

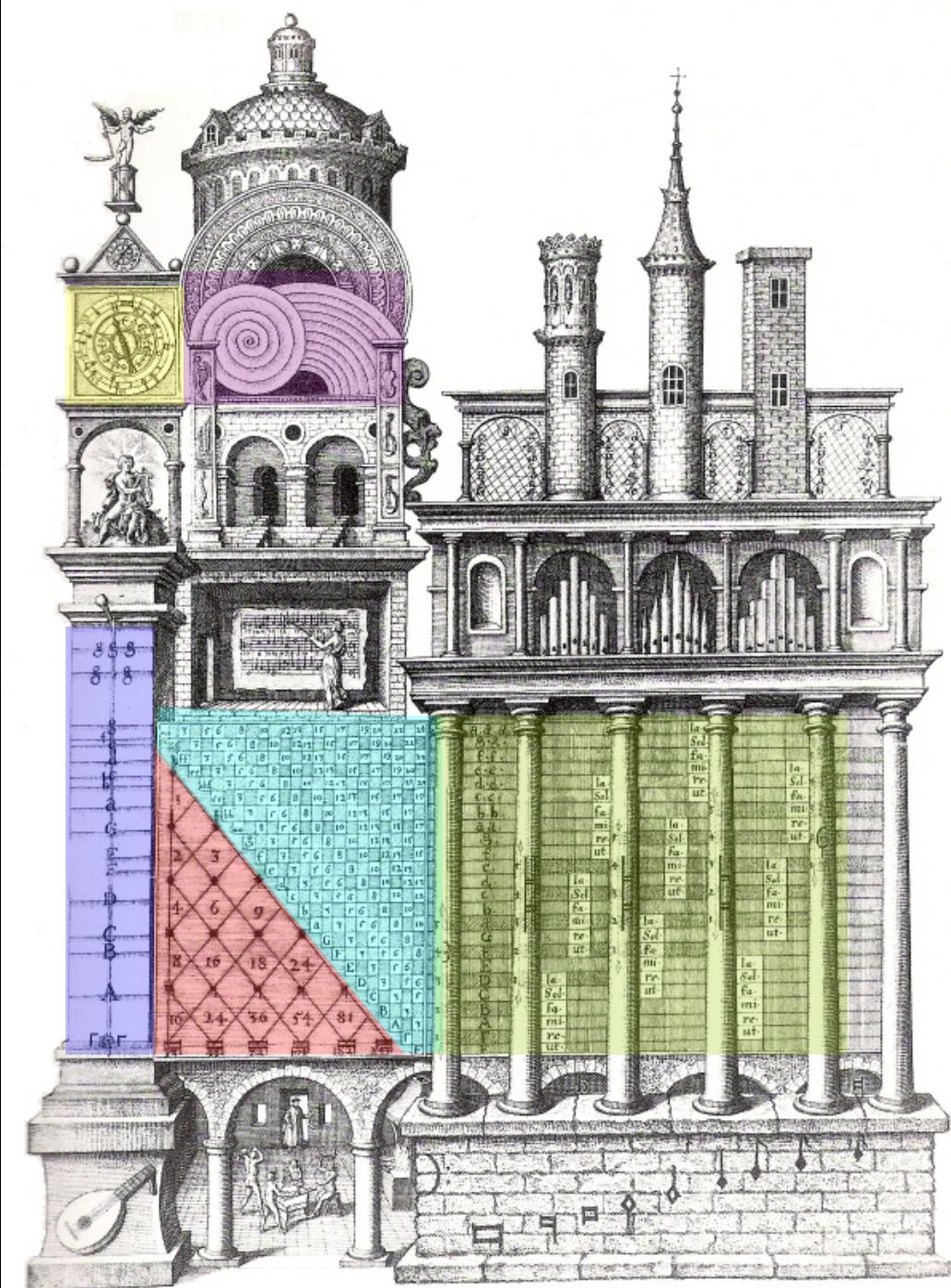
Sound – Color – Space

A virtual Museum

3 March 2014

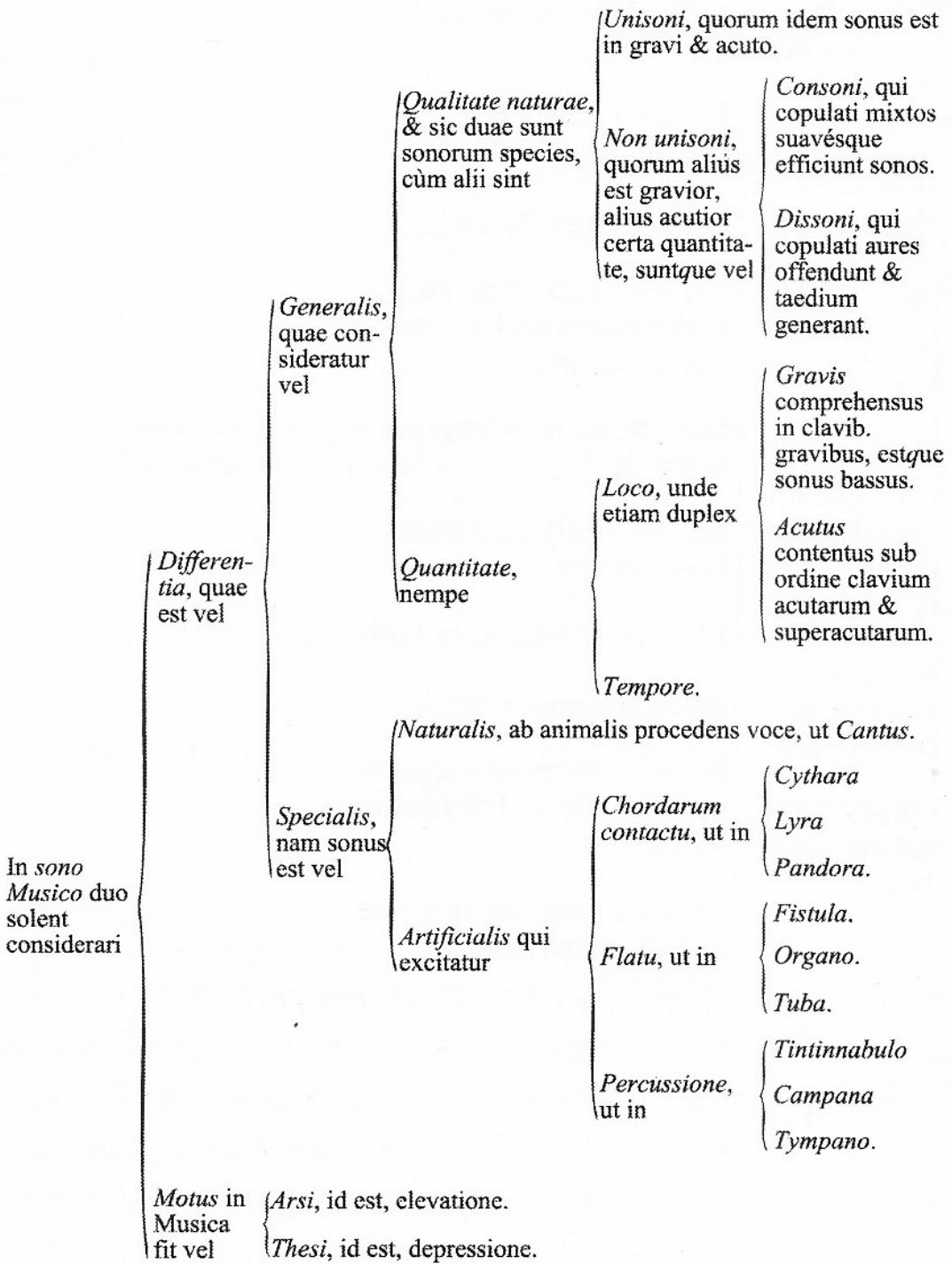
μ ονσειο =
temple of the
Muses

Robert Fludd
Temple of Music (1617)



Tree sentences

Robert Fludd: In
sono Musico ...



„Petersburg Hanging“



Johann Zoffany: The Tribuna of the Uffizi(1772-78)

Pitch space

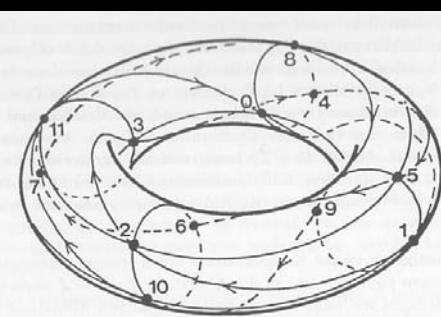
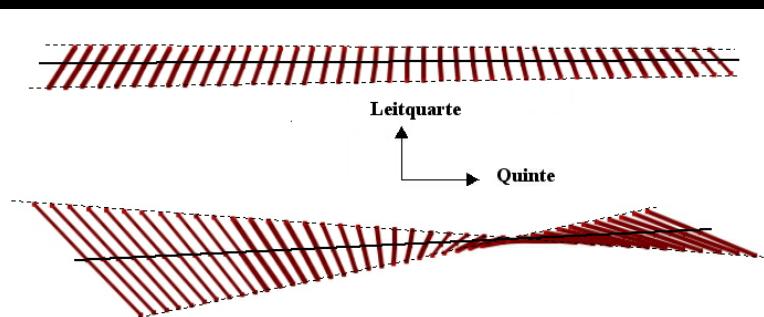
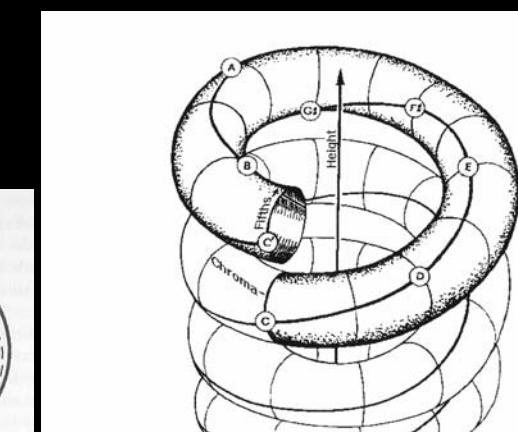
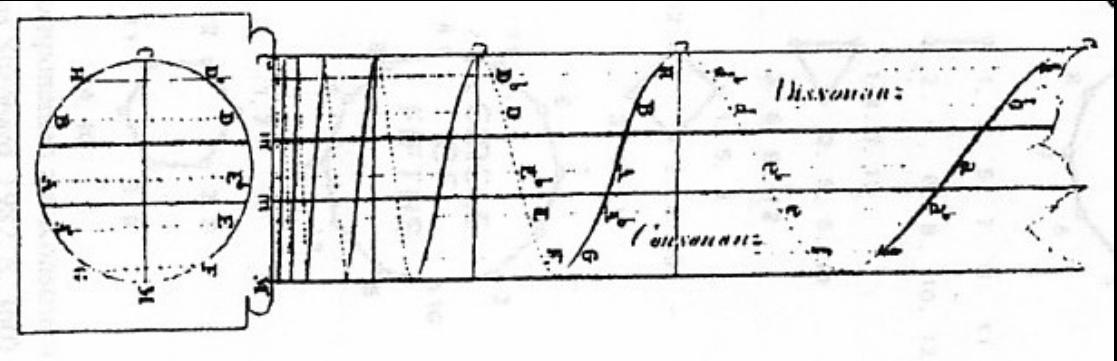
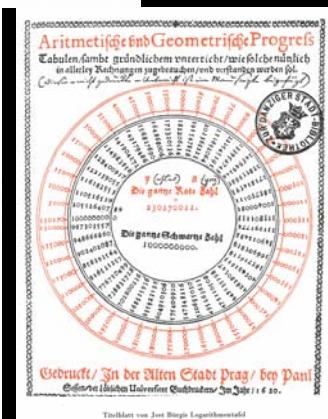
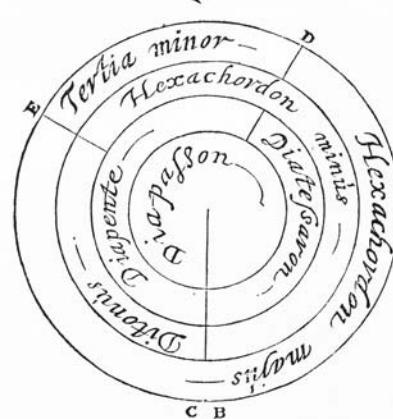
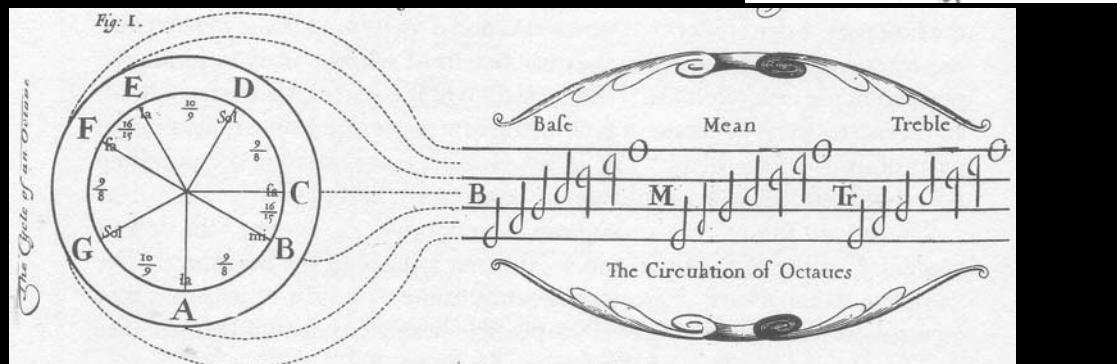
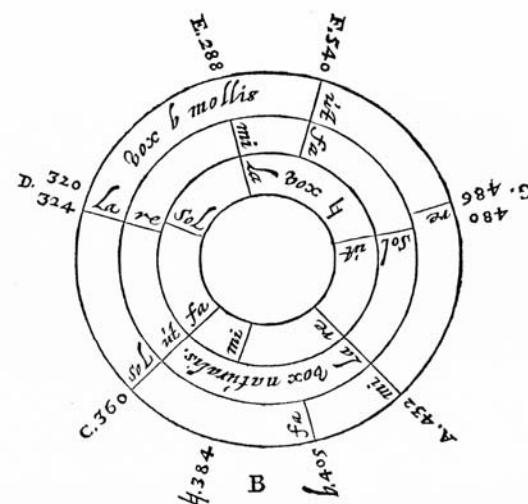
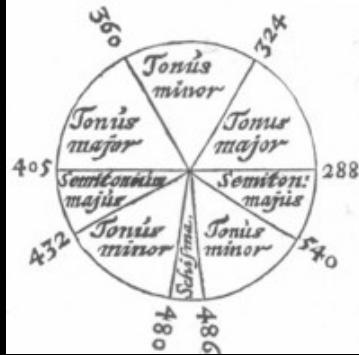
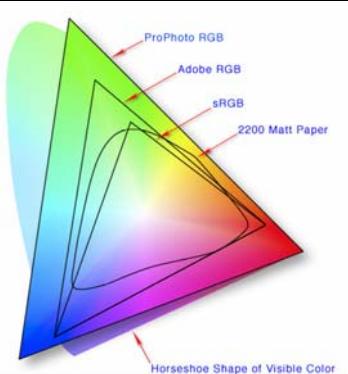
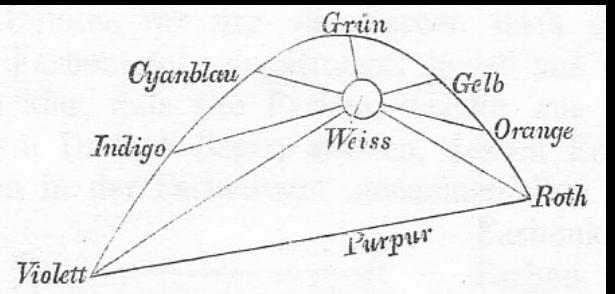
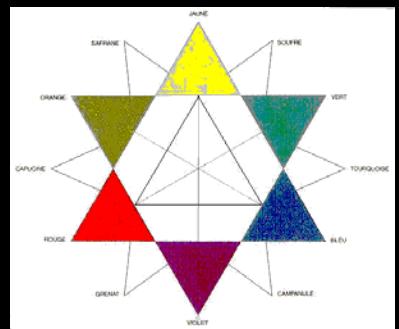
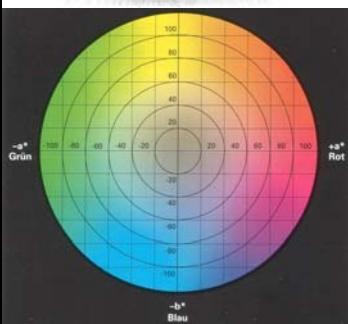
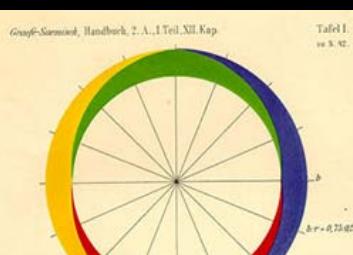
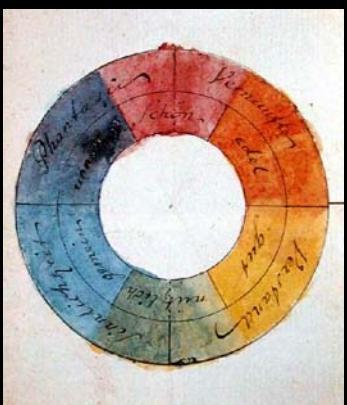
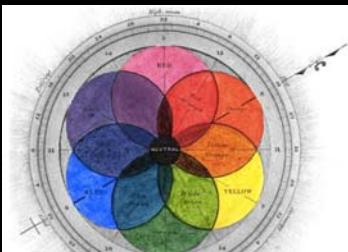
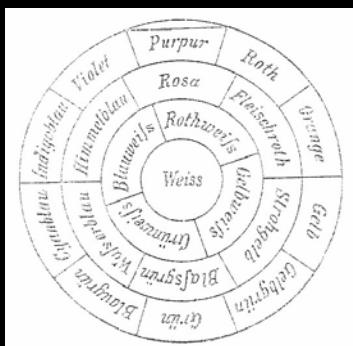
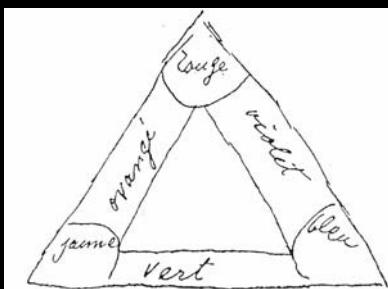
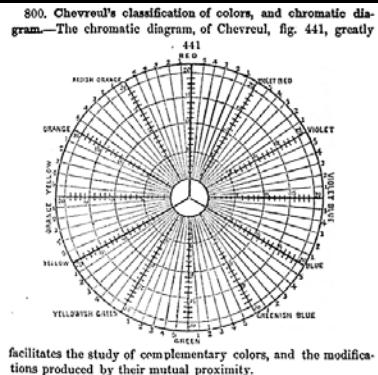
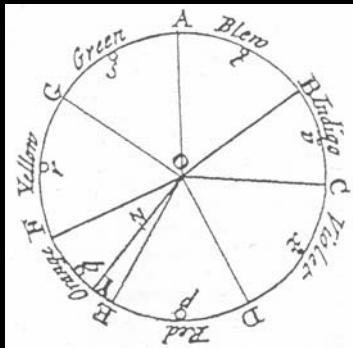
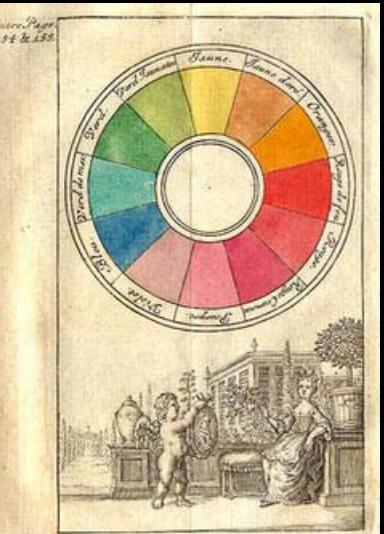
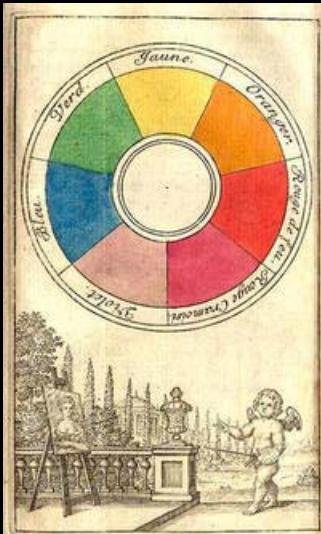
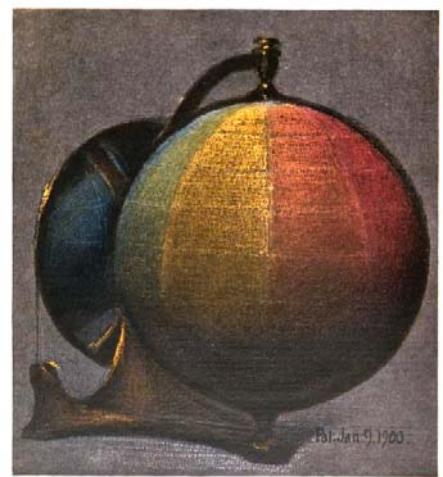
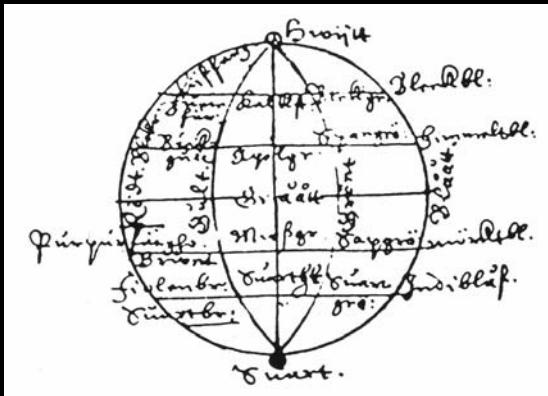


Figure 13.11 Double helix plotted on the surface of a helical cylinder. This captures the octave and perfect fifth relationship better than the simple torus of figure 13.10.

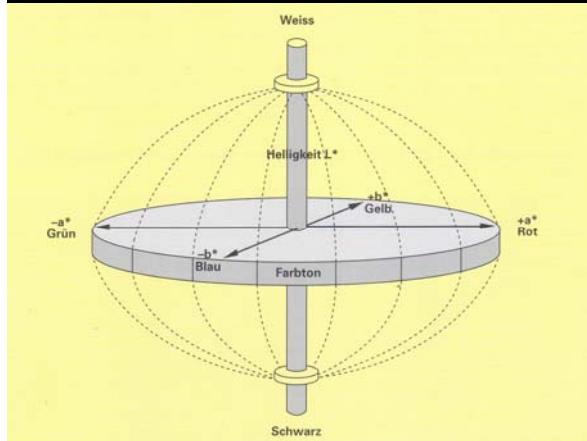
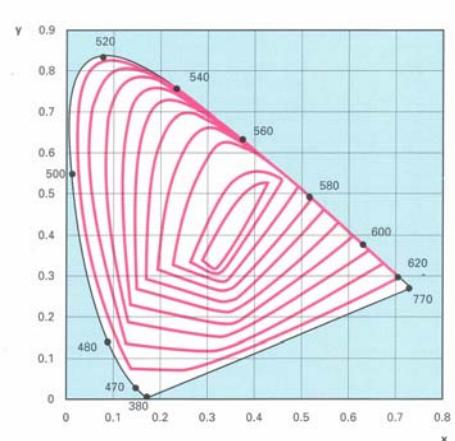
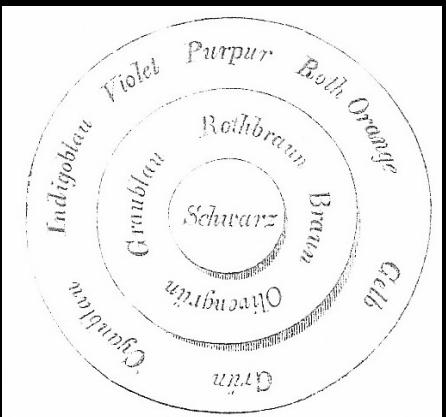
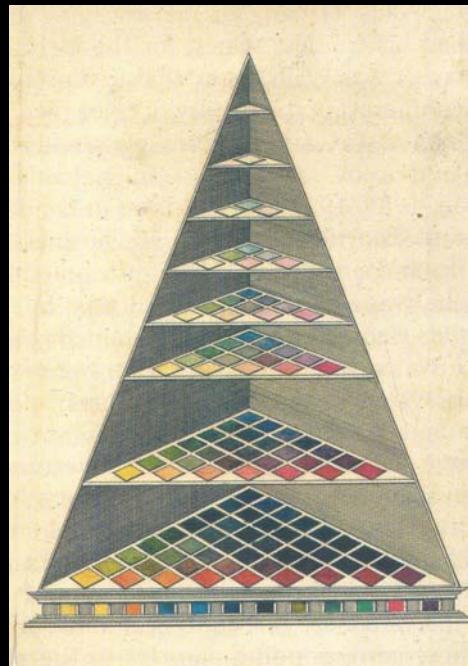
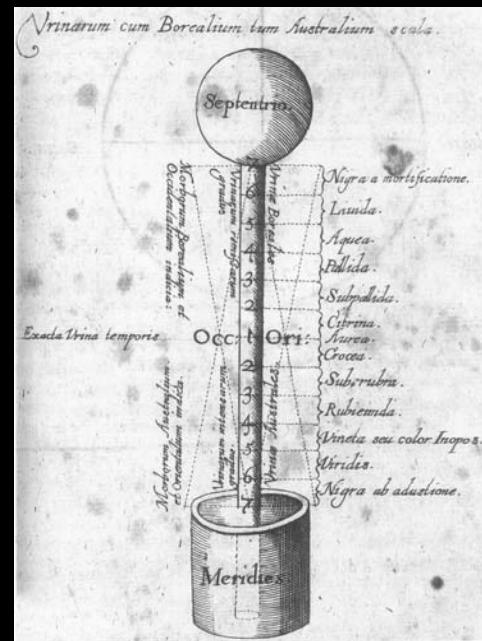
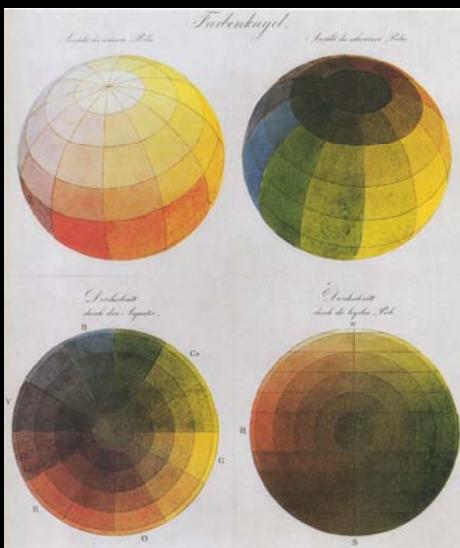
Colour spaces 2d

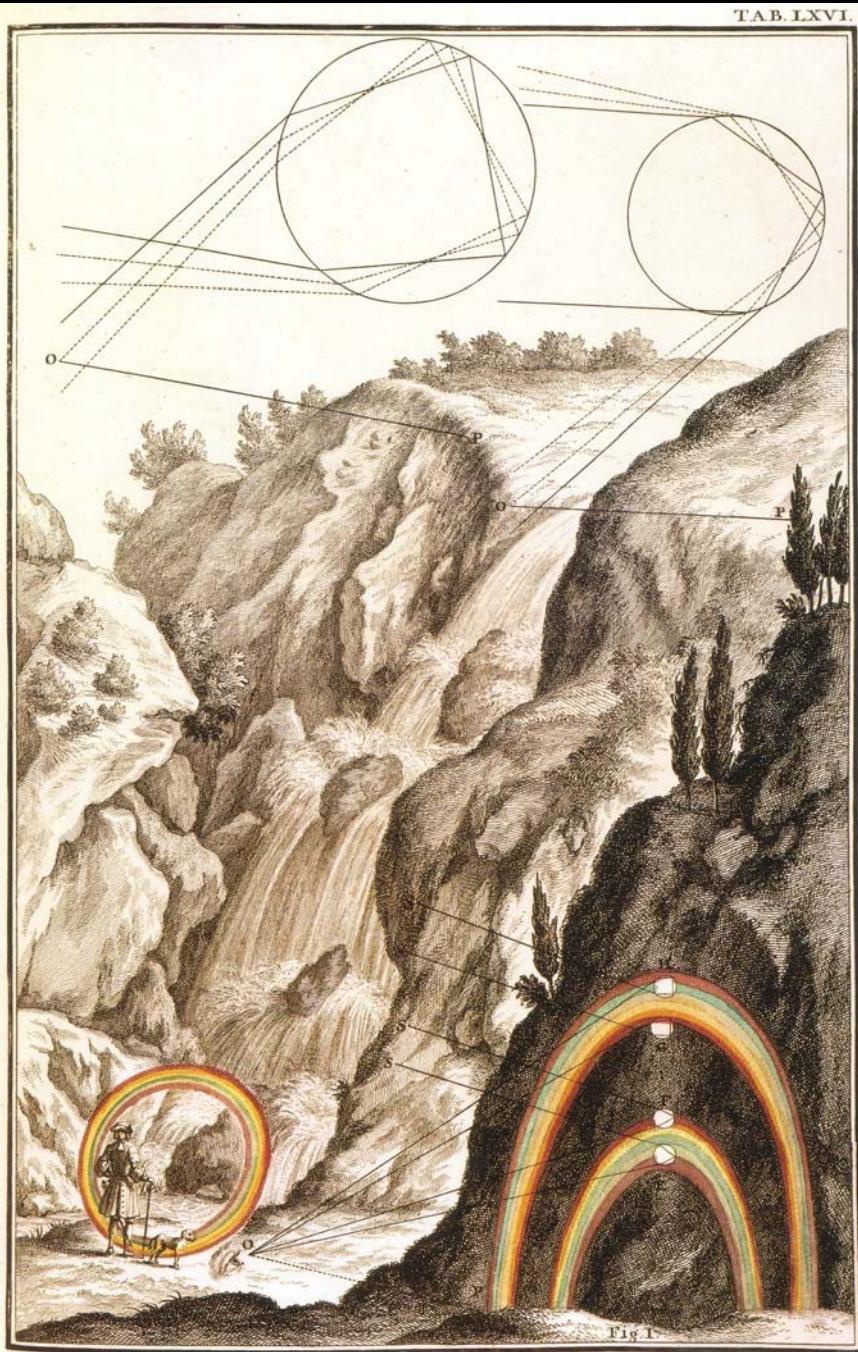
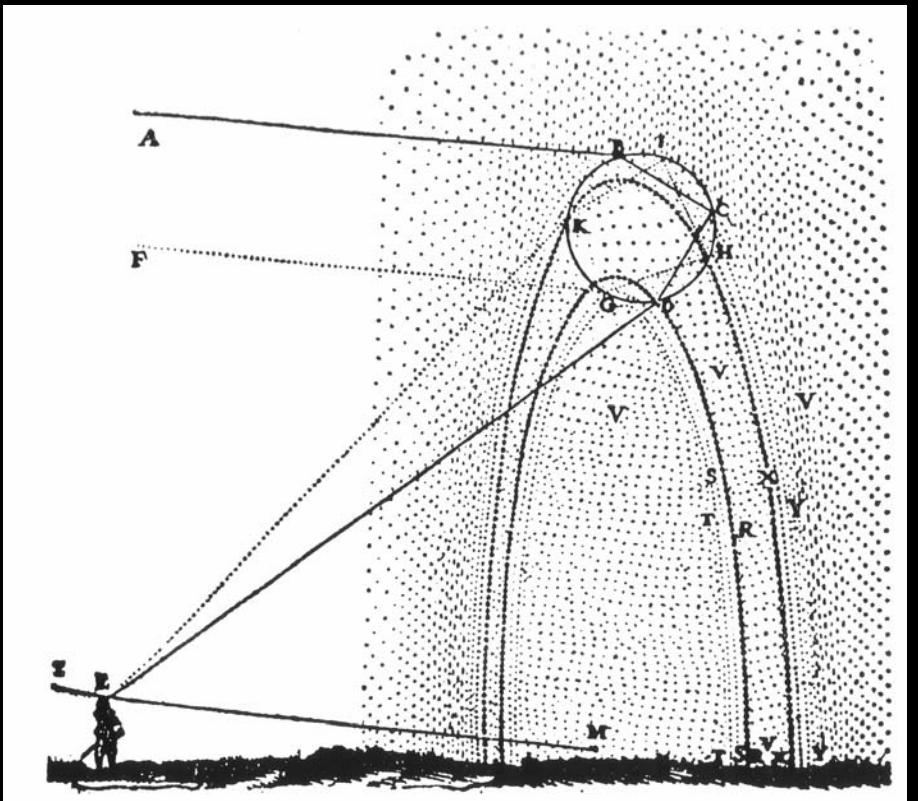


Colour spaces 3d

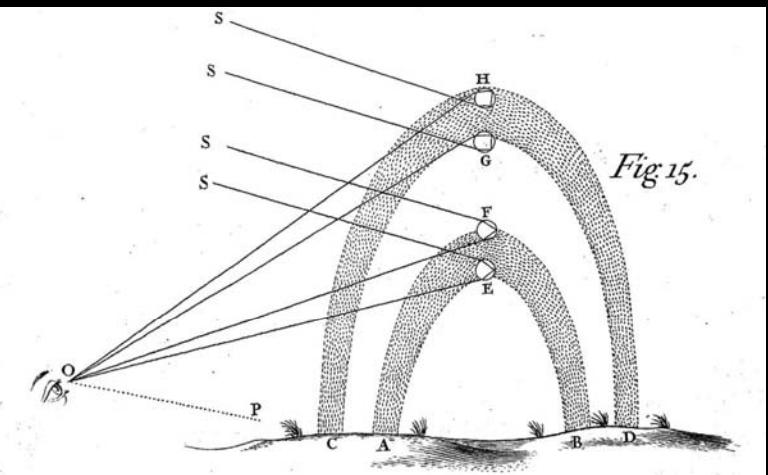


A BALANCED COLOR SPHERE





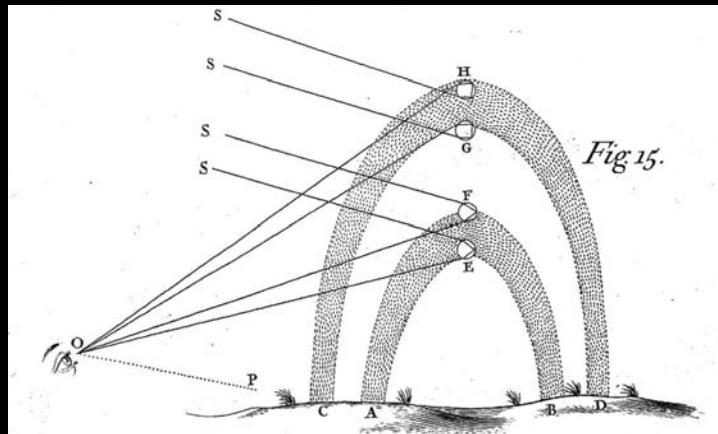
Descartes↑ Newton↓ Scheuchzer1731 →



GENESIS Cap. IX. v. 12. 17.
Iridis demonstratio.

I. Buch Moses Cap. IX. v. 12. 17.
Untersuchung des Regenbogen.

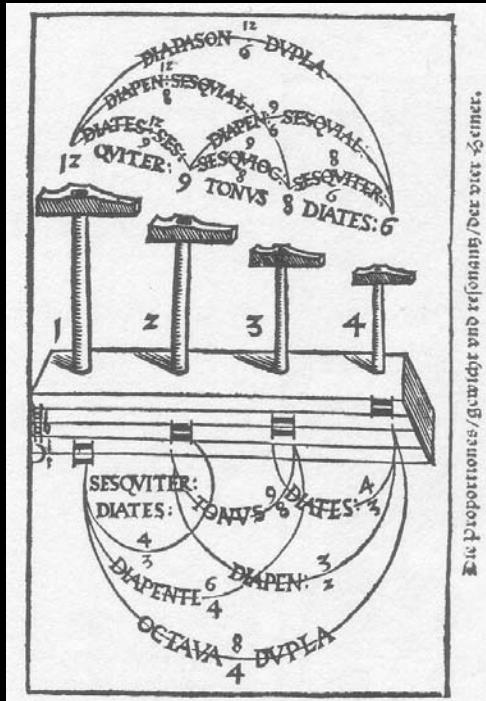
Rainbows



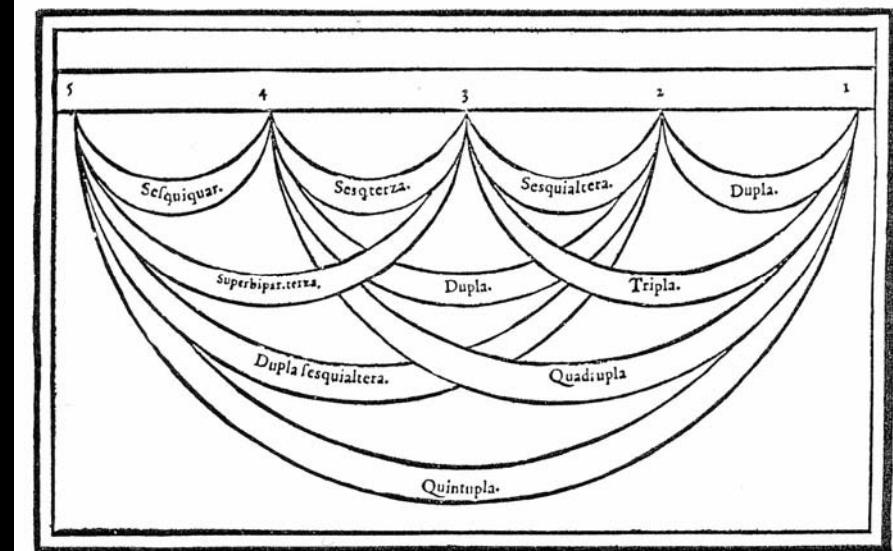
Newton 1704
Kaufmann 1780

Goethe 1826
Constable 1831

Tetraktyς Kappa 5

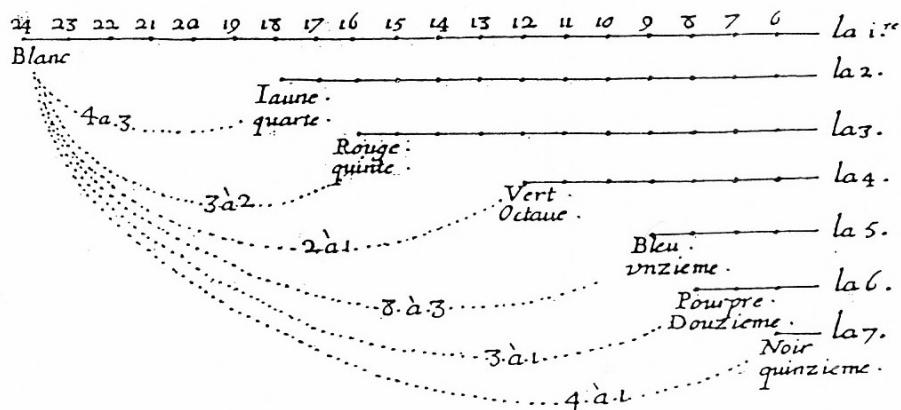


Agricola 1529

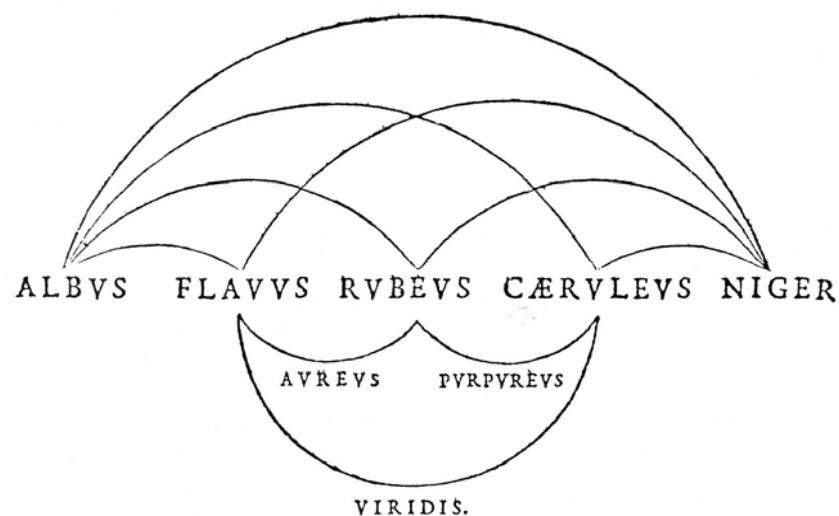


Zarlino 1573

Système des Couleurs et des Harmonies
I. Figure.



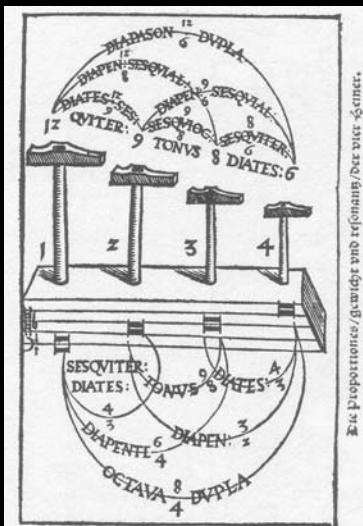
Cureau 1650



D'Aguilon 1613

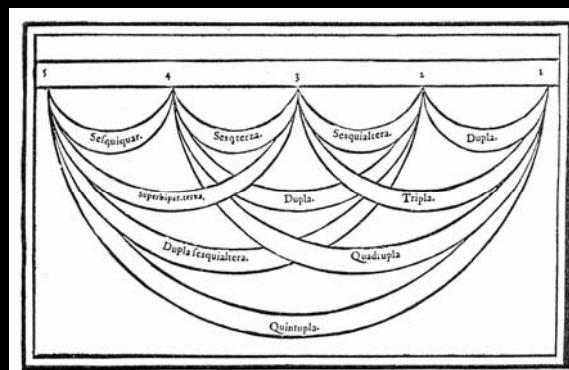
Kappa_n

1597_Praedicabilia_
AristotelisOrganon.jpg →

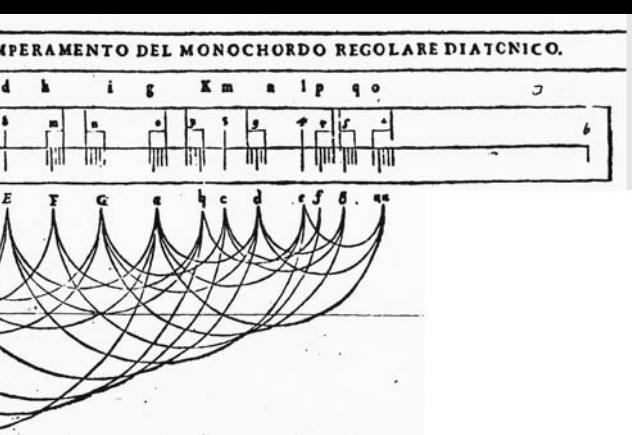
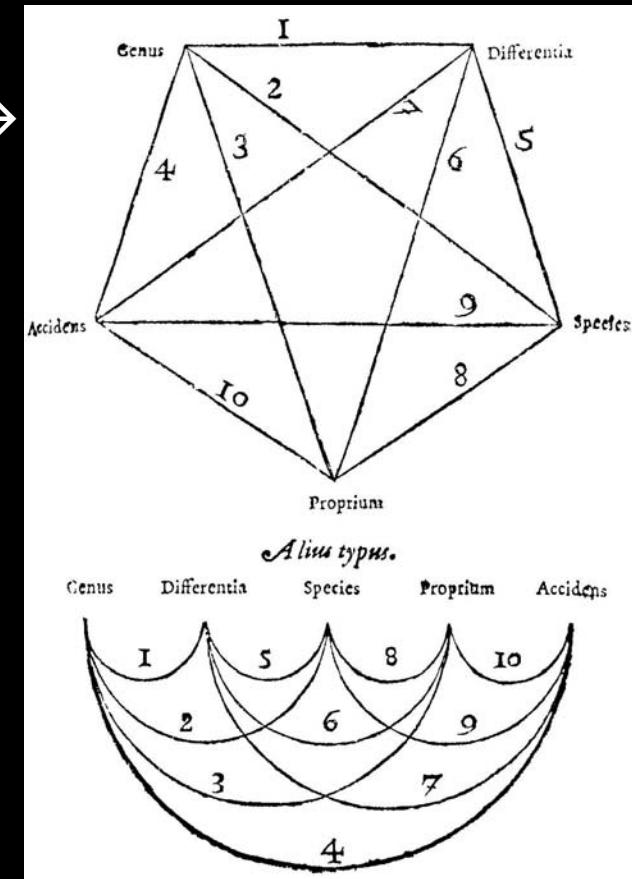


Die Proportionen/Grundprinzipien des vier Stimmens.

Agricola 1529

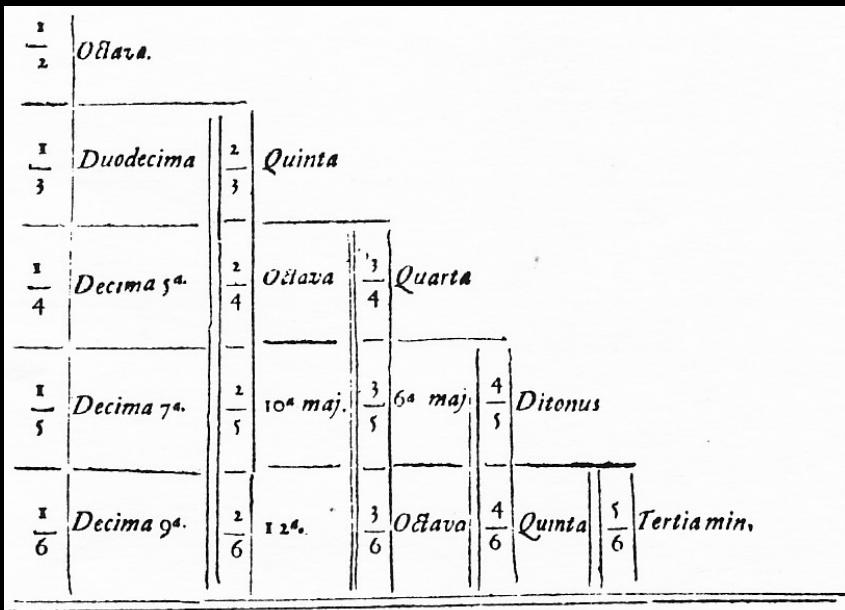


Zarlino 1573

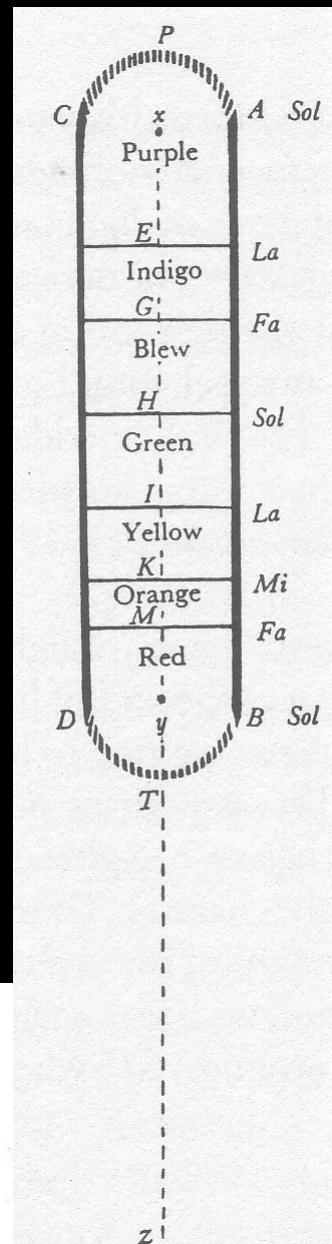
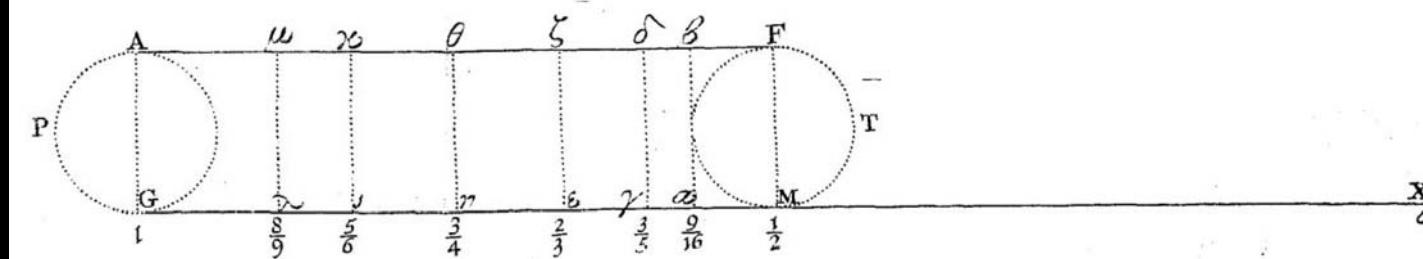
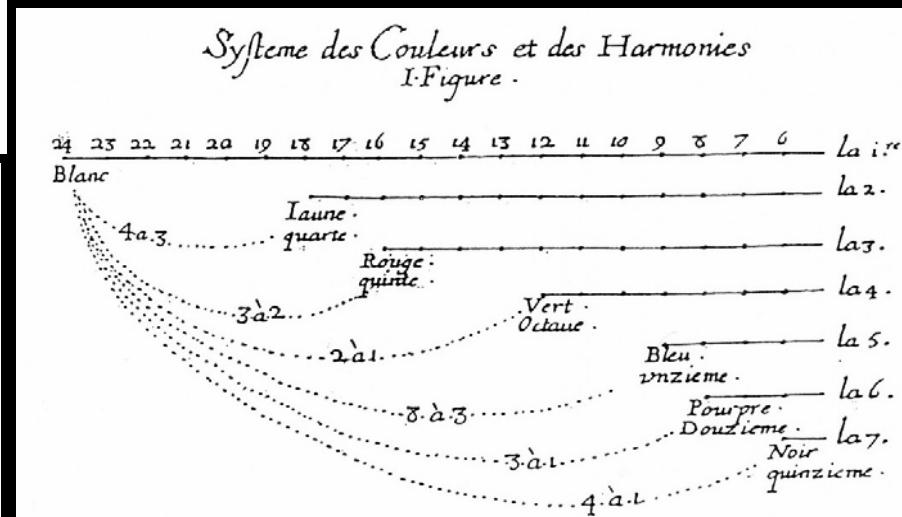
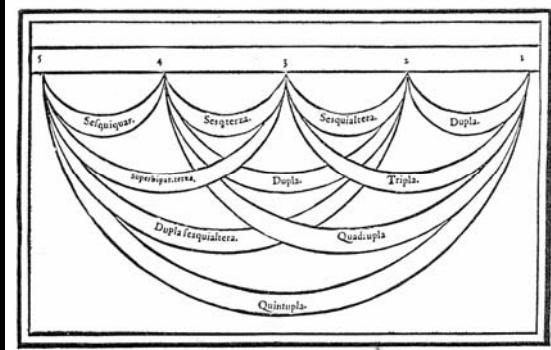
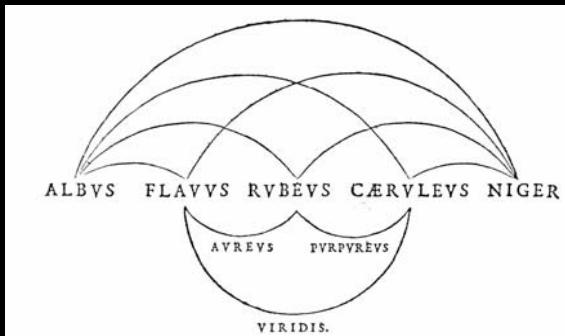


Descartes 1619/51

Zarlino 1571

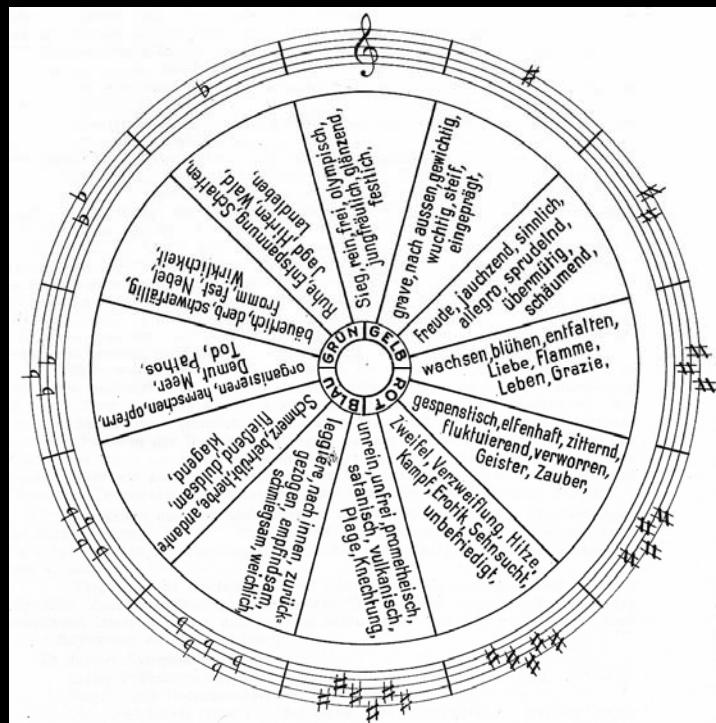
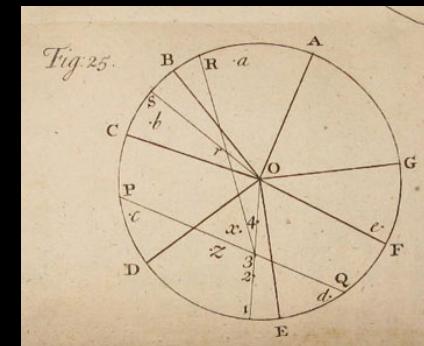
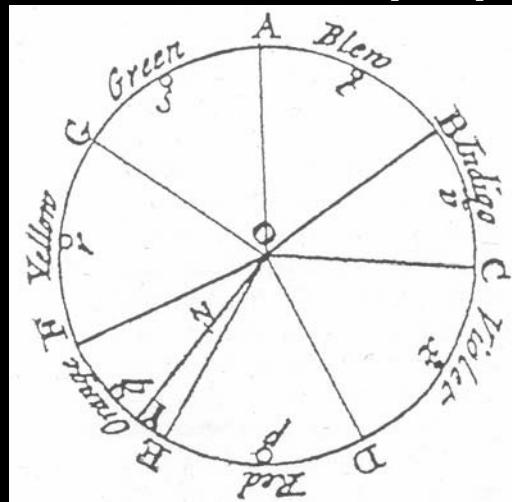
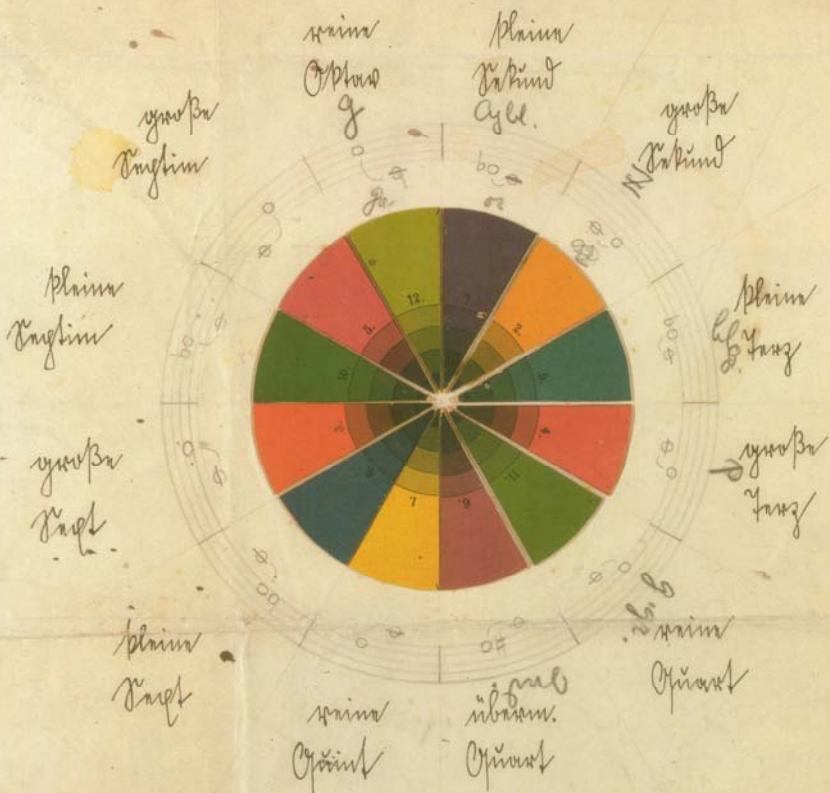


Pitch – Colour Space (1)

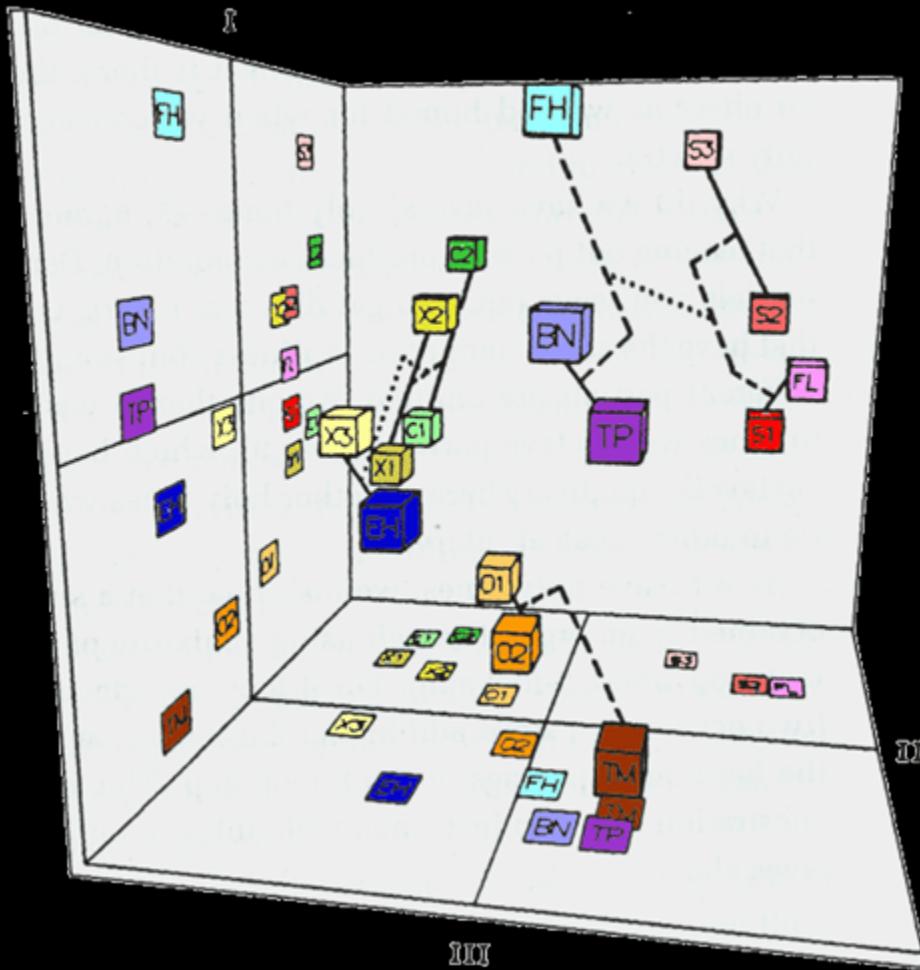


Pitch – Colour Space (2)

Die Intervalle der größtflächigen Temperatur
bändermägl. geom. unverändert:
physisch



Sound colour space: timbre space

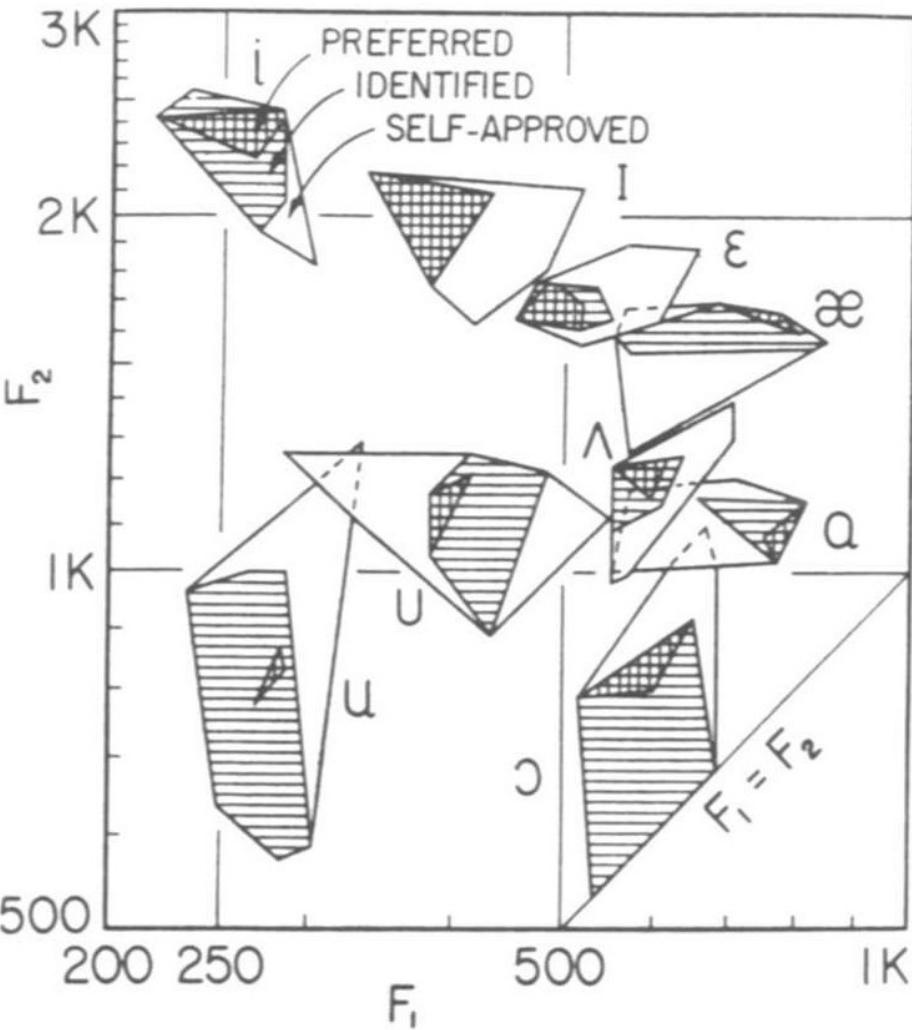


<http://at.or.at/hans/misc/timbre-space/timbre-space.html>

Grey/Gordon (1978)

→ Christoph Reuter (2014)

Vowels



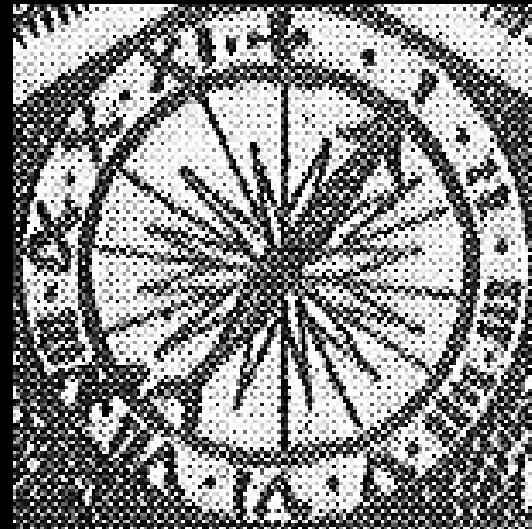
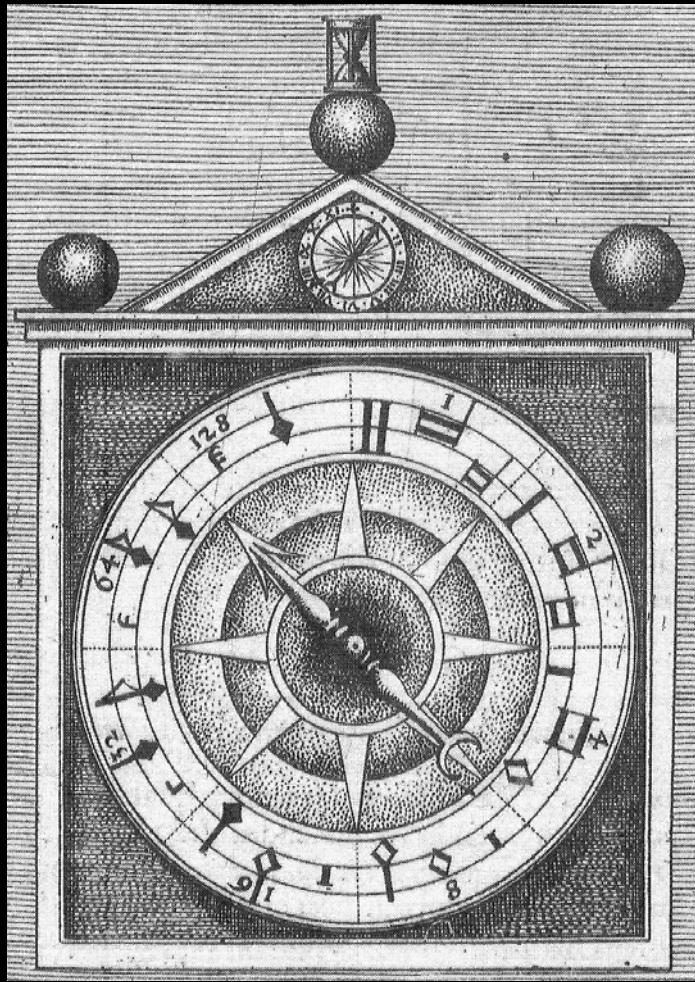
e - u - a - i

Fairbanks & Grubb 1961

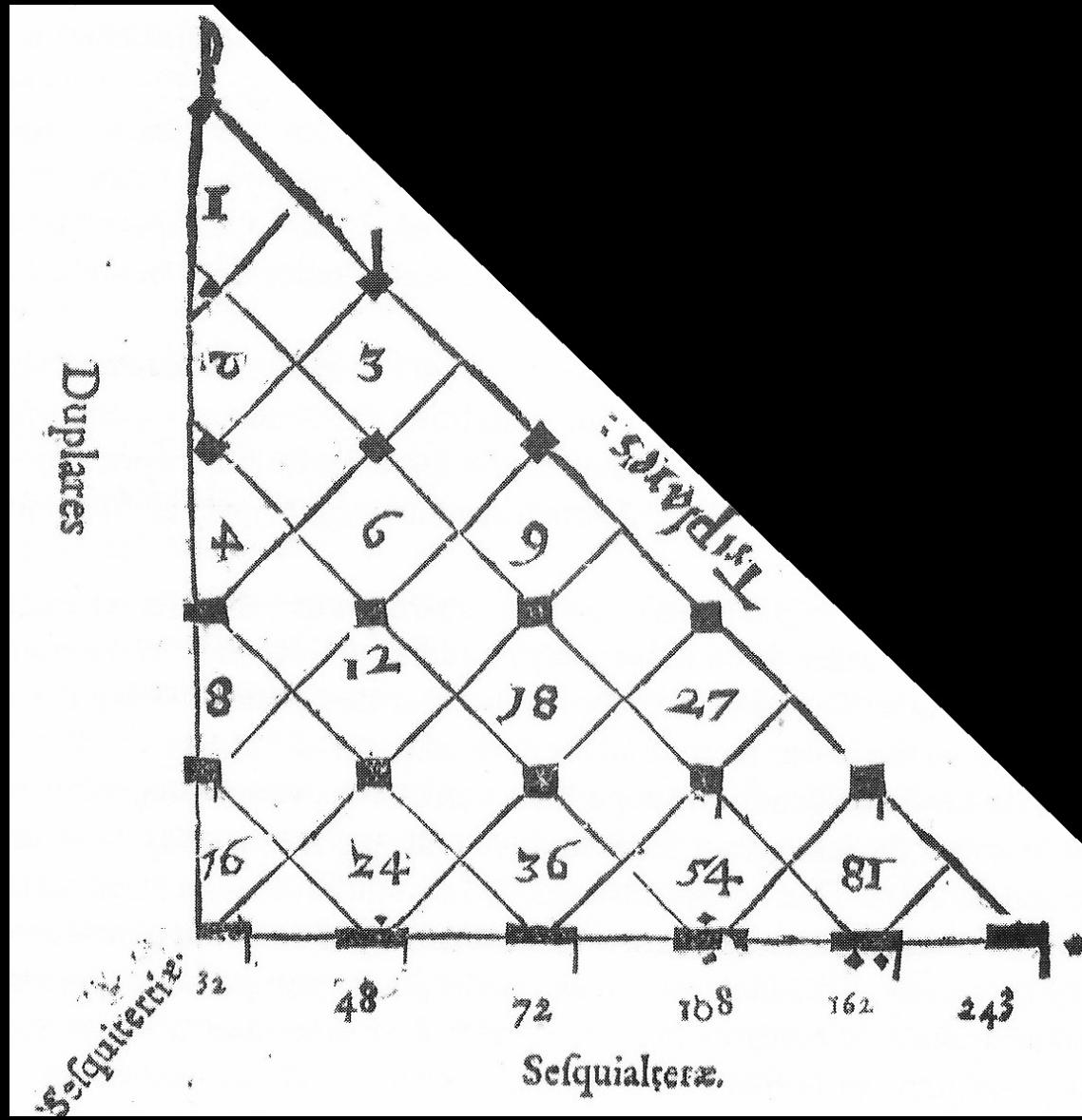
End

Fludd: binary durations

[←]

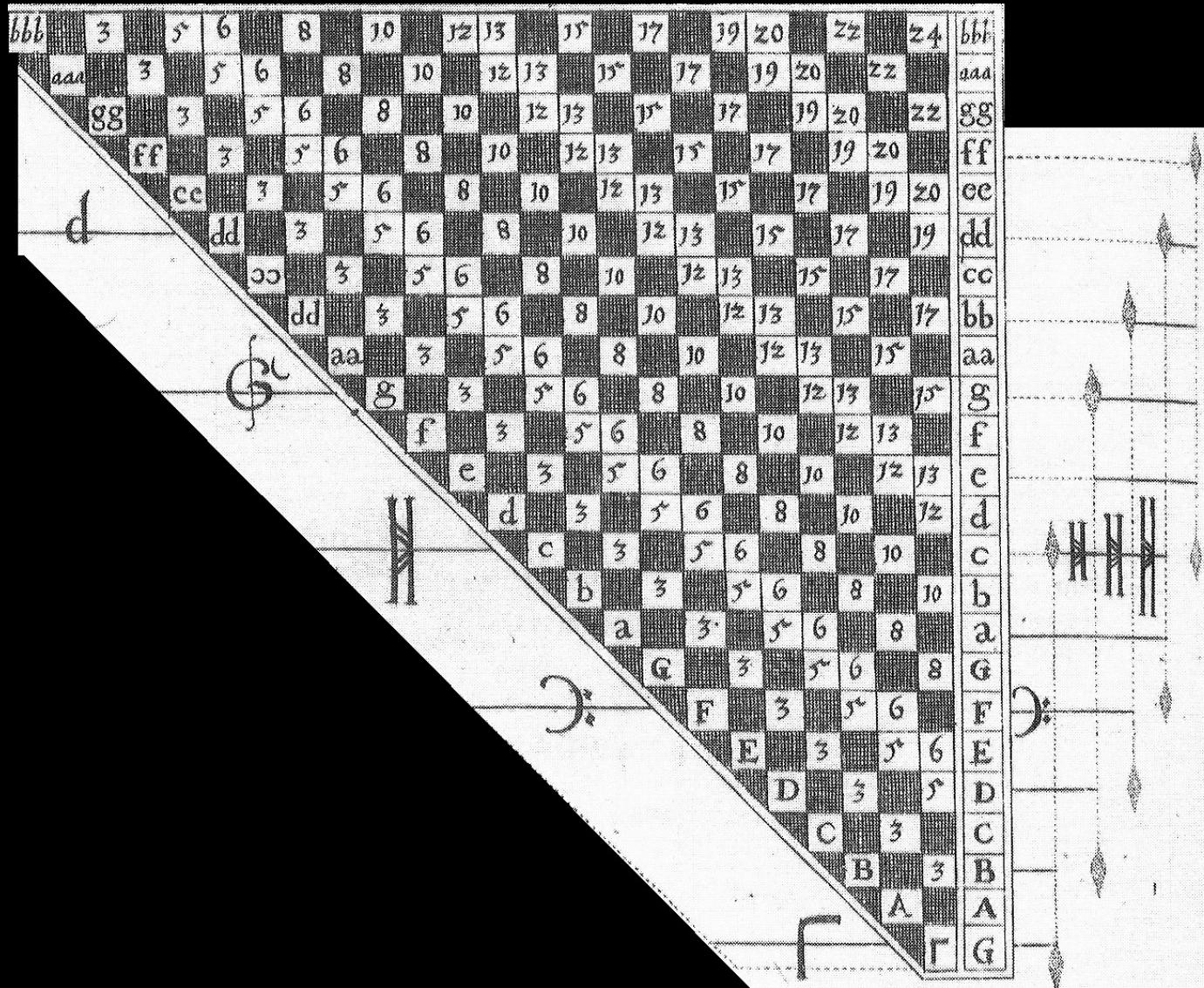


Fludd: lower triangle

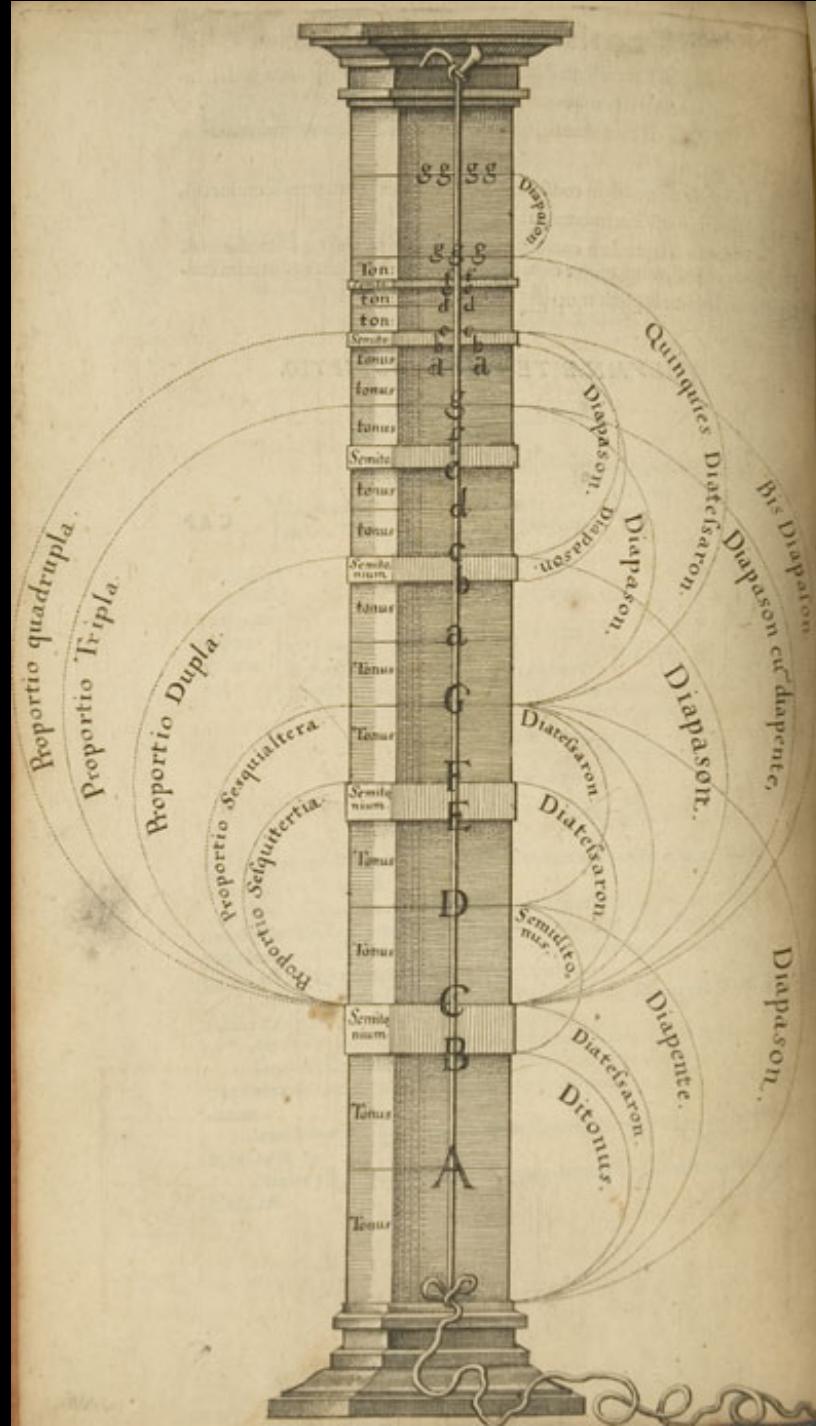


[<]

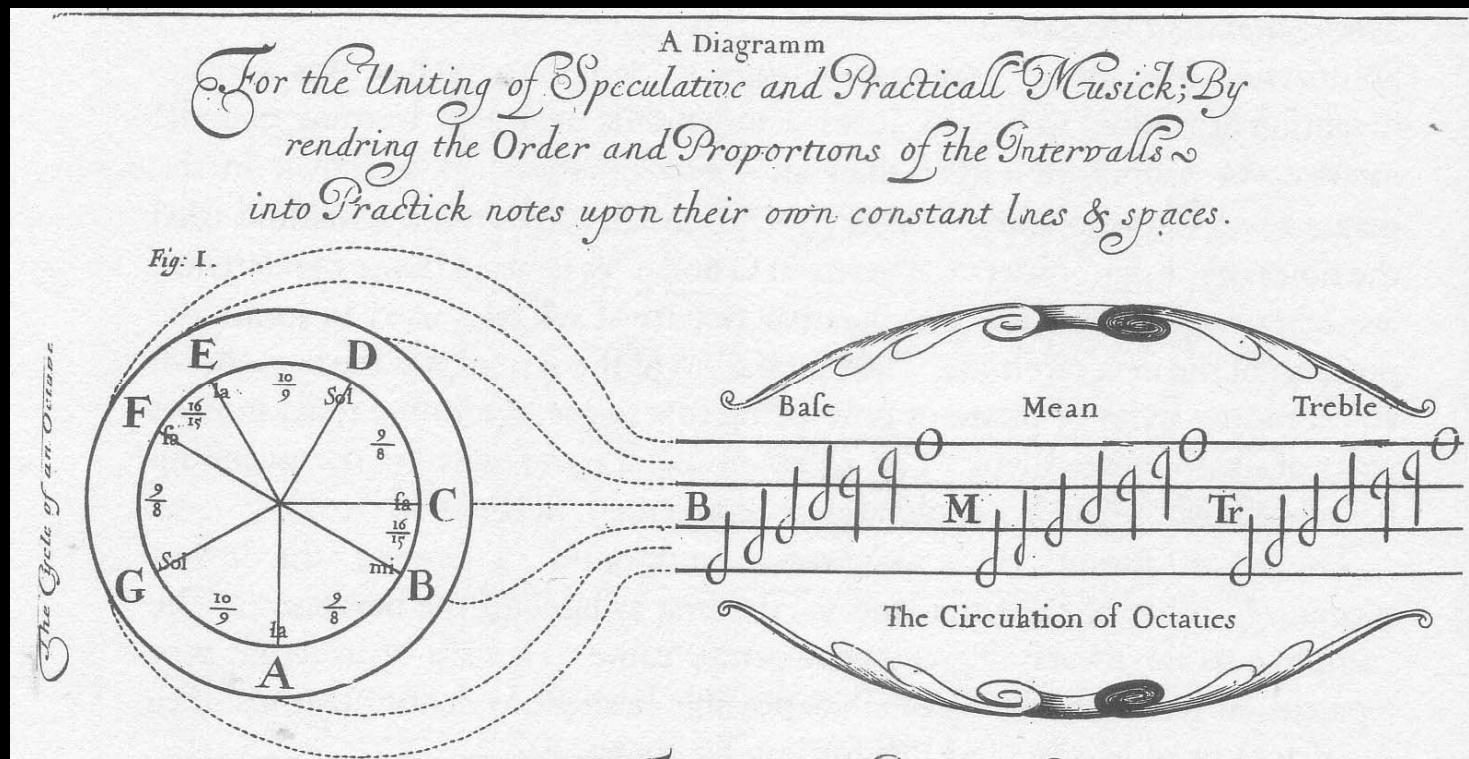
Fludd: upper triangle



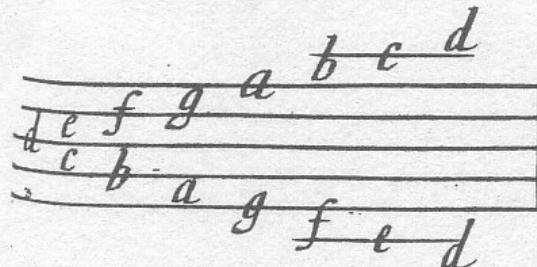
Fludd: Monochord



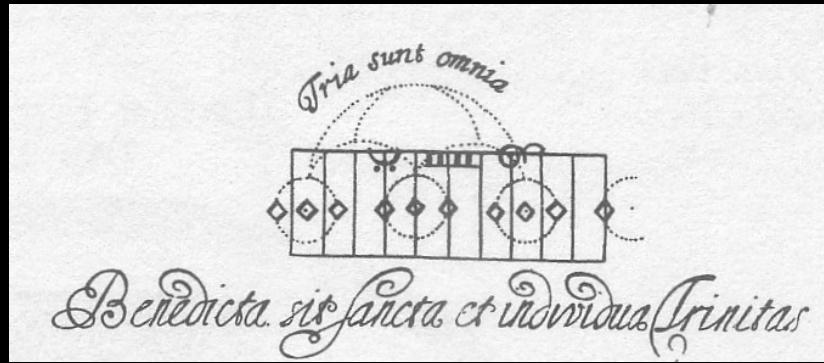
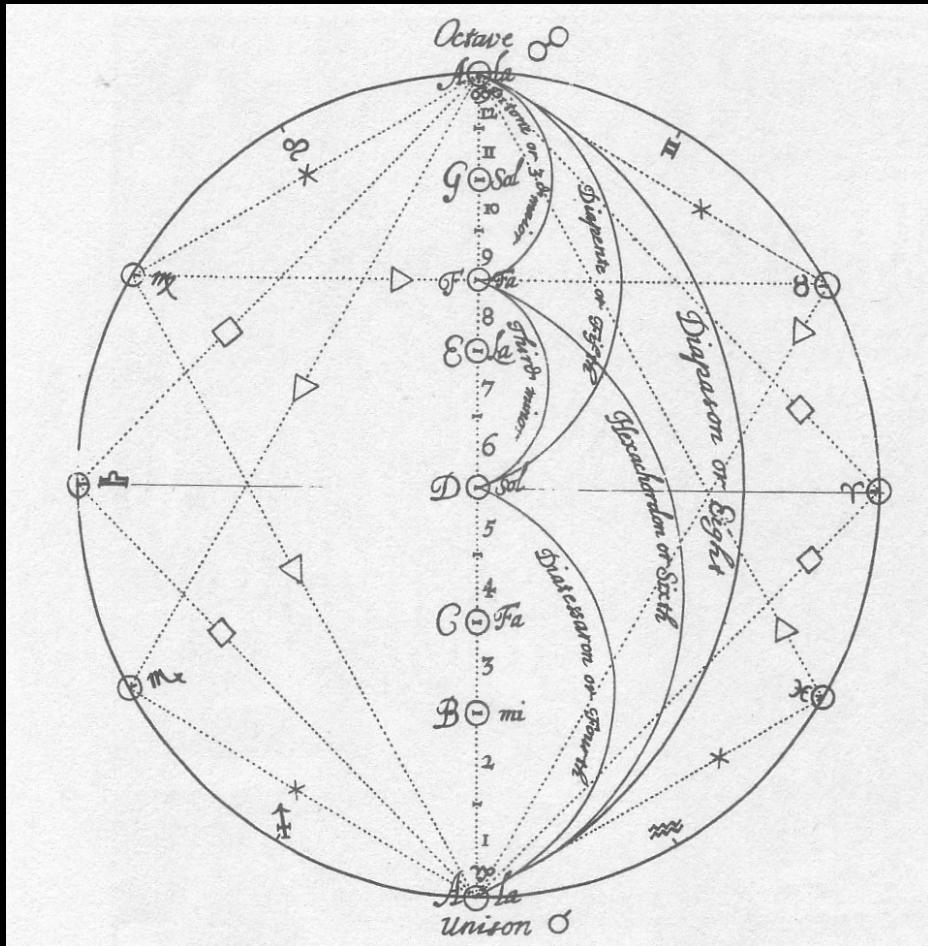
Thomas Salmon 1672



Two entire Octaves are con-
tained in every Systeme by
help of the Leiger lines.

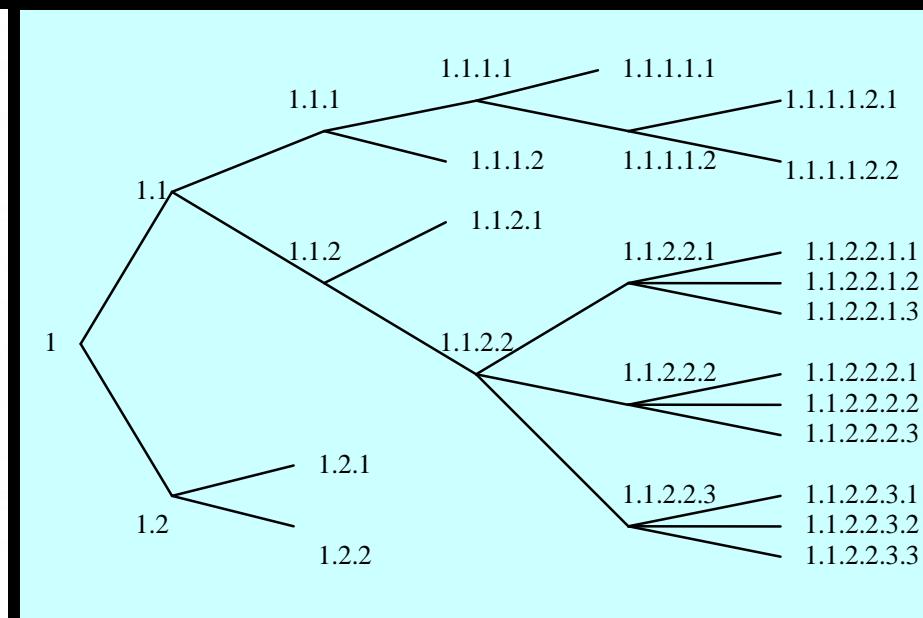


Christopher Simpson 1667



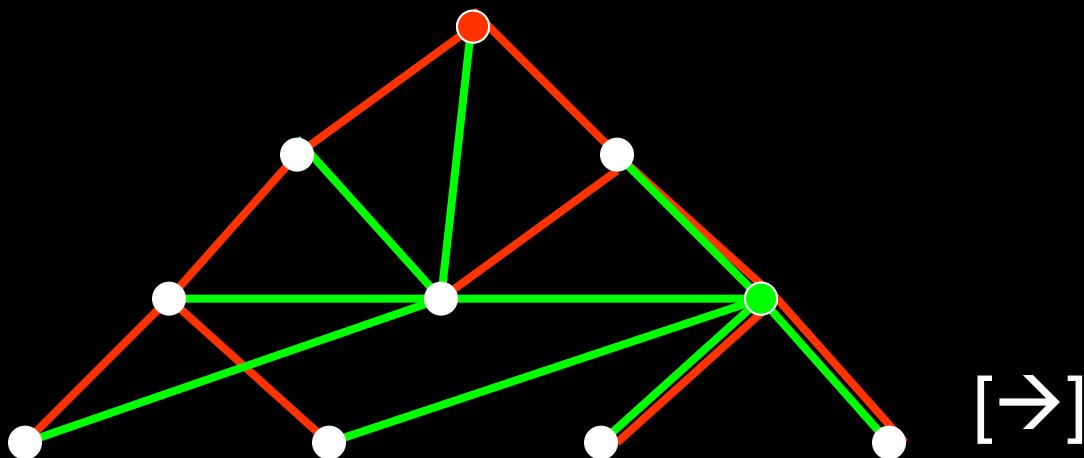
Fludd: Tree sentence

| | | | | |
|--|--------------------------|-------------------------------------|--|--|
| In musical sound, two things are usually considered: | the difference, which is | either general, which is considered | either by quality of nature, and thus there are two species of sounds since | ⁶³ some are unisons, whose pitch is the same in low and high; |
| | | | others are non-unisons, of which one pitch is lower, another higher by a certain quantity, and they are: | either consonances, which coupled produce mixed and sweet sounds; or dissonances, which coupled displease the ears and generate weariness. ⁶⁵ |
| | | | or by quantity, that is, | by position, whence also two-fold: |
| | | | | the low pitch included in the low keys and is the bass sound; the high pitch contained within the order of high and highest keys. |
| | | | | by duration; |
| | | or special, for sound is | ⁶² either natural such as songs, proceeding from the voice of a living being; | |
| | | | or artificial which is caused | by the stroking of strings, as on the cittern, the lyre, the bandora; |
| | | | | by blowing, as on the pipe, the organ, the trumpet; |
| | | | | by beating, as on small bells, ⁶⁶ the bell, the timpanum. |
| motion in music is made | | | | { either by <i>arsis</i> , that is, an upwards motion; or by <i>thesis</i> , that is, a downwards motion. ⁶⁴ |



[←]

Hierarchies and networks



[←]

Networks and dimension

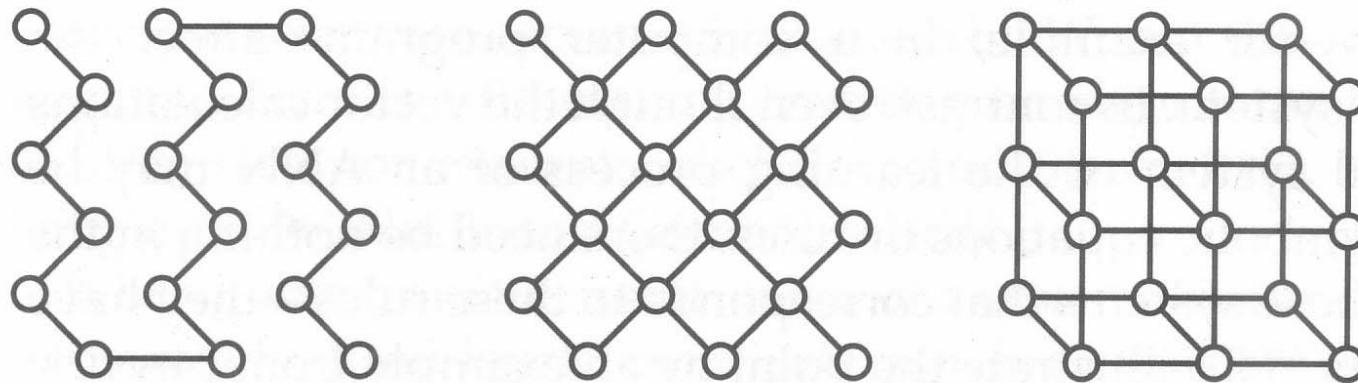


Figure 7.1

Different topologies implemented on the same 2-D pattern of neurons (based on Morasso and Sanguineti 1996, 291).

μ ονσειο =
temple of the
Muses

Robert Fludd
Temple of Music (1617)

