

Jolyon Laycock

# Orbium Cœlestium

(Of the Celestial Orbs)  
Cantata for mixed chorus, soloists and orchestra  
on a text by Nicholaus Copernicus





# Orbium Cœlestium (Of the Celestial Orbs)

## The Text

My setting of an extract from the text of “De Revolutionibus Orbium Cœlestium” (On the Rotations of the Celestial Orbs) by the 16<sup>th</sup> century astronomer Nicholaus Copernicus (1473-1543) is one part of the Creation Project. My objective is to create a collection of quasi-devotional choral and orchestral compositions tracing the story of the scientific and cosmological discoveries of the past 600 years using the visionary writings of the men and women of science who actually contributed to this astonishing advance in knowledge and understanding. I want to celebrate their achievements and express in music my own awe and wonder at the beauty and magnificence of the universe they revealed.

Copernicus was such an individual. He was born within the Polish Lithuanian Commonwealth during the reign of Jagiellonian kings, a time of great scientific and cultural enlightenment. He spent much of his early life in Krakow. The original handwritten manuscript of “De Revolutionibus” is still held in Krakow at the library of the Jagiellonian University. His contribution to cosmology was to propose a heliocentric universe in which the earth rotated about a central sun rather than the other way about, thus challenging several thousand years of religious orthodoxy which held that the earth was the centre of all things.

I have not attempted to set any of his extremely detailed technical and mathematical arguments. Instead I have given musical expression to Copernicus’ passionate general introduction. In it he celebrates the beauty of the universe revealed to him through his life’s work. The introduction is not to be found in the printed edition of “De Revolutionibus” published in 1543 by the Nurnberg printer Johannes Petreius but only in the original handwritten manuscript now held in the Jagiellonian University library but available on-line. The astronomer’s hand-writing is difficult to decipher but after several weeks of painstaking work I succeeded in transcribing it into modern text. For me it was essential to use the original Latin. An English translation, even one as good as that produced by the American historian Edward Rosen, lacks the concision of Latin and fails to convey the passion and force of Copernicus’ original utterance.

Towards the end of the introduction, Copernicus feels compelled to offer some guarded praise to God for the creation of this beautiful universe by citing a verse from Psalm 42: “For thou, Lord, hast made me glad through thy work”. This may seem to contradict my own personal religious standpoint, but we must remember that Copernicus was a man of his time. Even in the enlightened mores of the Polish Lithuanian Commonwealth he was already courting condemnation as a heretic merely by proposing a heliocentric universe.

His letter to Pope Paul III which precedes the text of “De Revolutionibus” was a strategic attempt to pre-empt any such condemnation. In fact Copernicus had withheld publication of his theory for several decades until, at the age of 70 and knowing that he was dying, he was finally persuaded to publish it by his pupil Georg Rheticus. Legend has it that he was presented with the final printed pages of the work as he lay on his death-bed in May 1543.

**Music: Jolyon Laycock**  
**Text: Nicholaus Copernicus**

## The Music

“Orbium Cœlestium” is set for 4-part choir, a quartet of soloists and an orchestra of classical proportions:  
2222 221 timps., tenor drum, piano and strings 66442.

The piano part may be adapted for harp.  
The solo soprano part is written for a singer of exceptional range including high D6.

The music of “Orbium Cœlestium” utilises the device of all-interval fractal sets that I discovered in 2010 and have used in nearly all my compositions since then. The piece uses two sets that exist in a complimentary “yin-yang” relationship. They can each be identified by a sequence of six interval numbers:

The “Yin” pattern has the sequence 3 5 2 4 1 6.  
The ”Yang” pattern has the sequence 5 6 3 4 2 1.

These two patterns can each exist in four forms related by full inversion and partial inversion about the resultant tritone:



Both sets possess strong tonal inflexions and this characteristic is exploited in the harmonic and melodic material created using them. The first five notes of set 352416 spell out a chord of the dominant major 9<sup>th</sup>. Set 563421 begins with the interval of a perfect 4<sup>th</sup> which creates a strong cadential implication when used as a harmonic bass line for harmonies based on 352416.

Jolyon Laycock (November 2015)

## The Composer

Jolyon Laycock was born in Bath in 1946 and studied for B.Mus. and M.Phil. in composition at the University of Nottingham. His teachers included Arnold Whittall, Henri Pousseur, Cornelius Cardew and Roger Smalley. Later in life he studied for his Ph.D. at York University under Nicola Lefanu. During the 1970s he pursued a freelance career as an experimental sound artist based at the Birmingham Arts Laboratory and Spectro Arts Workshop, Newcastle. In 1979 he took up the post of Music and Dance Co-ordinator at Arnolfini, Bristol, running a programme of contemporary music and dance regarded as one of the most innovative outside London. In 1990 he became Concert Director at the University of Bath and at the newly opened Michael Tippett Centre at Bath Spa University College where he founded the award-winning concert series *Rainbow over Bath*. He left the University in 2000 to complete his book *A Changing Role for the Composer in Society*. In 2004 he was appointed Senior Lecturer in Arts Management at Oxford Brookes University until 2010. In 2012 he won the EPSS Jubilee Song Competition with his setting of Philip Larkin’s *The North Ship* which led to a collaboration with Sarah Leonard resulting in the composition of *Dark Seas*, a setting of five poems of Philip Larkin for soprano, clarinet and piano.

## De Revolutionibus Orbium Cœlestium

### Latin text - extract from page 1.

Inter multa et varia litarium artisque studia: quibus hominum mentis vegetantur, et pernot amplectantur extremo, firmoque prosequeda studio: quae in rebus pulcherrimis, et firmo dignissimis perfectur.

Qualia formis quae et divinis mundi revolutionibus: concie sideris magnitudinibus: distantia: orti et occasi: cæterorum in cœlo apparenti causis pariter : et tota denique forma explicat.

Quid ante cœlo pulchrius nempe quod continet pulcra omnis: Quod post ipse nomina declarant: Cœlum et Mundus. Hoc puritatis et ornamenti: Illud cælati appellation.

Ipsis pluries philosophori ob nimiam eius excellentia visibili deum nominaverunt. Premet si artis dignitates penes sine et qua tractat materia æstimet erit per longa primissima Qua alii quidem Astronomiam alii Astrologia: Multi vero proferri mathematicos consummatione vocat.

Ipsa nimirum ingeminis artis caput: dignissima homi libero. Omnibus fore mathematicos pænebus fulcatur: Arithmeticæ Geometricæ Optica Geodesia Mechanica et si que sint aliæ omnes ad illam sese conserant.

At cum omnis bonatis artis fit abstrahere a vitiis et hominis mente ad meliora dirigate: Haec item memorabile arrisimi voluptate abundatius id optare parat:

Quis omni inhærento iis quae in optimo ordine constituta videat divina dispositione dirigi: Assidua eorum contemplatione et quadam consuetudine non provocatur ad optima admiretur ob opificem eius in qua tota felicitas est et omne bonis.

Neque em frustra divinus ille psaltes\* declaratis se direxit e fortuna dei et opibus manorum eius exultabuntur: Nisi quod huius ne mediis quali vibrato quoda ad firmis boni contemplatione aduramus.

(\* Psalm 92, verse 4: quoniam laetificasti me Domine in opere tuo in facturis manuum tuarum laudabo.)

*Transcribed from the original manuscript held in the library of the Jagiellonian University, Krakow. Available on line at: <http://pka.bj.uj.edu.pl/bjmanus/revol/images/001r.jpg>*

## On the Rotation of the Celestial Orbs

### English translation

Among the many and various literary and artistic studies which enliven men's minds the application of extreme zeal and utmost comprehension should promote the study of the most beautiful things and the most worthy to be perfected.

Such a thing is the study of the forms and revolutions of the heavenly bodies: the motions of the stars, their magnitudes, their distances, their risings and settings, as well as the causes of all the other phenomena manifested in the universe which, in short, explains its appearance.

For what indeed is more beautiful than heaven which contains all beauty, as declared by its very names: Heaven and Earth: The one purity and ornament; The other may be called a sculptural form.

Because of heaven's transcendent excellence many philosophers have often called it a visible god. It is clear that if the value of an art depends upon the material that it treats, the most important by far will be the art that is called Astronomy by some, Astrology by others and, by many acclaimed ancients, the consummation of Mathematics.

Without doubt it is the summit of the liberal arts and the one most worthy of free men. It is supported by almost all branches of mathematics - Arithmetic, Geometry, Optics, Geography, Mechanics - and whatever other forms there are that make a contribution.

Although all good artistic pursuits serve to draw men's minds away from vice and lead them towards better things, this art of astronomy also provides a remarkable abundance of intellectual pleasure.

Whoever occupies himself with such a well-ordered arrangement of things must see in it the direction of divine management. Will not assiduous contemplation and a certain familiarity provoke the greatest admiration for the maker in whom is all happiness and every goodness?

The godly psalmist\* would in vain declare himself made fortunate by god and exalted by the strength of his hand if we were not stimulated toward contemplation of the highest good by such a fervent compulsion.

(\* Psalm 92, verse 4. For thou, Lord, hast made me glad through thy work: I will triumph in the works of thy hands.)

*Adapted from a translation by Edward Rosen (1906-1985), John Hopkins University Press 1999  
[http://www.mifami.org/eLibrary/Copernicus\\_DeRevLiber1--1.4MB.pdf](http://www.mifami.org/eLibrary/Copernicus_DeRevLiber1--1.4MB.pdf)*

# Orbium Cœlestium

for mixed chorus, soloists and orchestra

Nicolaus Copernicus (1473-1543)

Jolyon Laycock

**Moderate ♩=60**

The musical score consists of two systems of music. The first system, labeled "Moderate ♩=60", features woodwind instruments (Flute, Oboe, Clarinet in B♭, Bassoon), brass instruments (Horn in F, Trumpet in B♭, Trombone), percussion (Timpani, Tenor Drum), and a Tenor Drum. The second system, also labeled "Moderate ♩=60", includes a piano part and a vocal ensemble (Soprano, Alto, Tenor, Bass) with lyrics in Latin. The vocal parts are supported by strings (Violin I, Violin II, Viola, Violoncello, Contrabass). The score uses various time signatures (4/4, 3/4, 2/4) and dynamic markings (p, mf, f).

**Soprano**  
In - ter mul-ta et var-i - a li-tar - ium ar - tis - que stu di - a; Qui - bus ho - mi-num men - tis ve - ge - tan - tur;

**Alto**  
In - ter mul-ta et var-i - a li-tar - ium ar - tis - que stu di - a; Qui - bus ho - mi-num men - tis ve - ge - tan - tur;

**Tenor**  
In - ter mul-ta et var-i - a li-tar - um ar - tis - que stu di - a; Qui - bus ho - mi-num men - tis ve - ge - tan - tur; Et

**Bass**  
In - ter mul-ta et var-i - a li-tar - um ar - tis - que stu di - a; Qui - bus ho - mi-num men - tis ve - ge - tan - tur;

slightly quicker ♩=84

Fl. Ob. Cl. Bsn. Hn.

Pno.

S. A. T. B.

Vln. I Vln. II Vla. Vc. Cb.

This page contains musical staves for various instruments and voices. The vocal parts include Soprano (S.), Alto (A.), Tenor (T.), and Bass (B.). The orchestra includes Flute (Fl.), Oboe (Ob.), Clarinet (Cl.), Bassoon (Bsn.), Horn (Hn.), Piano (Pno.), Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), Cello (Cv.), and Bass (Cb.). The score is set in 4/4 time, with dynamic markings such as *p* (piano), *mf* (mezzo-forte), and *mp* (mezzo-piano). The vocal parts sing in Latin, with lyrics appearing below the staff. The piano part has a melodic line in the upper staff and harmonic support in the lower staff. The strings provide harmonic support with sustained notes and rhythmic patterns.



**senza misura**

22      1 2 3 4      5

Fl.      dim.      1      4      5

Ob.      dim.      2      4

Cl.      dim.      3      4

Bsn.      dim.      4

Hn.

Tpt.

Tbn.

Pno.

S.      bus;      Dis tan - ti - a;      Dis tan - ti - a;

A.      dim.      1      4

T.

B.

Vln. I

Jln. II

Vla.

Vc.

Cb.



33

Fl.

Ob.

Cl.

Bsn.

Hn.

Tpt.

Tbn.

Timp.

Pno.

S.

A.

Vln. I

Vln. II

Vla.

Vc.

Cb.

et to ta-de-ni-que for ma ex-pli-cat, form-a ex pli - cat pul-chri-us coe-lo, pul-chri-us coe-lo, pul-chri-us coe-lo, quid an - te coe lo  
et to ta-de-ni-que for ma ex-pli - cat Quid an - te coe - lo pul-chri-us nem-pequod





46 **moderate**  $\text{♩} = 72$

Fl. *ff*  
Ob. *ff*  
Cl. *ff*  
Bsn. *ff*

Hn. *ff*  
Tpt. *ff*  
Tbn. *ff*  
Timp. (tr).....

T. D. **moderate**  $\text{♩} = 72$

Pno.

S. Coe-lum et Mun-dus; sotto voce Hoc pur-i-ta-tis et or-na men- ti;  
Coe-lum et Mun-dus; Coe-lum... mmm et Mun-dus;

A. Coe-lum et Mun-dus; Coe-lum... mmm et Mun-dus; solo  
T. Coe-lum et Mun-dus; et Munnn... sotto voce Il-lud cae-la-ti ap-pel-a-ti-on.  
Coe-lum et Mun-dus; et Munnn... sotto voce dusss...  
B. Coe-lum et Mun-dus; et Munnn... dusss....

Vln. I *pp* sul G *p*  
Vln. II *pp*  
Vla. *pp*  
Vc. *pp*  
Cb.

Fl. *mp*

Ob. *p* *mp*

Cl. *mp*

Bsn. *p* *mp*

Hn. *p* *mf* *mp*

Timp. *p*

S. solo *mp*  
Ip-sis plur - i - es phil - o-so-phor - i,  
Ip-sis plur - i - es phil - o-so- phor - i,

A. solo *mp*  
Ip - sis plur - i - es phil - o - so -  
phor - i, *ob*

T. solo *mp*  
phil-o -so-phor-i,  
*ob* ni mi-am ei - us ex-cell en - ti - a, ob

B. solo *mp*  
phil-o -so-phor-i,

Vln. I tutti  
*mp*

Vln. II

Vla. *mp*

Vc. *p*

Cb. pizz. *mp*

Musical score for orchestra and choir, page 62. The score includes parts for Oboe (Ob.), Clarinet (Cl.), Bassoon (Bsn.), Horn (Hn.), Timpani (Timp.), Soprano (S.), Alto (A.), Tenor (T.), Bass (B.), Violin I (Vln. I), Violin II (Vla.), Cello (Vc.), and Double Bass (Cb.). The vocal parts sing in four-part harmony. The score features dynamic markings such as *mp*, *mf*, and *p*. The vocal parts have lyrics written below their staves. The instrumentation includes woodwind, brass, percussion, and strings. The vocal parts sing in four-part harmony. The score features dynamic markings such as *mp*, *mf*, and *p*. The vocal parts have lyrics written below their staves. The instrumentation includes woodwind, brass, percussion, and strings.

70

Fl.

Ob.

Cl.

Bsn.

Hn.

Tim.

S.

A.

T.

B.

Vln. I

Vln. II

Vla.

Vc.

Cb.

a - ver-unt.  
no-mi-a - ver-unt.  
um,  
pre - met si ar - tis  
dig-ni - ta - tes,  
pre - met si art - tis  
dig-ni - ta - tes  
dig-ni - ta - tes si - ne, pe-nes; et  
dig-ni - ta - tes si - ne, pe-nes; et qua -  
dig-ni - ta - tes, pre - met si art - tis  
dig-ni - ta - tes  
dig-ni - ta - tes  
pre - met si ar - tis dig-ni - ta - tes, pre - met si art - tis dig-ni - ta - tes  
pizz.  
arco

76

Fl. *mp* *mf* *mp* *mf* *mp*

Ob. *mf* *mf* *p*

Cl. *mf* *mf* *p*

Bsn. *mf* *p*

Hn. *mp* *p*

Tbn. *mp* *p*

Timp.

S. *mf* *mp* *mf* *p*  
qua\_trac - tat ma - ter - ia aes - ti - met er - it per long - a pri - mis - si - ma, pri - mis - si - ma: Qua al - i -

A. *mf* *mf* *mf* *p*  
trac - tat ma - ter - ia aes - ti - met er - it per long - a pri - mis - si - ma, pri - mis - si - ma:

T. *p*  
pri - mis - si - ma: Qua

Vln. I *mp* *mf* *mp* *mf* *mp*

Vln. II *mp* *mf* *mp* *mf*

Vla. *mp*

Vc. *mp*  
pizz.

Cb. *mf* *mf* *mf* *mf* *mf*

arco

82

Fl.

Ob.

Cl.

Bsn.

Hn.

Tpt.

Tbn.

Tim.

Pno.

S.

A.

T.

B.

Vln. I

Vln. II

Vla.

Vc.

Cb.

i qui - dem As - tro - no - mi - am al - i al - i - qui - dem. As - tro - no - mi - am

al - i - As - tro - lo - gi - a: al - i - As - tro - lo - gi - a: qua - ve - to pro - fer - ri math - em - a - ti - cus - ma - the - ma - tic - us con - su ma - ti - on

ma - the - ma - tic - us con - su ma - ti - on

pizz.

Fl. *mp*      *mp*      *mf*      *f*

Ob. *mp*      *mp*      *mf*      *f*      *ff*      *mf*

Cl. *mp*      *f*      *ff*      *mf*

Bsn. *mp*      *mf*      *3*      *3*      *f*      *ff*      *mf*

Hn. *mf*      *f*      *ff*

Tpt. *mp*      *f*      *ff*      *mf*      *senza sord.*

Tbn. *f*      *ff*

Tim. *f*

T. D. *f*      *mf*

*presto*  $\text{♩} = 180$

Pno. *ff*      *mf*

S. *mp*      *mp*      *mf*      *f*      *ff*      *tutti*      *mf*

on      ma - the ma - tic - us      con - su - ma - ti on      vo - cat.      Ip - sa ni - mi - rum      Ip - sa ni - mi - rum in - ge - mi - nis ar - tis

A. *mp*      *f*      *ff*      *mf*

cus      con - sum - ma - ti on      con - sum - ma - ti on      vo - cat.      Ip - sa ni - mi - rum      Ip - sa ni - mi - rum in - ge - mi - nis ar - tis

T. *mp*      *mf*      *f*      *ff*      *mf*

con - sum - ma - ti on      con - sum - ma - ti on      vo - cat.      Ip - sa ni - mi - rum      Ip - sa ni - mi - rum in - ge - mi - nis ar - tis

B. *mp*      *mf*      *f*      *ff*      *mf*

ma - the ma - tic - us      con - su - ma - ti on      vo - cat.      Ip - sa ni - mi - rum      Ip - sa ni - mi - rum in - ge - mi - nis ar - tis

Vln. I *mp*      *mf*      *f*      *mf*

Vln. II *pizz.*      *mf*

Vla. *mp*      *mf*

Vc. *f*      *mf*

Cb. *arco*      *f*

97

Fl. f

Ob. f mf

Cl. f mf

Bsn. f mf

Hn.

Tpt. f mf

Tbn. mf

T. D. f mf p

Pno. f p

S. Ip - sa ni-mi-rum in ge-mi-nis ar-tis ca - put dig - nis-si-ma ho - mi li - ber - o Ip - sa ni-mi-rum in ge-mi-nis

A. Ip - sa ni-mi-rum in ge-mi-nis ar-tis ca - put dig - nis-si-ma ho - mi li - ber - o Ip - sa ni-mi-rum in ge-mi-nis

T. 8 Ip - sa ni-mi-rum in ge-mi-nis ar-tis ca - put dig - nis-si-ma ho - mi li - ber - o Ip - sa ni-mi-rum in ge-mi-nis

B. Ip - sa ni-mi-rum in ge-mi-nis ar-tis ca - put dig - nis-si-ma ho - mi li - ber - o

Vln. I f arco p

Vln. II f sempre pizz. p

Vla. f sempre pizz. p

Vc. f

107

Fl.

Ob.

Cl.

Bsn.

Hn.

Tpt.

T. D.

Pno.

S.

A.

T.

B.

Vln. I

Vln. II

Vla.

Ip - sa ni-mi-rum in - ge-mi-nis ar - tis  
ca - put,  
ar - tis  
ca - put,  
Ip - sa ni-mi-rum in - ge-mi-nis ar - tis  
ca - put,  
ar - tis  
ca - put,  
Ip - sa ni-mi-rum in - ge-mi-nis ar - tis  
ca - put,  
ar - tis  
ca - put,  
ar - tis  
ca - put,

118

Piccolo  
Fl.  
Ob.  
Cl.  
Bsn.  
Hn.  
Tpt.  
Tbn.  
T. D.  
Pno.  
S.  
A.  
T.  
B.  
Vln. I  
Vln. II  
Vla.  
Vc.

ar - tis ca - put, ar - tis ca - put, dig - nis-si-ma ho - mi li - be - ro, li - be - ro;  
ar - tis ca - put, ar - tis ca - put, dig - nis-si-ma ho - mi li - be - ro, li - be - ro;  
ar - tis ca - put, ar - tis ca - put, dig - nis-si-ma ho - mi li - be - ro, li - be - ro;

arco  
f  
arco  
f  
arco  
f  
arco  
f

mp  
pizz  
mp  
pizz  
mp  
mp

arco  
arco

130

Fl.

Ob.

Cl.

Bsn.

Hn.

Tpt.

T. D.

Pno.

S.

A.

T.

B.

Vln. I

Vln. II

Vla.

Vc.

Cb.

Om-ni-bus for - e ma - the - ma - ti - cus\_\_\_\_ pae-ne-bus ful - ca - tur\_\_\_\_ pae-ne-bus ful - ca - tur\_\_\_\_ Ma - the - ma-ti-cus

Om-ni-bus for - e ma - the - ma - ti - cus\_\_\_\_ pae-ne-bus ful - ca - tur\_\_\_\_ pae-ne-bus ful - ca - tur\_\_\_\_ Ma - the - ma-ti-cus

Om-ni-bus for - e ma-the-ma-ti- cus\_\_\_\_ pae-ne-bus ful - ca - tur\_\_\_\_ pae-ne-bus ful - ca - tur\_\_\_\_ Ma - the - ma-ti-cus

pizz. *p*

pizz. *p*

*ff*

arco

*ff*

*ff*

*pizz.* *ff*

*ff*

*ff*

*ff*

*ff*



Flute *sf*

Oboe *sf*

Clarinet in B♭ *sf*

Bassoon *sf*

Horn in F *sf*

Trumpet in B♭ *sf*

Trombone *sf*

Tenor Drum *ff*

Piano *sf*

Soprano *p*  
Ar-ith - me-ti-ca; Ar-ith - me - ti-ca; Ar - ith - me - ti - ca;

Alto *mp*  
Ar-ith - me-ti-ca; Ar-ith - me - ti-ca; Ar - ith - me - ti - ca;

Tenor *mf*  
Ar-ith - me-ti-ca; Ar-ith - me-ti-ca; Ar-ith - me-ti-ca; Ar-ith - me - ti-ca; Ar - ith - me - ti - ca;

Bass *mf*  
Ar-ith - me-ti-ca; Ar-ith - me-ti-ca; Ar-ith - me-ti-ca; Ar-ith - me - ti-ca; Ar - ith - me - ti - ca;

shout

shout

shout

shout

Violin I *pizz.* *sf*

Violin II *pizz.* *sf*

Viola *pizz.* *sf*

Violoncello *pizz. (Bartok)* *sf*

*ff*

*ff*

*ff*

*ff*

*pizz. arco*

*ff*

*ff*

*ff*

*ff*

*pizz. arco*

*pizz. arco*

*pizz. arco*

*pizz. arco*

153

Fl. *mf* *ff*

Ob. *mf* *ff*

Cl. *mf* *ff*

Bsn. *mf* *ff*

Hn. *mf* *ff*

Tpt. *mf* *ff*

Tbn. *mf* *ff*

Tim. *ff*

T. D. *mf* *ff*

Pno. *mf* *ff*

S. *f* *ff* shout *p* *mp*  
Ge o - met - ri - ca; Ge o - met - ri - ca; Ge o - met - ri - ca;  
Op - ti - ca;

A. *mf* *f* *ff* shout *#f* *mp*  
Ge o - met - ri - ca;  
Op - ti - ca;

T. *p* *mf* *f* *ff* shout *#f*  
Ge o - met - ri - ca; Ge o - met - ri - ca; Ge o - met - ri - ca; Ge o - met - ri - ca;

B. *f* *ff* shout *#f*  
Ge o - met - ri - ca; Ge o - met - ri - ca; Ge o - met - ri - ca;

Vln. I *mf* *ff* pizz. arco pizz. arco  
Vln. II *mf* *ff* arco pizz. arco  
Vla. *mf* *ff* arco pizz. arco  
Vc. *mf* *ff* pizz. arco pizz. arco  
Cb. *ff* pizz. (Bartok) + arco



Fl. *mf* ff ff

Ob. *mf* ff ff ff

C. *mf* ff ff ff

Bsn. *mf* ff ff ff

Hn. *mf* ff ff ff ff

Tpt. *mf* ff ff ff ff

Tbn. *mf* ff ff ff ff

Timp.

T. D. *mf* ff ff ff

Pno. *mf* ff ff ff

S. de - si - a; Me - cha-ni - ca; shout

A. de - si - a; Me - cha-ni - ca; shout

T. de - si - a; Me - cha-ni - ca; shout

B. de - si - a; Me - cha-ni - ca; shout

Vln. I arco *mf* pizz. arco pizz. arco ff pizz. arco pizz. arco ff pizz. arco pizz. arco ff pizz. arco pizz.

Vln. II pizz. arco pizz. arco ff arco pizz. arco ff pizz. arco pizz. arco ff pizz. arco pizz.

Vla. arco pizz. arco ff pizz.

Vc. pizz. arco pizz. arco ff pizz. (Bartok) arco ff pizz. arco ff pizz.

Cb. ff

Fl. *mf* 7

Ob. *mf*

Cl. *mf* 5

Bsn. *mf*

Hn. *mf*

Tpt. *mf*

Tbn. *mf*

Timp.

T. D. *mf*

Pno. *ff*

*divisi*

S. *p* *cresc.* Et si quesint al-i-ae om-nes; Et si que sint al-i-ae om-nes; shout

*divisi*

A. *mf* Et si que sint al-i-ae om-nes; shout

T. Et si que sint al-i-ae om-nes; shout

B. Et si que sint al-i-ae om-nes; shout

Vln. I *mf* arco

Vln. II *mf* pizz.

Vla. *mf*

Vc. *mf* arco

Cb. *mf*

*ff* pizz.

*pizz.* arco

*ff* pizz.

*ff* arco

*pizz.* arco

*ff* pizz.

**senza misura**

1 2 3 4 5 6

poco rall..

Fl. 192 *fff* dim al niente

Ob. *fff* dim al niente

Cl. *fff* dim al niente

Bsn. *fff* dim al niente

Hn. *fff* dim al niente

Tpt. *fff* dim al niente

Tbn. *fff* dim al niente

T. D. *fff*

Pno. *fff* **senza misura**

S. om - nes; ad il-lam se - se con-ser-ant. ad il-lam se - se con-ser- ant.

S. al - i - ae om - nes; ad il-lam se - se con-ser-ant. ad il-lam se - se con-ser- ant.

S. shout ad il-lam se - se con-ser-ant. ad il-lam se - se con-ser- ant.

A. al - i - ae om - nes; ad il-lam se - se con-ser-ant. ad il-lam se - se con-ser- ant.

A. shout ad il-lam se - se con-ser-ant. ad il-lam se - se con-ser- ant.

A. al - i - ae om - nes; ad il-lam se - se con-ser-ant. ad il-lam se - se con-ser- ant.

T. al - i - ae om - nes; ad il-lam se - se con-ser-ant. ad il-lam se - se con-ser- ant.

B. al - i - ae om - nes; ad il-lam se - se con-ser-ant. ad il-lam se - se con-ser- ant.

Vln. I arco *fff* dim al niente

Vln. II pizz. *fff* dim al niente

Vla. arco *fff* dim al niente

Vc. arco *fff* dim al niente

sostenuto  $\text{♩}=60$

Fl.

Ob.

Cl.

Bsn.

Hn.

Tpt.

Pno.

$\text{♩}=60$

hold pedal till bar 224

S. At cum om - nis bon - a - tis ar - tis fit ab - stra - he - re a vi - ti - is, a vi - ti - is, et

A. At cum om - nis bon - a - tis ar - tis fit ab - stra - he - re a vi - ti - is, is et

T. At cum om - nis bon - a - tis ar - tis fit ab - stra - he - re a vi - ti - is, a vi - ti - is, et

B. At cum om - nis bon - a - tis ar - tis fit ab - stra - he - re a vi - ti - is, f et

Musical score for orchestra, measures 11-16:

- Vln. I:** Dynamics:  $p$ ,  $mf$ ,  $mp$ ,  $mf$ ,  $f$ ,  $ff$ . Articulation: pizz.
- Vln. II:** Dynamics:  $mf$ ,  $mp$ ,  $mf$ ,  $f$ ,  $ff$ .
- Vla.:** Dynamics:  $p$ ,  $mf$ ,  $mp$ ,  $mf$ ,  $f$ ,  $ff$ ,  $>p$ .
- Vc.:** Dynamics:  $p$ ,  $mp$ ,  $mf$ ,  $f$ ,  $>p$ . Articulation: pizz.
- Cb.:** Dynamics:  $p$ ,  $mp$ ,  $mf$ ,  $f$ .

Fl. 206

Ob.

Cl.

Bsn.

Hn. normale

Pno.

S. hom-i-nis men-te ad me-li - or-a di - ri - ga - te, me - li-or - a di-ri - ga - te: Haec i - tem mem - or - a - bi - le

A. hom-i - nis men - te ad me-li - or-a di - ri - ga - te, me - li-or - a di-ri - ga - te: Haec i - tem mem-or - a - bi - le, mem-or-a - bi - le

T. hom-i - nis men - te ad me - li - or - a, me - li-or - a di-ri - ga - te: Haec i - tem mem-or - a - bi - le, mem-or-a - bi - le

B. hom-i - nis men - te ad me-li - or-a di - ri - ga - te; Haec i - tem mem or - a - bi - le,

Vln. I

Vln. II

Vla.

Vc.

Cb.



227

Fl. Ob. Cl. Bsn.

Timp. Pno.

S. A. T. B.

Vln. I Vln. II Vla. Vc. Cb.

Flute part starts with a rest, then eighth-note patterns. Oboe and Clarinet play eighth-note patterns. Bassoon rests. Timpani plays eighth-note patterns. Piano has a dynamic change from *p* to *sf*. Voices sing Latin text: *i - is quae in op - ti-mo or-di-ne con-sti-tu - a vi-de-at, vi-de-at di - vi - na dis-po-si - ti-on - e di - ri - gi: As - si-du - a e - or-um con-tem*. Alto, Tenor, and Bass sing the same text. Violin I, Violin II, Viola, Cello, and Bass play eighth-note patterns.

234

Fl. *p*

Ob. *pp*

Cl. *mf* *pp*

Bsn. *mf*

Hn. *p* *mf*

Tim. *mf* *p*

Pno. *mf* *p*

S. pla - ti - o - ne et qua-dam con-sue - tu - di - ne non pro-voc - a-teur ad op-tim - ma: Ad - mir - e - tur ob - op - if - i-cem

A. pla - ti - o - ne et qua-dam con-sue - tu - di - ne non pro-voc - a-teur ad op-tim - ma: Ad - mir - e - tur ob - op - if - i-cem

T. con-tem-pla - ti - o - ne et qua-dam con-sue - tu - di - ne non pro-voc - a-teur ad op-tim - ma: Ad - mir - e - tur ob - op - if - i-cem

B. con-tem-pla - ti - o - ne et qua-dam con-sue - tu - di - ne non pro-voc - a-teur ad op-tim - ma: Ad - mir - e - tur ob - op - if - i-cem

Vln. I *p* *mp*

Vln. II *p* *mp*

Vla. *p* *mp*

Vc. *p* *mp*

Cb. *p* *mf* *p*

239

Fl. *f* *fp* *ff*

Ob. *mf* *f* *ff*

Cl. *mf* *f* *ff*

Bsn. *mf* *f* *fp* *ff*

Hn. *mf* *f* *fp* *ff*

Tpt. *mf* *f* *fp* *ff*

Tbn. *mf* *f* *fp* *ff*

Timp.

Pno. *f* *ff*

*Ad.*

S. *mf* *f* *fp* *ff*

ei - us in qua to - ta fel - i - ci - tas, to - ta fel - i - ci - tas est, et

S. *mf* *f* *fp* *ff*

ei - us in qua to - ta fel - i - ci - tas, to - ta fel - i - ci - tas est, et

A. *mf* *f* *fp* *ff*

ei - us in qua to - ta fel - i - ci - tas, to - ta fel - i - ci - tas est, et

T. *mf* *f* *fp* *ff*

ei - us in qua to - ta fel - i - ci - tas, to - ta fel - i - ci - tas est, et

B. *mf* *f* *fp* *ff*

ei - us in qua to - ta fel - i - ci - tas, to - ta fel - i - ci - tas est, et

Vln. I *mf* *f* *ff*

Vln. II *f* *ff*

Vla. *f* *ff*

Vc. *f* *ff*

Cb. *mf* *f* *ff*



249

Fl. *mf*

Ob. *mf* 3

Cl. 3

Bsn. *mf*

Hn.

Tpt.

Tbn.

Tim. -

Pno. *mf*

S. Ne - que em frus - tra di vi - nus il - le psal - tes, di vi - nis il - le psal - tes,

A. Ne - que em frus - tra di vi - nus il - le psal - tes, di vi - nis il - le psal - tes

T. Ne - que em frus - tra di vi - nus il - le psal - tes, di vi - nis il - le psal - tes

B. Ne - que em frus - tra di vi - nus il - le psal - tes, psal - tes

Vln. I *mf*

Vln. II *mf*

Vla. *mf*

Vc. *mf*

Cb.



Fl. *mf*

Ob. *mf*

Cl. *f* *mf*

Bsn. *mf* *f*

Hn. *mf* *f*

Tpt. *mf* *f*

Tbn. *mf* *f*

Tim. *mf* *f*

Pno. *mf* *f*

S. or - um ei - us ex - - ul - ta - bun - tur: et

A. or - um ei - us ex - - ul - ta - bun - tur: e for - tun - a de - - i et

T. 8 or - um ei - us ex - - ul - ta - bun - tur: e for - tun-a de - - i

B. bus, ex - ul - ta - bun - tur:

Vln. I *mf* pizz. arco *f*

Vln. II *mf* pizz. arco *f*

Vla. *mf* pizz. arco *f*

Vc. *mf* pizz. arco *f*

Cb.

268

Fl. *sub ff*

Ob. *sub ff* *f*

Cl. *mf* *p*

Bsn. *sub ff* *f* *mf* *p* *mf*

Hn. *sub ff* *f* *mf* *p* *mf*

Tpt. *f* *mf*

Pno. *mf* *mp*

S. *op - i-bus man - or - um ei - us ex - ul - ta - bun - tur:* *Ni - si quod*

A. *op - i-bus man - or - um ei - us ex - ul - ta - bun - tur:* *Ni - si quod*

T. *mf* *3* *3* *Ni - si*

B. *-*

Vln. I *sub ff* *f* *mf* *mp* *mf* *3* *3*

Vln. II *mf* *mp* *mf* *3* *3* *mf*

Vla. *mf* *mp* *mf* *3* *3* *mf*

Vc. *sub ff* *f* *mf* *mp* *mf*

Fl. 277

Ob.

Cl.

Bsn.

Hn.

Tpt.

Tbn.

Timp.

Pno.

S.

A.

T.

B.

hu - i - us ne me - di - is,      hu - i - us ne me - di - is      qua - li vi - bra - to,      qua - li vi - bra - to

hu - i - us ne me - di - is,      hu - i - us ne me - di - is      qua - li vi - bra - to,      qua - li vi - bra - to

8      quod hu - i - us ne me - di - is,

Ni - si quod hu - i - us      qua - li vi -

Vln. I

Vln. II

Vla.

Vc.

Cb.

arco

Fl. 285 ff

Ob. 3 ff f mf p

Cl. 3 ff 3 f mf p

Bsn. 3 mf p

Hn. ff 3 f mf p

Tpt. 3 ff f mf p

Tbn. 3 ff mf p

Tim. (tr) ff

Pno. ff mf p slower for rehearsal only

S. quo - da ad fir - mis bo - ni quo - da ad fir - mis bo - ni a capella

A. quo - - da ad fir - mis, quo - da ad fir - mis bo - ni a capella p

T. bra - to quo - - da ad fir - mis, quo - da ad fir - mis bo - ni a capella

B. bra - to quo - - da ad fir - mis, quo - da ad fir - mis bo - ni con - tem-pla - ti -

Vln. I ff 3 f 3 mf pizz. 3 p

Vln. II ff 3 f 3 mf pizz. 3 pizz. 3 p

Vla. ff 3 f 3 mf pizz. 3 p

Vc. ff 3 f 3 mf pizz. 3 p

Cb. 3

Musical score for Flute (Fl.), Oboe (Ob.), Clarinet (Cl.), and Bassoon (Bsn.) in 302 time. The score consists of five measures. The Flute and Oboe play eighth-note patterns with grace notes. The Clarinet and Bassoon provide harmonic support. Measure 1: Flute rests, Oboe eighth-note pattern, Clarinet eighth-note pattern, Bassoon rests. Measure 2: Flute rests, Oboe eighth-note pattern with dynamic *mf*, Clarinet eighth-note pattern, Bassoon rests. Measures 3-5: Repeating patterns for Flute, Oboe, Clarinet, and Bassoon with sixteenth-note figures and sixteenth-note bass lines. Measure 5 concludes with a dynamic *mf*.

Fl. 307

Ob.

Cl.

Bsn.

Hn. *mf*

Tpt. *mf*

Tbn. *mf*

Pno.

S. Ni - si quod hu - i - us ne me - di - is, *cresc.* hu - i - us ne me - di - is

A. Ni - si quod hu - i - us ne me - di - is, *cresc.* hu - i - us ne me - di - is

T. Ni - si quod hu - i - us ne me - di - is,

B. Ni - si quod hu - i - us ne me - di - is,

Vln. I arco *f*

Vln. II arco *f*

Vla. arco

Vc. arco





Fl. 6  
mf

Ob. 6  
mf

Cl. 6  
mf

Bsn. 6  
mf

Hn. 3  
mf

Tpt.

Tbn. mf

Tim. (tr).....  
mf

S. firm - - is bo - - ni con - tem - pla - ti o - - ne ad -  
ni, bo - - - ni con - tem - pla - ti o - - ne ad -  
mf

A. firm - - is bo - - ni con - tem - pla - ti o - - ne ad -  
ni, bo - - - ni con - tem - pla - ti o - - ne ad -  
mf

T. - ni, bo - - - ni con - tem - pla - ti o - - ne ad -  
mf

B. - ni, bo - - - ni con - tem - pla - ti o - - ne ad -  
mf

Vln. I

Vln. II

Vla.

Vc.

Cb.

325

Fl.

Ob.

Tpt.

S.

A.

T.

B.

Vln. I

Vln. II

Vla.

Vc.

*ur - a - mur.*

*pp*

*al niente*

*pp*

*al niente*

*pp*

*al niente*

*pp*

*al niente*

## Music by Jolyon Laycock

**Four Times Four** for 16 actors/dancers/singers with electronics (1971)

**Locations I, II, III, and IV** - sound sculptures (1970 rev. 1973)

**Lattice - for 12 solo strings and electronics** (1972 - Commissioned by the Barber Institute, University of Birmingham)

**Pluramusic** - electronic sound installation (1972-1977)

**This Could Happen to You** - participatory audio-visual installation (1974-1976)

**Tyrannos** - 12 audio-visual cycles on the myth of Oedipus (unfinished) - Earth Cycle, Moon Cycle, Uranus Cycle, Pluto Cycle, and Equinox Cycle first performed 1977

**Bladud - a wordscape with music** - commissioned by Bathampton Primary School (1985)

**Woden's Dyke** - music-theatre for school and community performance based on the story of the Anglo-Saxon chieftain Ceawlin of Wessex. Commissioned by Wansdyke Arts Council (1987).

**Hetty Pegler** - music theatre piece commissioned by Prema Arts Centre, Uley, Gloucestershire (1988)

**High Wood** - solo oboe (1988)

**In Bruton Town** - Fantasia of a Somerset folk song for double string orchestra (1988)

**Seven Stars** - Community opera based on Thomas Clarkson's investigations into the Bristol slave trade in 1787. Bristol City Commission. (1994)

**A Dream of Flying** - for clarinet, horn, bassoon, string trio, double bass and piano (1995).

**Eadgar Cyning** - settings for soloists, choir and orchestra in the original language of three poems from the Anglo-Saxon Chronicle about the coronation and death of King Edgar at Bath. (1996).

**Un Tiento Rasguado (homage to Joaquin Rodrigo)** junior competition test piece for the Bath International Guitar Festival 1996.

**Sinfonietta for String Orchestra** (1998) revised and re-issued as **Tetraktis** (2014)

**Mengjiang Weeping at the Wall** Music-theatre piece for soprano, choir, small ensemble, Chinese instruments and junior school children; Commissioned by the Corsham Festival (2002).

**Die! A-One Sparrow** for piano duet (2002)

**Among Seven Hills** Sinfonia Concertante for piano and orchestra (2009)

**12 Landscape Studies** for piano (1996-2010)

**12 River Preludes** for piano (2011)

**6 Sonnets of Edna St. Vincent Millay** for mezzo soprano and piano (2011)

**3 Sonnets of Gerard Manley Hopkins** for tenor or baritone and piano (2012)

**String Quartet** (2012)

**An Entangled Bank** A setting for 8 part *a cappella* choir of the final paragraph of *The Origin of Species* by Charles Darwin (2013).

**Cantilena** for solo cello and open score ensemble (2013)

**Clarion Call** for solo bass clarinet and open score ensemble (2014)

**Dark Seas** 5 poems of Philip Larkin for coloratura soprano, clarinet and piano (2014)

**The Swan - after Camille Saint-Saëns** for cello and two pianos (2014)

**Trilithon for orchestra (begun 1968 – completed & revised 2015)**

**Orbium Cœlestium (Of the Celestial Orbs)** - Cantata on a text by Nicholaus Copernicus (2015)

Book publication:

**A Changing Role for the Composer in Society**

A Study of the Historical Background and Current Methodologies of Creative Music-Making

Peter Lang, European Academic Publishers, Switzerland (2005)

<http://www.peterlang.com/all/index.cfm>

Poetry:

**To Tolverne - a Riddle** A poem inspired by the D-day museum at Tolverne, Cornwall (2001)

**Berliner Schnauze** A collection of poems in the form of an entertainment in words and music inspired by a visit to Berlin ten years after the fall of the Berlin wall (1999).

**A Mendip Ploughing Match at Priddy** and other Mendip poems

**Estrildis** an operatic libretto in blank verse based on a story from Geoffrey of Monmouth *The History of the Kings of Britain*.

**Persons from Chew** (28 limericks rhyming woth Chew) - Jolyon Laycock & John Gully (2015)

For more details visit: <http://www.jolyonlaycock.uk/>