Seven equidistant enharmonic tetrachords

Barnaby Brown, *Descending Equi-heptatonic Circuits.* **Diagram 1**

L H
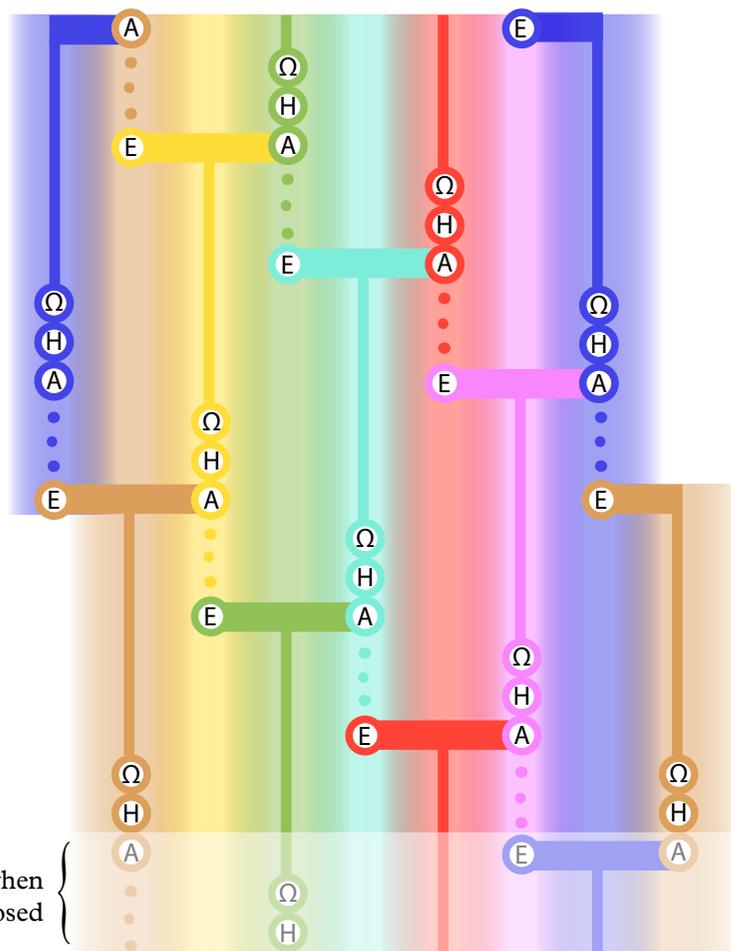
$F^{\sharp}4$ -43 **Locrian**
(new Hypodorian)

E4 -14 **Mixolydian**

D4 +14 **Lydian**
(tense Lydian)

C4 +43 **Phrygian**

B3 -29 **Dorian**

A3 0 **Aeolian**
(slack Lydian /
old Hypodorian)

G3 +29 **Iastian**
(Hypophrygian)

$F^{\sharp}3$ -43 **Locrian**
(new Hypodorian)

only available when
hole L-5 is closed

This network of T-junctions is a hypothetical model of how aulos players modulated in the *nomos trimelēs*, the dithyramb and drama in the period c. 550–400 BCE, i.e. between Sakadas of Argos and Pronomus of Thebes. At each T-junction, fourth-century Greek musicians called the tetrachord to the right 'conjunct' (*synēmmenon*, a fourth higher) and the tetrachord to the left 'disjunct' (*diezeugmenon*, a fifth higher); the tones of disjunction are represented by three dots.

In the Roman period, the vowels alpha (**A**), eta (**H**), omega (**Ω**) and epsilon (**E**) identified a note's position in the tetrachord, like *Do Re Mi Fa* in a movable-Do system. This was in a diatonic environment; their use in the enharmonic environment of the Classical period is hypothetical.

The pitches given here are approximately those of the Pydna aulos (the Poseidonia is about a semitone higher, the Elgin about a tone lower). The offsets in cents show the discrepancy between an equidistant 7-tone system and the equidistant 12-tone system of Aristoxenus and staff notation. Only the former is compatible with the hole boring of Classical-era finds. For pure intervals, all fifths must be widened and all fourths narrowed by roughly 16 cents. This requirement for pitch adjustment on every note excludes lyres from this tonal system.