

*Marc Sabat*

**Gioseffo Zarlino**

*for variable instrumentation*

**PLAINSOUND MUSIC EDITION**

## Gioseffo Zarlino (2015)

*for variable instrumentation*

With every new consonance come new possibilities for melodic movement as well as new harmonic complexities, paradoxes and dissonances. Tonal systems evolve, reflecting musical practice, discovering new perceived relationships of sounds.

Inspired by his reading of the remarkable scientist-musician Claudius Ptolemy, in 1558 the Renaissance Italian theorist Gioseffo Zarlino describes a diatonic and chromatic tonal space defined by rational intervals between the numbers 1 through 6 (the *Senario*). This space expands the Pythagorean division of the octave, including consonant thirds and sixths to better describe the contemporary practice of vocal counterpoint. In addition to the major whole tone 8:9, produced by moving between the perfect fourth 3:4 and perfect fifth 2:3, there is a minor whole tone 9:10, between the perfect fifth 2:3 and major sixth 3:5. A singing voice sometimes makes a major tone step, at other times a minor tone step, almost without consciously perceiving the small enharmonic difference of a comma between them.

Zarlino describes how these two whole tones produce two diatonic species of the melodic major third 4:5 (major+minor, minor+major). In my piece, the two main voices move mainly by tones, occasionally by a pure major third, making consonant counterpoint. The comma differences are composed and notated; by intoning simple ratios, the two voices realise different size tones. Their successive combinations outline three different thirds: the Ptolemaic 4:5 (major+minor or minor+major), Pythagorean 64:81 (major+major), and the small third 100:81 (minor+minor) sometimes heard in Byzantine chant.

Zarlino's proposal to sing in 5-limit Just Intonation is part of a century-long exploration of diatonic/chromatic/enharmonic tone systems and music. Unlike his contemporary Nicola Vicentino, who separates genera to seek out the enharmonic, Zarlino sees the greatest subtlety and beauty in diatonic genera mixed with subtle chromatic and enharmonic intervals. Both theorist-composers opened doors to a remarkable universe of microtonal explorations.

My "Zarlino" is the third in a series of pieces inspired by ideas in the history of music theory, which I seek to experience and unfold in a sounding world.

Berlin, 17 February 2016

# Gioseffo Zarlino

for at least two sustaining instruments or voices  
in memoriam Friedemann Weigle

Marc Sabat

Repeat ad libitum, as precise intonation desires

Harp (ad lib.)

The uppermost staff indicates common partial unisons between harmonics, which may be heard when the intervals between the two main voices (I and II) are well-tuned in their natural ratios. This part may be realised by a harp playing the sounding pitches. Notes marked with a circle are octave harmonics played on strings one octave lower and tuned accordingly. E's may be played as Fb's. Parts I & II may also be realised by a harpist with octave harmonics appropriately tuned. If desired, both harp parts may be combined, by retuning the three higher F strings down to E. Optional notated vowels apply to any sung parts. These may be modified, as needed, so that each voice is able to produce clear resonances at the common partial pitches. Alternately, sing any changing vowels (for example the Italian sequence i-o-e-u-a-i-o). Try to always perceive the small comma differences as clearly as possible. The arrow notates an alteration of the respective Pythagorean pitch by one syntonic comma (80:81). Harmonic circles apply to a harp realisation.

*p dolce, ma senza vibrato, pure*

I

(C only on repeats) *p dolce, ma senza vibrato, pure*

II

Any instrument(s) in Pythagorean tuning (if not available, equal tempered tuning may be substituted)

Keyboard (ad lib.)

*senza Ped.*

Secondary voices, may be added ad lib. in versions with more than two musicians

*pp sotto voce, semplice e preciso*

III (ad lib.)

Men: a - o - æ - u - ɔ - a - a - æ - o - ɔ - u - a - a - o - æ - u - ε - e - a - æ - o - ɔ - u - a - a - o - æ - u - ɔ - a - a - æ - o - i - u - a -  
Women: a - a - e - o - æ - a - ɔ - e - a - æ - o - ɔ - a - a - e - o - e - ɜ - ɔ - e - a - æ - o - ɔ - ɔ - a - e - o - æ - a - ɔ - e - a - i - o - ɔ -

*pp sotto voce, semplice e preciso*

IV (ad lib.)

4

Hp

I

II

Kbd

III

IV

F<sup>b</sup>

F<sup>b</sup>

F<sup>b</sup>

F<sup>b</sup>

F<sup>b</sup>

a - o - æ - a - e - a - a - a - æ - o - a - a - o - æ - u - ε - a - a - a - a - æ - o - i - o - o - æ - a - e - a - a - a - u - æ - o - a - a - a - e - o - e - a - a - a - a - o - e - a - i - æ - a - e - o - æ - a - a - æ - o - e - a - o

7 8

Hp

I

II

Kbd

III

IV

F $\flat$  F $\flat$  F $\flat$  F $\flat$  F $\flat$  F $\flat$

a - u - i - o - æ - a - a - u - æ - o - a - a - u - o - o - æ - a - e - ε - u - æ - o - a - a - u - o - o - æ - a - a - u - æ - o - a -  
 o - o - i - a - e - o - a - æ - o - e - a - o - o - o - æ - a - e - o - e - a - a - a - o - o - æ - a - e - o - a - a - æ - o - e - a - a -

(A tied last time only)

10

Hp

I

II

Kbd  
(E 1st time only)

III

IV

F $\flat$  F $\flat$  F $\flat$  F $\flat$

a - o - æ - u - ɔ - a - a - e - a - æ - o - ɔ - i - o - æ - a - a - a - ε - u - æ - o - a - a - o - æ - a - a - a - a - e - a - æ - o - a - a - a  
 ɔ - a - e - o - æ - a - a - ʊ - ɔ - e - a - æ - i - a - e - ɔ - a - a - a - e - o - e - a - a - ɔ - a - e - ɔ - a - a - a - ʊ - ɔ - e - a - a - a



# Gioseffo Zarlino

for at least two sustaining instruments or voices with optional keyboard  
in memoriam Friedemann Weigle

Marc Sabat

Repeat ad libitum, as precise intonation desires

The uppermost staff indicates common partial unisons between harmonics, which may be heard when the intervals between the two main voices (I and II) are well-tuned in their natural ratios. The arrow notates an alteration of the respective Pythagorean pitch by one syntonic comma (80:81). If singing, use any changing vowels, for example the Italian sequence i-o-e-u-a-i-o.

(C only on repeats) *p dolce, ma senza vibrato, immacolato*

*p dolce, ma senza vibrato, immacolato*

If possible, tune the pitches F, C, G, D, A, E in pure fifths, or play on any instrument(s) in Pythagorean tuning

(E only on repeats) *pp sotto voce, semplice e preciso*

*senza Ped.*

4



7

CP

I

II

Kbd

(A tied last time only)

10

CP

I

II

Kbd

(E 1st time only)

# Gioseffo Zarlino

for 2 violins, cello and piano : in memoriam Friedemann Weigle

Repeat ad libitum, as precise intonation desires

Marc Sabat

The score is written for five instruments: Violin (ad lib.), Violin, Violoncello, Piano (ad lib.), and a second Violin part. The music is in 6/8 time and consists of two systems. The first system includes staves for Violin (ad lib.), Violin, Violoncello, and Piano (ad lib.). The second system includes staves for Violin (Vln), Violoncello (Vlc), and Piano (PF). The score includes various performance instructions such as *senza sord.*, *con sord.*, *ppp sotto voce, flautando, espressivo*, *p dolce, ma senza vibrato, pure*, and *pp sotto voce, semplice e preciso*. It also features dynamic markings like *ppp*, *p*, and *pp*. A specific instruction for the Violoncello and Piano parts reads: "Tune the natural pitches F, C, G, D, A, E in pure untempered fifths and play all intervals as justly in tune as possible. An arrow notates a correction by one syntonic comma (80:81) to produce pure thirds and sixths." The score includes repeat signs and first endings, with a measure number '4' at the start of the second system.

**Violin (ad lib.)**  
senza sord.  
*ppp sotto voce, flautando, espressivo*  
sometimes disappearing into white

**Violin**  
con sord.  
(C only on repeats)  
*p dolce, ma senza vibrato, pure*

**Violoncello**  
con sord.  
*p dolce, ma senza vibrato, pure*  
Tune the natural pitches F, C, G, D, A, E in pure untempered fifths and play all intervals as justly in tune as possible.  
An arrow notates a correction by one syntonic comma (80:81) to produce pure thirds and sixths.

**Piano (ad lib.)**  
(E only on repeats)  
*pp sotto voce, semplice e preciso*

**Vln**  
senza Ped.

**Vlc**

**PF**

(E tied last time only)

7

Vln

Vln

Vlc

Pf

(A tied last time only)

10

Vln

Vln

Vlc

Pf

(E 1st time only)

# Gioseffo Zarlino

for a female voice and a male voice, bass flute, clarinet in B $\flat$ , piano, violin, viola and cello  
in memoriam Friedemann Weigle

Repeat ad libitum, as precise intonation desires

Marc Sabat

(C only on repeats) Tune the natural pitches F, C, G, D, A, E in pure untempered fifths and intone all intervals as justly as possible.  
An arrow notates a correction by one syntonic comma (80:81) to produce pure thirds and sixths.

**Bass Flute**  
*p dolce, ma senza vibrato, immacolato*

**Clarinet in B $\flat$**   
*p dolce, ma senza vibrato, immacolato*

**Piano**  
(E only on repeats)  
*pp sotto voce, semplice e preciso*  
*senza Ped.*

**Female Voice**  
*pp sotto voce, semplice e preciso*  
a - a - e - o - æ - a - c - e - a - æ - o - c - a - a - e - o - e - æ - c - e - a - a - æ - o - c - c - a - e - o - æ - a - c - e - a - i - o - c -

**Male Voice**  
*pp sotto voce, semplice e preciso*  
a - o - æ - u - c - a - a - æ - o - c - u - a - a - o - æ - u - e - e - a - æ - o - c - u - a - a - o - æ - u - c - a - a - æ - o - i - u - a -

**Violin**  
*ppp sotto voce, flautando*  
*senza sord.*

**Viola**  
*ppp sotto voce, flautando*  
*senza sord.*

**Violoncello**  
*ppp sotto voce, flautando*  
*senza sord.*  
*port.*

4

B Fl

Cl

Pf

F

M

Vln

Vla

Vlc

a - a - a - c - z - a - a - a - c - a - a - c - a - a - i - æ - a - a - c - z - a - a - æ - o - a - a - c -

a - o - æ - a - a - a - a - a - æ - o - a - a - o - æ - u - ε - a - a - a - a - æ - o - i - c - o - æ - a - a - a - a - c - u - æ - o - a -

7

B Fl

Cl

Pf

F

M

Vln

Vla

Vlc

(A tied last time only)

(E tied last time only)

(A tied last time only)

o - o - i - a - a - c - a - æ - o - a - a - c - c - o - æ - a - a - c - æ - e - o - a - a - a - c - o - æ - a - a - c - a - æ - o - a - a -

a - u - i - o - æ - a - a - c - u - æ - o - a - a - u - c - o - æ - a - a - æ - u - æ - o - a - a - a - u - c - o - æ - a - a - c - u - æ - o - a -

10

B Fl

Cl

Pf  
(E 1. time only)

F

M

Vln

Vla

Vlc

3-a-e-o-æ-a-a-3-a-e-a-æ - i-a-e-3-a-a-a-e-o-e-a-a - 3-a-e-3-a-a-a-3-a-e-a-a - a  
 a-o-æ-u-3-a-a-e-a-æ-o-3 - i-o-æ-a-a-a-a-ε-u-æ-o-a - a-o-æ-a-a-a-a-e-a-æ-o-a - a





7

Pf

(A tied last time only)

CP

F

o - o - i - a - a - o - a - æ - o - a - a - o - o - o - æ - a - a - o - æ - e - o - a - a - a - o - o - æ - a - a - o - a - æ - o - a - a -

M

a - u - i - o - æ - a - a - o - u - æ - o - a - a - u - o - o - æ - a - a - e - u - æ - o - a - a - u - o - o - æ - a - a - o - u - æ - o - a -

10

Pf

(E 1. time only)

CP

F

o - a - e - o - æ - a - a - æ - i - a - e - o - a - a - a - e - o - a - a - a - o - a - e - o - a - a - a - a - a - a - æ - o - a - a - a

M

a - o - æ - u - o - a - a - e - a - æ - o - o - i - o - æ - a - a - a - a - e - u - æ - o - a - a - o - æ - a - a - a - a - e - a - æ - o - a - a

# Gioseffo Zarlino

for a female voice, bass clarinet in B $\flat$ , keyboard and viola  
in memoriam Friedemann Weigle

Marc Sabat

Repeat ad libitum, as precise intonation desires

Common Partial



The small staff indicates common partial unisons between harmonics, which may be heard when the intervals between the two voices are well-tuned in their natural ratios. Optional notated vowels are indicated in phonetic symbols (IPA). These may be modified, as needed, so that each voice is able to produce clear resonances at the common partial pitches. Alternately, sing any vowels (for example the Italian sequence i-o-e-o-a-i-o). Try to always perceive the small comma differences as clearly as possible. The arrow notates an alteration of the respective Pythagorean pitch by one syntonic comma (80:81).

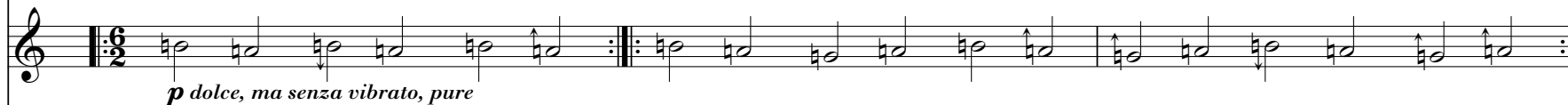
Female Voice

(C 2. time only) ***p dolce, ma senza vibrato, pure***



(C only on repeats) a - a - a - o - æ - a - o - e - a - æ - o - o - a - a - a - o - e - æ - o - o - o - a - a - o - æ - a - o - e - a - i - o - o -

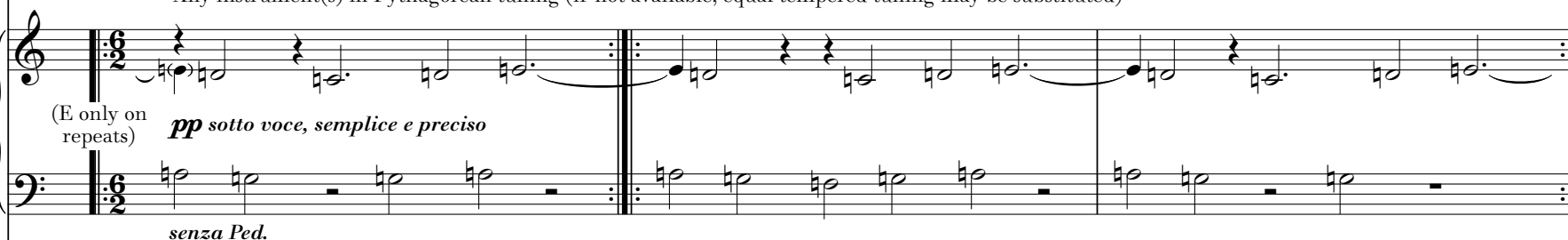
Bass Clarinet in B $\flat$



***p dolce, ma senza vibrato, pure***

Any instrument(s) in Pythagorean tuning (if not available, equal tempered tuning may be substituted)

Piano or Keyboard  
(ad lib.)



(E only on repeats) ***pp sotto voce, semplice e preciso***

senza Ped.

Viola

senza sord.



***ppp sotto voce, flautando, espressivo, sometimes disappearing into white***

4

CP

F

a - a - e - c - z - a - a - a - c - e - a - c - a - a - e - o - e - a - a - a - c - e - a - i - æ - a - e - c - z - a - a - æ - o - e - a - c -

B Cl

Pf

Vla

7

CP

F

o - o - i - a - a - c - a - æ - o - a - a - c - - c - o - æ - a - a - c - æ - e - o - a - a - a - - c - o - æ - a - a - c - a - æ - o - a - a - a

B Cl

Pf

(A tied last time only)

Vla

(E tied last time only)

10

CP

F

o - a - e - o - æ - a - a - z - o - e - a - æ - i - a - e - o - a - a - e - o - e - a - a - o - a - e - o - a - z - o - e - a - a - a

B Cl

Pf

(E 1. time only)

Vla

# Gioseffo Zarlino

for bassoon, cello and guitar with violin ad libitum  
in memoriam Friedemann Weigle

Repeat ad libitum, as precise intonation desires

Marc Sabat

The musical score is arranged in five systems. The first system includes Violin (ad lib.), Bassoon, Violoncello, and Guitar. The second system includes Violoncello and Guitar. The third system includes Violin, Bassoon, Violoncello, and Guitar. The fourth system includes Violin, Bassoon, Violoncello, and Guitar. The fifth system includes Violoncello and Guitar.

**Violin (ad lib.)**  
senza sord.  
I

**Bassoon**  
(C only on repeats)  
*ppp sotto voce, flautando, espressivo*  
*sometimes disappearing into white*

**Violoncello**  
*p dolce, ma senza vibrato, pure*

**Guitar**  
(E only on repeats)  
*pp sotto voce, semplice e preciso*

Tune the strings as follows : E +2c, B -6c, G -4c, D -8c, A 0, E +2c  
Check that C on 2nd string fret I (-6c) is pure with open G (-4c) and with F on 4th string fret III (-8c)  
Play all intervals in pure untempered fifths as justly in tune as possible:  
D on 2nd string fret III and A on 3rd string fret II, marked with a + sign, may need to be pulled slightly higher (-2c and 0c).

4

(E tied last time only)

7

Vln

Bsn

Vlc

Gtr

(A tied last time only)

10

Vln

Bsn

Vlc



(E 1st time only)

Gtr

