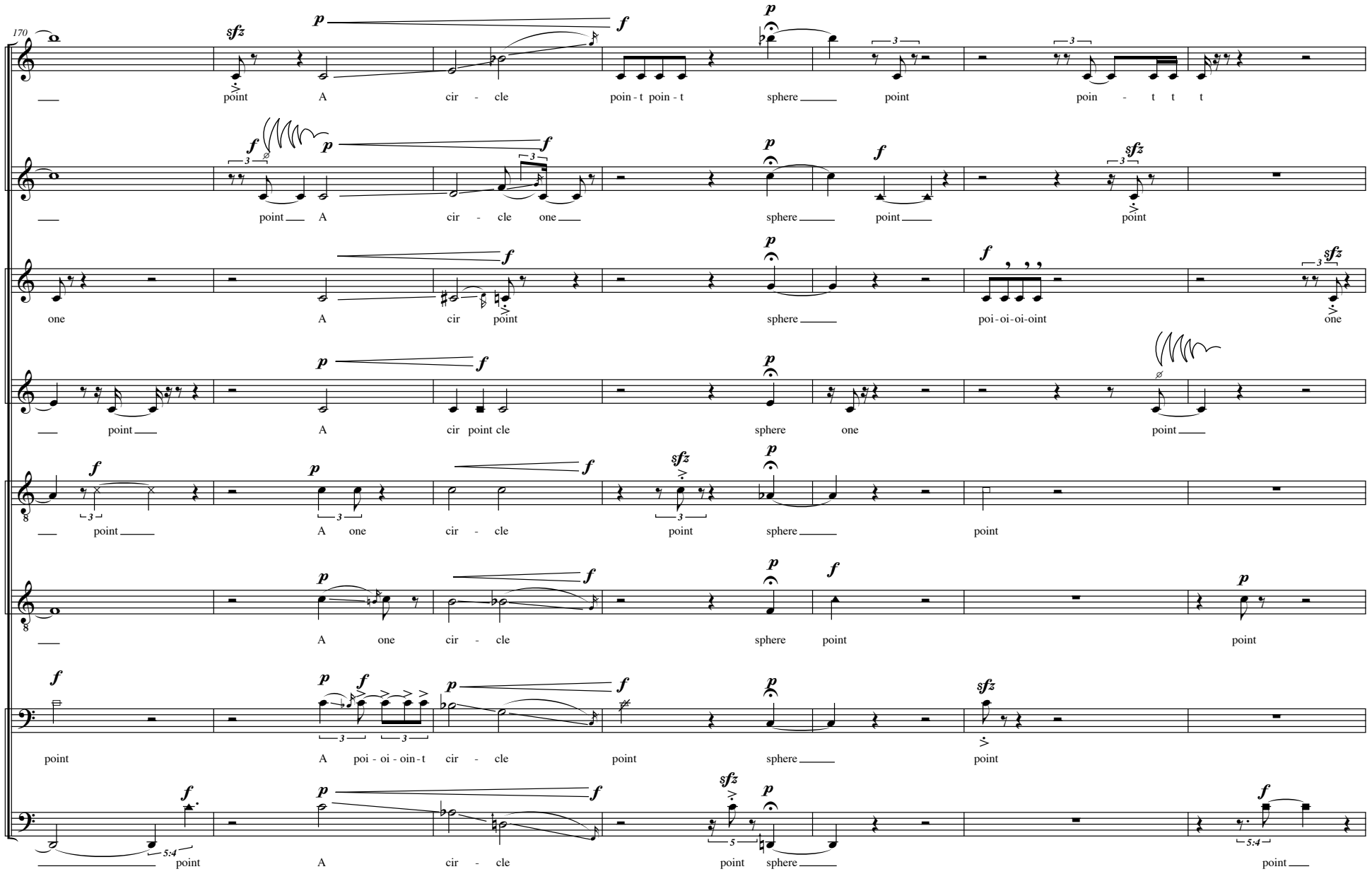

133
S 1
A rec - tan - gle A rec - tan - gle A rec - tan - gle A rec - tan - gle
S 2
A cube A cube A cube A cube A cube A cube A cube A cube A cube A
A 1
line A cube A cube A cube A cube A cube A
A 2
A rec - tan - gle A rec - tan - gle A rec - tan - gle A rec - tan - gle A rec - tan - gle
T 1
A rec - tan - - - gle A rec - tan - - - gle - A rec
T 2
A rec - - - - - tan - - - - gle A
B 1
A cube A cube A
B 2
A cube A

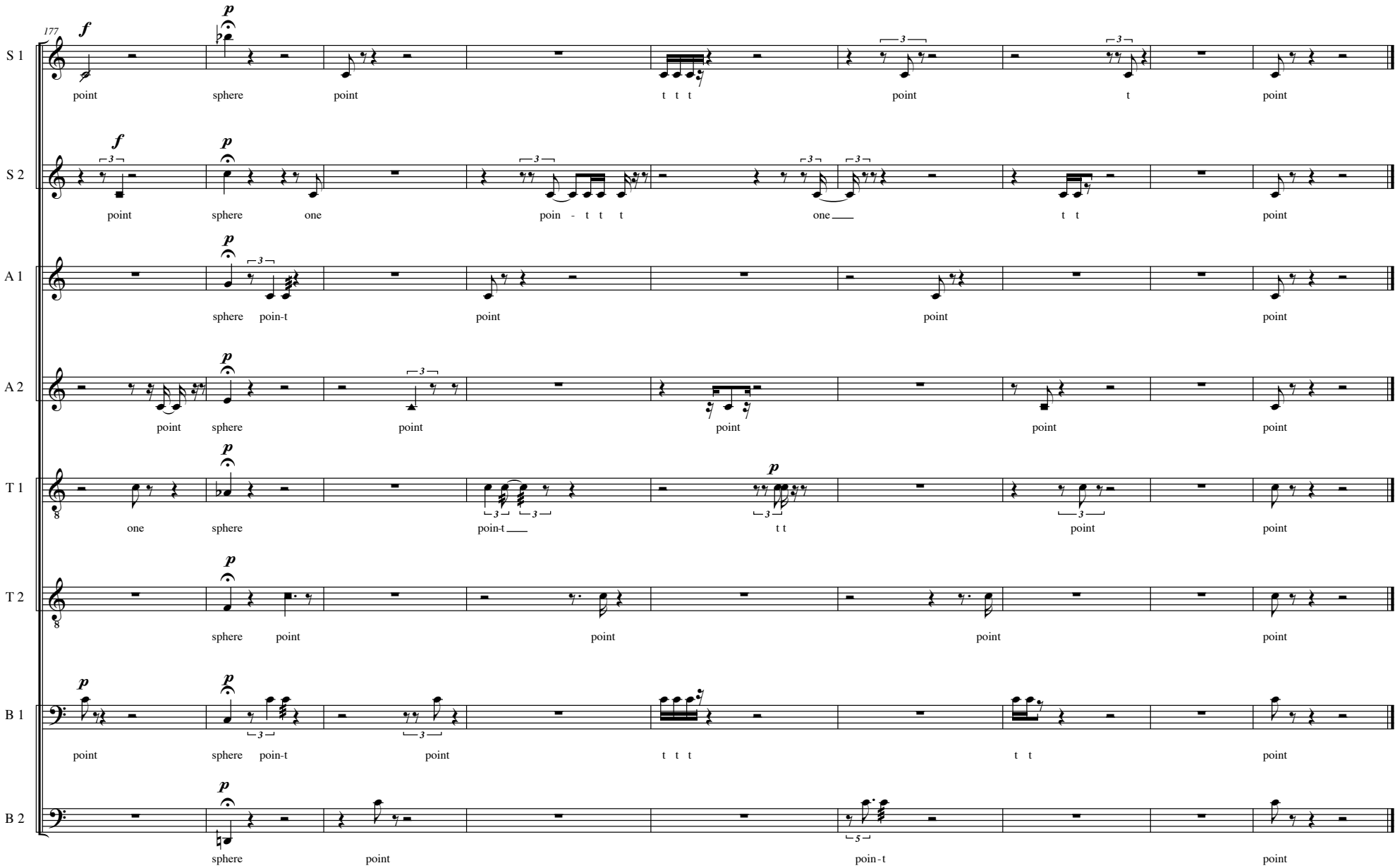

J
139
S 1
S 2
A 1
A 2
T 1
T 2
B 1
B 2
Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid
hex - - - - a - - - - gon
cube A cube A cube A
hex - - - a - - - gon hex - a - gon
cube A cube
hex - a - gon hex - a - gon
Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu
hex - - - - - - a - - - - -
Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid
hex - a - gon hex - a - gon hex - a - gon hex - a - gon hex - -
Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu
hex - a - gon hex - a - gon hex - a -
cube
line
point
ff dim.
f
p
sfz


(extremely long - c. 10 secs)
146
S 1
hex - - - - - a - - - - - - - gon
S 2
hex - a - gon hex - a - gon hex - a - gon hex - a - gon hex - a - gon hex - a - gon hex - a - gon hex - a
A 1
hex - - - - - a - - - - - gon hex
point
A 2
- - - gon hex - a - gon hex - a - gon hex - a
point
T 1
- - - - - a - - - gon hex - - - a - - - gon hex
point
T 2
- - - - - - gon hex - - a - gon hex - - - a - gon
point
B 1
line
B 2
line
mp
pp
sfz
f
mf


rit.
(molto)
♩ = 40
♩ = 80
155
S 1
oc - ta - gon oc - ta - gon oc - ta - gon oc - ta - gon oc - ta - gon oct - a - he - dron oct - a - he - dron oct - a - he - dron oc - ta - he - dron oc - ta - he - dron
S 2
oc - ta - gon oc - ta - gon oc - ta - gon oc oc - ta - he - dron oc - ta - he
A 1
oc - ta - gon oc - ta - gon oc - ta - gon oc oc - ta - he - dron oc - ta - he - dron oc - ta
A 2
oc - ta - gon oc - ta oc - ta - he - dron
T 1
oc - ta - gon oc - ta oc - ta - he - dron oc -
T 2
oc - ta - gon oc - oc - ta - he - dron oc - ta - he - dron oc - ta - he - dron oc - ta - he
B 1
oc - ta - gon oc - ta - gon oc - ta - gon oc - ta - oc - ta - he - dron oc - ta - he - dron oc - ta - he - dron oc - ta - he - dron
B 2
oc - ta - gon oc - ta - gon oc - ta - gon oc - ta oc - ta - he - dron oc - ta - hed - ron oc - ta - he - dron


K
♩ = 40 accel.
♩ = 80
x3
163
S 1
oc - ta - gon oc - ta - gon oc-ta-gon point point point point sphere
S 2
ta-gon oc-ta - gon oc point point poin - t point sphere
A 1
oc - ta - - - gon poi - oi - oi - oi - oin - t point poi - oi - oi - oi - oin - t sphere
A 2
ta - gon point point point sphere
T 1
ta gon poi - oi - oi - oint point poi - oi - oi - oint sphere
T 2
ta - - - - gon poin - - - t point point sphere
B 1
gon oc - - - ta point point sphere
B 2
gon oc-ta-gon oc - ta - gon point point sphere


170
S 1
point A cir - cle poin - t poin - t sphere point poin - t t t
S 2
point A cir - cle one sphere point point
A 1
one A cir point sphere poi - oi - oi - oint one
A 2
point A cir point cle sphere one point
T 1
point A one cir - cle point sphere point
T 2
A one cir - cle sphere point point
B 1
point A poi - oi - oin - t cir - cle point sphere point
B 2
point A cir - cle point sphere point


177
S 1
point sphere point t t t point t point
S 2
point sphere one poin - t t t one t t point
A 1
sphere poin-t point point point
A 2
point sphere point point point point
T 1
one sphere poin-t t t point point
T 2
sphere point point point point
B 1
point sphere poin-t point t t t t t point
B 2
sphere point poin-t point