

Flatland

For 8 voices

Alex Hills, January 2014
Duration c. 10 minutes

Performance Instructions

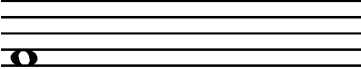
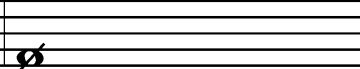
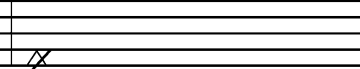
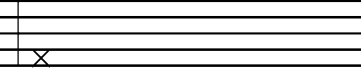
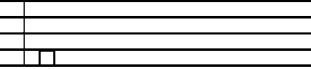
All abbreviations are standard. Accidentals carry throughout the bar.

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).




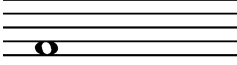
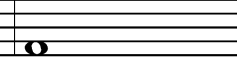
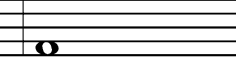
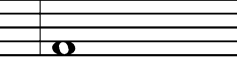
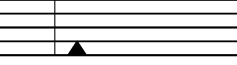

Symbols/Noteheads:

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':

normal	slightly breathy	breath in the back of throat	clear exhaling of breath	air only, with no sung quality
				
ah	ah	ah	ah	ah

'Distortion'

normal	exaggerated vibrato	vibrato while moving tounge to roof of mouth	very nasal vibrato in front of mouth	distort in back of throat/ with diaphragm	crush completely in back of throat
					
					
ah	ah	ah	ah	ah	ah

'Percussiveness' (this largely moves to detached consonants)

normal	continuous sound with clear pulsation -somewhat like 'Monteverdi trill'	clearly separated iterations	hard consonant with tounge at end of vowel	repeated consonant following vowel	rolled consonant (quasi-fluttertounge) after vowel	rolled consonant alone	hard consonant with tounge
							
ah	ah	ah at ah at	a - t a - t	a - t t t	a - t	t	t

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.

strict and mechanical but
without metric stress

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

♩ = 80

Soprano 1 *f* square A A A A A A A A A square *p* line

Soprano 2 *p* eq - ui - lat - er - al tri - an - gle eq - ui - lat - er - al tri - an - gle

Alto 1 *f* A square A square square A

Alto 2 *p* eq - - - - ui - - - - lat - al - er - - - - al - - - - tri

Tenor 1 *f* A A A A A A A A A square square

Tenor 2 *p* eq - - - - - ui - - - - - lat

Bass 1 *f* A square A square A square A A A A

Bass 2 *f* *p* line

A

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

21

S 1 *f*
A rec - tan - gle A rec - tan - gle A rec - tan - gle Four

S 2 *p*
A square A square A square A square A square A square

A 1 *f* *p*
A square A square A square A square A square

A 2 *f*
A rec - tan - gle A rec - tan - gle A rec - tan - gle Four

T 1 *f*
A rec - tan - - - gle A rec Four

T 2 *f*
tan - - - - - gle A Four

B 1 *p*
A square A square

B 2 *p*
A square

B

rit. ----- ♩ = 40

accel. ----- ♩ = 80 *rit.* ----- ♩ = 60

26 *ff* *p* *f* *p* *f*

S 1 Cir - cle oc - ta - gon oc - ta - gon oc - ta - gon oc - ta - gon Eight Six hex - a - gon Five

S 2 *ff* *p* *f* *f* Cir - cle oc - ta - gon oc - ta - gon oc - ta Eight Five

A 1 *ff* *p* *f* *p* Cir - cle oc - ta - gon oc - ta - gon Eight Six hex - a - gon hex - a - gon

A 2 *ff* *p* *f* *p* Cir - cle oc - ta - gon Eight Six hex - a - gon

T 1 *ff* *p* *f* *p* *f* Cir - cle oc - ta - gon Eight Six hex - a - gon hex - a - gon hex - a - gon hex - a - gon hex - a - gon Five

T 2 *ff* *p* *f* *p* Cir - cle oc - ta - gon Eight Six hex - a - gon hex - a - gon hex - a - gon

B 1 *ff* *p* *f* *f* Cir - cle oc - ta - gon oc - ta - gon oc - ta Eight Five

B 2 *ff* *p* *f* *p* *f* Cir - cle oc - ta - gon oc - ta - gon oc - ta - gon Eight Six hex - a - gon hex - a - gon Five

rit.-----

♩ = 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 *p* square e - qui - lat - er - al tri - an - gle *f* Three _____

S 2 A square A square A square A square

A 1 *p* e - - - qui - - - lat - - - er *f* Three _____

A 2 *p* eq-ui-lat-er-al tri-an-gle eq-ui-lat-er-al tri-an-gle eq-ui-lat-er-al tri-an-gle *f* Three _____

T 1

T 2 *f* Three _____ *p* > *f* > *p* > i - so - ce - les tri - an - gle i - so - ce - les tri - an - gle i - so - ce - les tri - an - gle

B 1 *f* A square A square Three _____ *f* *p* *f* *p* *f* *p* i - so - ce - les - tri - an - gle _____

B 2 *f* A square Three _____ *f* *p* *f* *p* *f* *p* i - so - ce - les tri - an - gle i - so - ce - les - tri - an - gle



$\bullet = 72$

48 *f* *p*

S 1 line *p* *f* line

S 2 *p* *f* line *f* *p* *f* line line

A 1 *f* *p* line *p* *f* line

A 2 *p* *f* line *f* *p* line

T 1 *f* *p* line *p* *f* line

T 2 *p* *f* line *f* *p* line

B 1 *f* *p* line *p* *f* line

B 2 *p* *f* *p* line

line

Detailed description: This is a page of a musical score for 8 staves, labeled S 1, S 2, A 1, A 2, T 1, T 2, B 1, and B 2. The score is in common time (C) with a tempo of 72. It begins at measure 48. The staves contain various musical notations including notes, rests, and dynamic markings such as *f* (forte) and *p* (piano). Phrasing is indicated by slurs and the word 'line'. The score shows a complex interplay of dynamics across the different parts, with some parts starting at *f* and others at *p*, and both changing throughout the passage.

D

pp

p

S 1 *pp* ta t ta-gon pen-ta - gon pen - ta-gon pen-ta-gon pen - ta *p* ta

S 2 *pp* ta t pen - ta - - - gon pen - ta

A 1 *f* i tri an-gle eq-ui-lat-er - al-tri-an-gle-eq-ui-

A 2 *pp* ta t ta - - - gon pen - - ta

T 1 *f* (non dim.) i i i i tri tri tri i tri tri tri i tri tri tri tri tri tri tri tri an - gle eq -

T 2 *dim.* t t t t t ta t ta t tri t tri t tri lat - - - er - - - *pp* *f*

B 1 *dim.* t t t t t ta t ta t ta t ta - gon pen - ta - gon pen - ta *pp*

B 2 *dim.* t t t t t ta t ta t pen - - - - - - - - ta *pp*

73

S 1 ta ta ta ta at at a

S 2 ta a t a a

A 1 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

A 2 ta ta ta at at

T 1 ui - lat - er - al tri - an an

T 2 al tri an an an at at an at an at an at an at at

B 1 ta ah ah ah

B 2 ta

Detailed description of the musical score: The score is for eight voices (S1, S2, A1, A2, T1, T2, B1, B2). It begins at measure 73. S1 and S2 have lyrics 'ta ta ta ta at at' and 'ta a t a a' respectively. A1 has a long line of lyrics: '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'. A2 has 'ta ta ta at at'. T1 has 'ui - lat - er - al tri - an an'. T2 has 'al tri an an an at at an at an at an at an at at'. B1 has 'ta ah ah ah'. B2 has 'ta'. Dynamics include *p* (piano) and *f* (forte). There are also some handwritten scribbles above the notes.

E

All joins between glissandos to be as seamless as possible.

80

S 1 *f* *p* *pp/mp/f/ff* *pp* x4
 a t a a-t a-t ah ah a-t-t-t a-t-t-t ah

S 2 a ah ah ah ah

A 1 *f* *p* *pp/mp/f/ff* *pp*
 a-t a-t a-t-t-t a a-t t t-t-t t-t-t

A 2 *p*
 ah ah a-t ah

T 1 *p* *f* *p* *pp*
 ah ah at at a ah ah

T 2 an an at at ah ah ah *pp*

B 1 *f* *pp/mp/f/ff* *pp*
 ah ah a-t-t-t a t t

B 2 ah ah a-t-t-t ah *pp*

88

S 1
ah a - t t a - t t t t t t t u

S 2
ah a k u

A 1
t t t t t t t k

A 2
t t t t a k

T 1
a - t t t ah ah a - t a - t t t t t t k

T 2
t t t t a k

B 1
ah t t t t t t

B 2
t t t t a

Detailed description: This is a page of a musical score for 8 voices, numbered 88. The staves are arranged vertically from Soprano 1 (S1) at the top to Bass 2 (B2) at the bottom. The lyrics are written below the vocal staves. Dynamics such as *f* (forte) and *pp* (pianissimo) are indicated. There are also some handwritten scribbles above the S2 staff. The score includes various musical notations like notes, rests, and slurs.

F

96

pp *ll* *ll* *ll* *f*

S 1 u - k ku ku k - u k - u ku ku ku

S 2 k - u k - u ku ku ku ku cube A cube A

A 1 *f* *pp* u k k k - u k - u k - u k - u ku ku ku ku ku ku ku ku

A 2 *f* ku k k k - u k u cube A cube A cube A cube A cube A cube A cube A cube A

T 1 *f* *pp* u k - u k - u k - u ku ku

T 2 *f* k k k ku k k k - u cube A cube A cube A cube A

B 1 *f* k k k u k k k - u k - u ku ku

B 2 *pp* *f* k ku k k k - u cube A

Detailed description: This is a musical score for eight voices, labeled S1, S2, A1, A2, T1, T2, B1, and B2. The score is written in a common time signature and includes various musical notations such as notes, rests, and slurs. Dynamics are indicated by *pp* (pianissimo) and *f* (forte). The lyrics are written below the notes, with some words like 'cube' and 'A' appearing in the lower parts. There are also some handwritten markings, including a large 'F' in a box at the top right and some scribbles in the S1 and S2 staves.

103

S 1 *f* te - tra - he - dron te - tra - he - dron te - tra - he - dron py - - - ra - - - mid

S 2 *f* *p* cube A cube py - ra - mid - py - ra - mid A

A 1 *f* *p* ku te-tra-hedron te - tra - hedron te - tra - hedron te - tra - hedron te - tra - hedron te - tra - hedron te - tra - hedron te - tra - hedron te - tra - hedron py-ra-mid py-ra-mid py-ra-mid py-ra-mid py-ra-mid py A

A 2 *p* cube A cube A cube A cube A cube A cube A A

T 1 *n.* *f* *p* te - - - tra - - - he - - - dron te - - - tra A

T 2 *p* cube A cube A cube A A A

B 1 *p* A

B 2 *p* cube A

G

$\bullet = 80$

100 *p* *ff* *f* *pp*

S 1 A Sphere A Cir - cle cube A cube A cube

S 2 A Sphere A Cir - cle Square A A A A A A A A square

A 1 A Sphere A Cir - cle A square A square square A

A 2 A Sphere A Cir - cle A cube cube

T 1 A Sphere A Cir - cle A A A A A A A A square square

T 2 A Sphere A Cir - cle A cube A cube A A A A A A A

B 1 A Sphere A Cir - cle A square A square A square A A A A

B 2 A Sphere A Cir - cle A A A A A A A A A cube

Detailed description: This is a musical score for eight voices, labeled S 1, S 2, A 1, A 2, T 1, T 2, B 1, and B 2. The score is written in a common time signature (C) and features a variety of dynamics including piano (p), fortissimo (ff), forte (f), and pianissimo (pp). The lyrics are: S 1: A Sphere A Cir - cle cube A cube A cube; S 2: A Sphere A Cir - cle Square A A A A A A A A square; A 1: A Sphere A Cir - cle A square A square square A; A 2: A Sphere A Cir - cle A cube cube; T 1: A Sphere A Cir - cle A A A A A A A A square square; T 2: A Sphere A Cir - cle A cube A cube A A A A A A A; B 1: A Sphere A Cir - cle A square A square A square A A A A; B 2: A Sphere A Cir - cle A A A A A A A A A cube. The score includes various musical notations such as slurs, ties, and fingerings (e.g., 5:4, 5, 5:4). A tempo marking of 100 and a dynamic marking of p are at the beginning. A box containing the letter 'G' and a note with a duration of 80 are also present at the top.

119

p *f* *p* *f*

S 1 line eq - - - - ui eq - ui - lat - er - al tri - an - gle

p *f* *p* *p* *f*

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

p *f* *p* *f* *p* *p*

A 1 ir - reg - u - lar py - ra - mid ir - reg - u - lar pen - - -

p *f* *p* *f*

A 2 eq - ui - lat - er - al tri - an - gle eq - ui - lat - er - al tri - an - gle lat - - - er

f *p* *f* *p*

T 1 ir - reg - u - lar py - ra - mid ir - reg - u - lar pen - ta - gon pen -

p *f* *p* *p*

T 2 eq - - - ui - - - - lat - - - er pen - ta -

mp *f* *p* *p*

B 1 ir - reg - u - lar py - ra - - - mid pen - ta -

f *p* *p*

B 2 line pen -

Detailed description: This is a page of a musical score for eight voices, labeled S 1, S 2, A 1, A 2, T 1, T 2, B 1, and B 2. The score is in a common time signature and features various dynamics such as *p* (piano), *f* (forte), *mp* (mezzo-piano), and *mf* (mezzo-forte). It includes triplets and slurs. The lyrics are: "line eq - - - - ui eq - ui - lat - er - al tri - an - gle ir - reg - u - lar py - ra - mid ir - reg - u - lar pen - - - eq - ui - lat - er - al tri - an - gle eq - ui - lat - er - al tri - an - gle lat - - - er pen - ta - gon pen - eq - - - ui - - - - lat - - - er pen - ta - ir - reg - u - lar py - ra - - - mid pen - ta - line pen -".

H



126

S 1 *f* i - so - ce - les - - - tri - - - an - - - gle - i *p* *f* *U₂*

S 2 *f* i - so - ce - les - tri - an - - - gle - i *p* *f* *f* line

A 1 *f* ta - gon pen - ta - gon pen - ta - gon *f* pen-ta-gon pen - ta-gon pen-ta-gon pen-ta-gon

A 2 *f* i - so so so so ce - - les - tri - - - an - - - gle *p* *f*

T 1 *f* ta-gon pen-ta-gon pen-ta-gon ta - gon - pen - ta *f* gon

T 2 *f* - - gon pen - ta *f* gon pen - ta - gon

B 1 *f* gon pen - ta - gon Pen - ta - gon *f* pen - ta - gon pen - ta - gon

B 2 *f* pen-ta-gon pen - ta-gon pen-ta - gon pen-ta-gon *f* Pen - - - ta - gon

133

S 1 *p* A rec - tan - gle *f* A rec - tan - gle A rec - tan - gle *p* A rec - tan - gle

S 2 *p* *f* *p*
A cube A cube A cube A cube A cube A cube A cube A cube A

A 1 *p* *f* *f* *p*
line A cube A cube A cube A

A 2 *p* *f* *p* *f*
A rec - tan - gle A rec - tan - gle A rec - tan - gle A rec - tan - gle A rec - tan - gle

T 1 *p* *f*
A rec - tan - - - - gle A rec - tan - - - - gle A rec

T 2 *p* *f*
A rec - - - - - tan - - - - - gle A

B 1 *f* *p*
A cube A cube A

B 2 *f* *p*
A cube A

J

S 1 *f* *p* *ff dim.*
 139 *f* *p*
 Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid hex - - - a - - - gon

S 2 *ff dim.*
 cube A cube A cube A hex - - - a - - - gon hex - a - gon

A 1 *ff dim.*
 - cube A cube hex - a - gon hex - a - gon

A 2 *p* *f* *ff dim.*
 Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu hex - - - a - - -

T 1 *p* *f* *ff dim.*
 8 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 - -

T 2 *f* *p* *ff dim.*
 8 Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu - boid Cu hex - a - gon hex - a - gon hex - a -

B 1 *f*
 - cube line

B 2 *sfz*
 - point

(extremely long -
c. 10 secs)

146 *mp* ----- *pp*

S 1
hex - - - - a - - - - - gon

mp ----- *pp*

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

mp ----- *pp* *sfz*

A 1
hex - - - - a - - - - gon hex point

mp ----- *pp* *sfz*

A 2
- - - gon hex - a - gon hex - a - gon hex - a point

mp ----- *pp* *sfz*

T 1
- - - a - - - gon hex - - - a - - - gon hex point

mp ----- *pp* *sfz*

T 2
- - - gon hex - a - gon hex - a - gon point

B 1 *mp* ----- *f*

B 2 *f* ----- *mf*

line -----

line -----

rit. *(molto)* ♩ = 40 ♩ = 80

S 1 ¹⁵⁵ *p* *f* *rit.* *(molto)* ♩ = 40 ♩ = 80

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 *p* *f*

oc - ta - gon oc - ta - gon oc - ta - gon oc - ta - he - dron oc - ta - he

A 1 *p* *f*

oc - ta - gon oc - ta - gon oc - ta - he - dron oc - ta - he - dron oc - ta

A 2 *p* *f*

oc - ta - gon oc - ta - he - dron

T 1 *p* *f*

oc - ta - gon oc - ta - he - dron oc

T 2 *p* *f*

oc - ta - gon oc - ta - he - dron oc - ta - he - dron oc - ta - he - dron oc - ta - he

B 1 *p* *f*

oc - ta - gon oc - ta - gon oc - ta - gon oc - ta - he - dron oc - ta - he - dron oc - ta - he - dron

B 2 *p* *f*

oc - ta - gon oc - ta - gon oc - ta - gon oc - ta - he - dron oc - ta - he - dron oc - ta - he - dron

K

♩ = 40 *accel.* ----- ♩ = 80

x3

163

S 1
oc - ta - gon oc - ta - gon oc-ta-gon point point point sphere

S 2
ta-gon oc-ta - gon oc point point 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

p *f* *p* *f* *p* *f* *p*

3 3 3 3 3 3 3

5.4

170

S 1 *sfz* *p* *f* *p*
point A cir - cle poin - t poin - t sphere point poin - t t t

S 2 *f* *p* *f* *p* *f* *sfz*
point A cir - cle one sphere point point

A 1 *f* *p* *f* *f* *sfz*
one A cir point sphere poi - oi - oint one

A 2 *p* *f* *p*
point A cir point cle sphere one point

T 1 *f* *p* *f* *sfz* *p*
point A one cir - cle point sphere point

T 2 *p* *f* *p* *f* *p*
A one cir - cle sphere point point

B 1 *f* *p* *f* *p* *f* *p* *sfz*
point A poi - oi - oin - t cir - cle point sphere point

B 2 *f* *p* *f* *sfz* *p* *f*
point A cir - cle point sphere point

177

f *p*

S 1 point sphere point t t t point t point

f *p*

S 2 point sphere one poin - t t t one — t t point

p

A 1 sphere poin-t point point point

p

A 2 point sphere point point point point

p

T 1 one sphere poin-t — t t point point

p

T 2 sphere point point point point

p *p*

B 1 point sphere poin-t point t t t t t point

p

B 2 sphere point poin-t point

Detailed description of the musical score: The score is for 8 voices, labeled S 1, S 2, A 1, A 2, T 1, T 2, B 1, and B 2. It begins at measure 177. The key signature has one flat (B-flat). The time signature is 4/4. Dynamics include *f* (forte) and *p* (piano). The lyrics are: 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. There are several triplets and a quintuplet in the bass parts.