

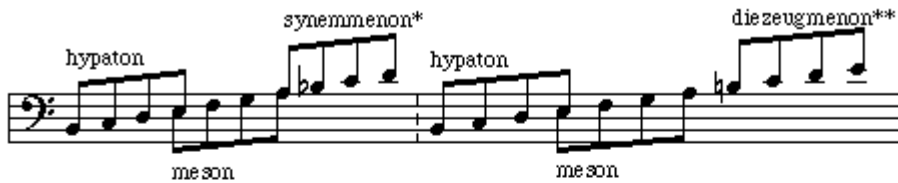
**MTO 10.1 Examples: Wibberley, Willaert's didactic demonstration of Syntonic tuning**

(Note: audio, video, and other interactive examples are only available online)

<http://www.mtosmt.org/issues/mto.04.10.1/mto.04.10.1.wibberley.php>

**Example 1.** Illustration of Tenor tetrachords disposed heptachordally

**Normal diatonic *scala* showing usual tetrachord structures**



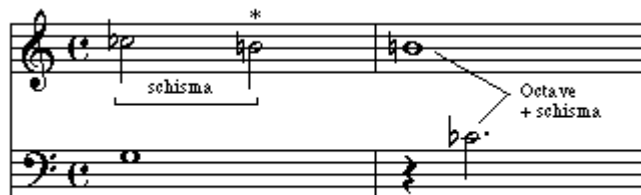
\* 'synemmenon' means 'conjoined' - the Latin being 'coniuncta'

\*\* 'diezeugmenon' means 'disjoined' - the Latin being 'disiuncta'

**Willaert's new diatonic *scala* as used in his Tenor**



**Example 2.** Demonstration of the schisma



\* note lowered by a syntonic comma

**Example 3.** Willaert's tetrachord matrix using simplified notation

The image shows a musical score for a tetrachord matrix. It consists of two staves, a treble clef on top and a bass clef on the bottom. The music is written in a simplified notation style. Six segments of the music are labeled with the word "conjuncta" followed by a number from 1 to 6. The segments are arranged in a grid-like pattern across the two staves. The top staff contains conjuncta 3 and 5, while the bottom staff contains conjuncta 1, 2, 4, and 6. The notes are primarily eighth and sixteenth notes, with some rests. The key signature has one flat (B-flat).

**Example 4a.** Willaert's Tenor transcribed into simplified notation

**Quid non ebrietas dissignat (Tenor)**

(Original)

(Transcription)

The image displays a musical score for a tenor part. It is divided into two main sections: "(Original)" and "(Transcription)". Each section contains five systems of music, each with a vocal line (treble clef) and a lute line (bass clef). The key signature has one flat (B-flat). The original notation uses various note values including minims, crotchets, and quavers. The transcription below it uses a simplified notation system with stems and flags to represent the pitch and rhythm. The lyrics "Quid non ebrietas dissignat" are written below the vocal line in the transcription section.

**Example 4b.** The correct performance of Example 4a indicated by editorial flats

**Quid non ebrietas dissignat** (with double ficta)

The image shows three systems of musical notation for the motet 'Quid non ebrietas dissignat'. Each system consists of a mensural line (soprano clef) and a lute line (treble clef). The mensural line contains notes with stems and flags, and the lute line contains notes with stems and flags. Editorial flats (b) are placed above or below notes in the lute line to indicate the correct performance. The first system has three flats, the second has seven flats, and the third has seven flats. The piece concludes with a double bar line and a repeat sign.

**Example 5.** Pythagorean and Ptolemaic tetrachords compared

The image shows two tetrachords on a single staff. The first is labeled 'Pythagorean' and consists of four notes: C, D, E, F. The second is labeled 'Ptolemaic' and consists of four notes: C, D, E, F. Above the Ptolemaic notes are the interval markings '+1 +1 +1'. Below the Ptolemaic notes is a '+1' marking.

**Example 6.** Willaert's new Syntonic tetrachords

The image shows a single staff with a sequence of notes: C, D, E, F, G, A, B, C. Above the notes are the interval markings '-1 -1 -1 -1 -1'. The notes are C, D, E, F, G, A, B, C.

Pitch material used in the second half of Willaert's motet *Quid non ebrietas*?

Pitches marked "-1" are lowered by a comma from their Pythagorean defaults, while the remaining notes retain their Pythagorean pitch standards.

**Example 7.** Willaert's exercise in pitching 16:15 semitones

Willaert's first exercise:  
the singing of new semitones

**Example 8.** Voice leading between Tenor and Altus

20

mis o - nus e - - - xi - mit ad - do - cet ar - tes,  
e - xi - mit, ad - do - cet ar -  
e - xi - - - mit, ad - do - cet ar - tes, ad - do -  
xi - mit, ad - do - - - cet ar - tes, ad - do cet ar -

**Example 9.** Willaert's last use of Pythagorean harmony in measure 23

21

xi - mit ad - do - cet ar - tes, ad - do cet ar - tes,

e - xi - mit, ad - do - cet ar - tes, ad - do - - - cet

mit, ad - do - cet ar - tes, ad - do - cet ar - - - - tes,

cet ar - tes, — — ad - do cet ar - tes, ad - do - cet ar

**Pythagorean intervals**

Detailed description: The image shows a musical score for four staves. The top staff is a vocal line with lyrics: 'xi - mit ad - do - cet ar - tes, ad - do cet ar - tes,'. The second staff is another vocal line with lyrics: 'e - xi - mit, ad - do - cet ar - tes, ad - do - - - cet'. The third staff is a lute or guitar line with lyrics: 'mit, ad - do - cet ar - tes, ad - do - cet ar - - - - tes,'. The bottom staff is a bass line with lyrics: 'cet ar - tes, — — ad - do cet ar - tes, ad - do - cet ar'. Above the notes in the first three staves, there are interval markings: '-1' above the first two notes of each staff, and '-1 -1' above the last two notes of each staff. A bracket labeled 'Pythagorean intervals' points to the interval between the two notes in the bass line that correspond to the 'ad - do' lyrics in the third measure.

**Example 10.** A new edition of Willaert's *Quid non ebrietas dissignat*

**Quid non ebrietas dissignat** Willaert

**CANTUS**  
 Quid non e - bri - e - tas dis - sig - nat? O - per - ta re - clu -

**ALTUS**  
 Quid non ebri - e - tas dis - sig - nat? O - per - ta

**TENOR**  
 Quid non e - bri - e - tas dis - sig - nat, dis - sig - nat? O - per - ta

**BASSUS (editorial)**  
 Quid non ebri - e - tas dis - sig - nat, dis - sig - nat? O - per - ta re -

**9**

- - - dit spes iu - bet es - se ra - tas, ad proe - li - a tru - dit i -

re - clu - dit spes iu - bet es - se ra - tas, ad proe - li - a tru - dit i - ner -

re - clu - dit spes iu - bet es - se ra - tas, ad proe - li - a tru - dit i -

clu - dit spes iu - bet es - se ra - - - tas, ad proe - li - a tru - dit i - ner - tem, i -

16

ner - tem, sol - li - ci - tis a - ni - mis o - nus e - - - xi - mit, ad -  
 tem, sol - li - ci - tis a - ni - mis o - nus e - xi - mit,  
 ner - tem, sol - li - ci - tis a - ni - mis o - nus e - xi - mit, ad - do - cet  
 ner - tem, sol - li - ci - tis a - ni - mis o - nus e - xi - mit, ad - do - - - - cet ar - tes, -

22

do - cet ar - tes, ad - do - cet ar - tes, ad - do - cet ar - tes, ad - do - cet ar - tes.  
 ad - do - cet ar - tes, ad - do - - - cet ar - - - - tes, ad - do - - - cet ar - tes.  
 ar - tes, ad - do - cet ar - - - - tes, ad - do - - - cet ar - - -  
 ad - do - cet ar - tes, ad - do - - - cet ar - - - - tes. Fe - cun - di ca - li - ces

28

tes. Fe - cun - di ca - li - ces quem non fe - ce - re di - ser -

Fe - cun - di ca - li - ces quem non fe - ce - re di - ser - tum, di - ser -

tes. Fe - cun - di ca - li - ces quem non fe - ce - re di - ser -

quem non fe - ce - re di - ser - tum, quem non fe - ce - re di - ser -

33

tum, fe - cun - di ca - li - ces quem non fe - ce - re di - ser - tum?

- - tum, fe - cun - di ca - li - ces quem non fe - ce - re di - ser - tum?

- - tum, fe - cun - di ca - li - ces quem non fe - ce - re di - ser - tum?

- - tum, fe - cun - di ca - li - ces quem non fe - ce - re di - ser - tum?

tum, fe - cun - di ca - li - ces quem non fe - ce - re di - ser - tum, quem non fe - ce - re di - ser - tum?