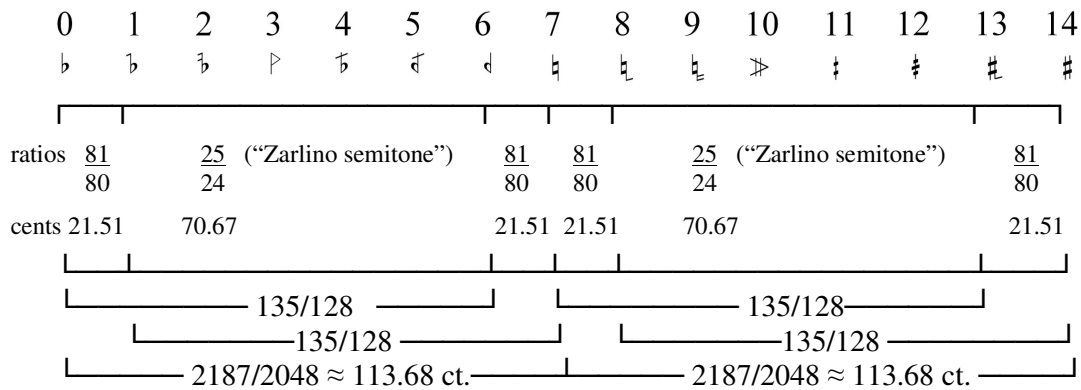


Julien Jalâl Ed-Dine Weiss: Prototypes 1-8 (1990)

Assymetrical Division of the Pythagorean *Apotome*

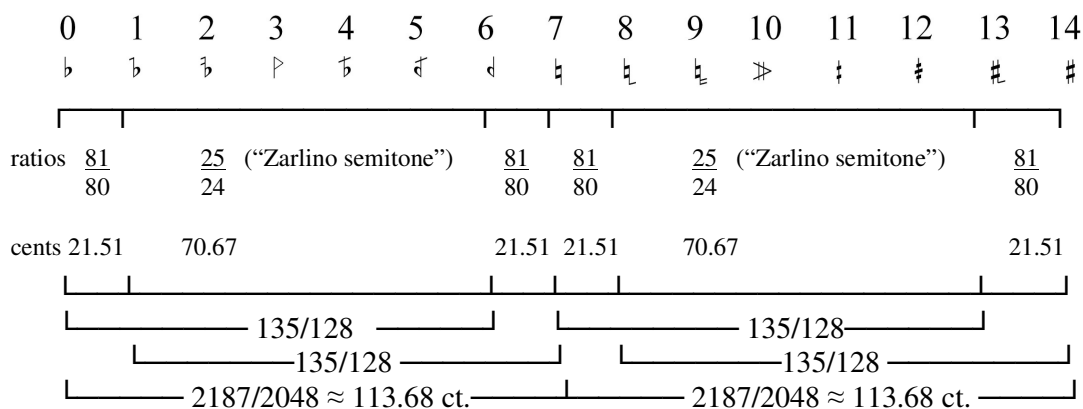


Available Pitch Content per Octave in Relationship to C Natural.

| | | | | | | | | | | | | | | | |
|---------------------|---------------------------------|-------------------------------|----------------------------------|------------------------------|-------------------------------|-------------------------------|--------------------------------|-------------------------------|-----------------------------------|---------------------------------|-------------------------------------|------------------------------------|-------------------------------------|-----------------------------------|-------------------------------------|
| basic module | $\frac{81}{80}$ 21.51c | $\frac{49}{48}$ 35.70c | $\frac{1053}{1024}$ 48.35c | $\frac{729}{704}$ 60.41c | $\frac{2673}{2560}$ 74.78c | $\frac{135}{128}$ 92.18c | $\frac{2187}{2048}$ 113.69c | | | | | | | | |
| DO | | | | | | | | 1 1 0 | $\frac{81}{80}$ 21.51c | $\frac{49}{48}$ 35.70c | $\frac{1053}{1024}$ 48.35c | $\frac{729}{704}$ 60.41c | $\frac{2673}{2560}$ 74.78c | $\frac{135}{128}$ 92.18c | $\frac{2187}{2048}$ 113.69c |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| | \flat | \flat | \flat | \flat | \flat | \flat | \flat | \flat | \flat | \flat | \flat | \flat | \flat | \flat | \flat |
| RE | $\frac{256}{243}$ 90.22c | $\frac{16}{15}$ 111.73c | $\frac{784}{729}$ 125.92c | $\frac{13}{12}$ 138.57c | $\frac{12}{11}$ 150.63c | $\frac{11}{10}$ 165.00c | $\frac{10}{9}$ 182.40c | $\frac{9}{8}$ 203.91c | $\frac{729}{640}$ 225.41c | $\frac{147}{128}$ 239.60c | $\frac{9477}{8192}$ 252.26c | $\frac{6561}{5632}$ 264.32c | $\frac{24057}{20480}$ 278.68c | $\frac{1215}{1024}$ 296.09c | $\frac{19683}{16367}$ 319.39c |
| MI | $\frac{32}{27}$ 294.14c | $\frac{6}{5}$ 315.64c | $\frac{98}{81}$ 329.83c | $\frac{39}{32}$ 342.48c | $\frac{27}{22}$ 354.55c | $\frac{99}{80}$ 368.91c | $\frac{5}{4}$ 386.31c | $\frac{81}{64}$ 407.82c | $\frac{6561}{5120}$ 429.32c | $\frac{1323}{1024}$ 443.52c | $\frac{85293}{65536}$ 456.17c | $\frac{59049}{45056}$ 468.23c | $\frac{216513}{163840}$ 482.59c | $\frac{10935}{8192}$ 500c | $\frac{177147}{131072}$ 521.51c |
| FA | $\frac{8192}{6561}$ 384.36c | $\frac{512}{405}$ 405.87c | $\frac{25088}{19683}$ 420.06c | $\frac{104}{81}$ 432.71c | $\frac{128}{99}$ 444.77c | $\frac{176}{135}$ 459.13c | $\frac{320}{243}$ 476.54c | $\frac{4}{3}$ 498.05c | $\frac{27}{20}$ 519.55c | $\frac{49}{36}$ 533.74c | $\frac{351}{256}$ 546.39c | $\frac{243}{176}$ 558.46c | $\frac{891}{640}$ 572.82c | $\frac{45}{32}$ 590.22c | $\frac{729}{512}$ 611.73c |
| SOL | $\frac{1024}{729}$ 588.27c | $\frac{64}{45}$ 609.78c | $\frac{3136}{2187}$ 623.97c | $\frac{13}{9}$ 636.62c | $\frac{48}{36}$ 648.69c | $\frac{22}{15}$ 663.05c | $\frac{40}{27}$ 680.45c | $\frac{3}{2}$ 701.96c | $\frac{243}{160}$ 723.46c | $\frac{147}{96}$ 737.65c | $\frac{3159}{2048}$ 750.30c | $\frac{2187}{1408}$ 762.37c | $\frac{8019}{5120}$ 776.73c | $\frac{405}{256}$ 794.13c | $\frac{6561}{4096}$ 815.64c |
| LA | $\frac{128}{81}$ 792.18c | $\frac{8}{5}$ 813.69c | $\frac{392}{243}$ 827.88c | $\frac{13}{8}$ 840.52c | $\frac{18}{11}$ 852.59c | $\frac{33}{20}$ 866.96c | $\frac{5}{3}$ 884.36c | $\frac{27}{16}$ 905.87c | $\frac{2187}{1280}$ 927.37c | $\frac{441}{256}$ 941.56c | $\frac{28431}{16384}$ 954.21c | $\frac{19683}{11284}$ 963.21c | $\frac{72171}{40960}$ 980.64c | $\frac{3645}{2048}$ 998.04c | $\frac{59049}{32768}$ 1019.55c |
| SI | $\frac{16}{9}$ 996.09c | $\frac{9}{5}$ 1017.6c | $\frac{49}{27}$ 1031.79c | $\frac{117}{64}$ 1044.44c | $\frac{81}{44}$ 1056.5c | $\frac{297}{160}$ 1070.87c | $\frac{15}{8}$ 1088.27c | $\frac{243}{128}$ 1109.78c | $\frac{19683}{10240}$ 1131.28c | $\frac{3969}{2048}$ 1145.47c | $\frac{255879}{131079}$ 1158.03c | $\frac{177147}{90112}$ 1170.19c | $\frac{649539}{327680}$ 1184.55c | $\frac{32805}{16384}$ 1201.95c | $\frac{531441}{262144}$ 1223.46c |
| DO | $\frac{4096}{2187}$ 1086.31c | $\frac{256}{135}$ 1107.82c | $\frac{5120}{2673}$ 1122.01c | $\frac{52}{27}$ 1134.66c | $\frac{64}{33}$ 1146.73c | $\frac{88}{45}$ 1161.09c | $\frac{160}{81}$ 1178.49c | $\frac{2}{1}$ 1200c | $\frac{81}{40}$ 1221.51c | $\frac{49}{24}$ 1235.70c | $\frac{1053}{512}$ 1248.35c | $\frac{729}{352}$ 1260.41c | $\frac{2673}{1280}$ 1274.78c | $\frac{135}{64}$ 1292.18c | $\frac{2187}{1024}$ 1313.69c |

Julien Jalâl Ed-Dine Weiss: Prototype 9 (2007)

Assymetrical Division of the Pythagorean *Apotome*.



Available Pitch Content per Octave in Relationship to C Natural.

| | | | | | | | | | | | | | | | | |
|---------------------|---------------------------------|-------------------------------|-------------------------------|---------------------------------|----------------------------------|-------------------------------|--------------------------------|-------------------------------|-----------------------------------|-------------------------------------|---------------------------------|----------------------------------|-------------------------------------|-----------------------------------|-------------------------------------|--|
| basic module | $\frac{81}{80}$ 21.51c | $\frac{1701}{1664}$ 38.07c | $\frac{33}{32}$ 53.27c | $\frac{27}{26}$ 65.34c | $\frac{243}{232}$ 80.2c | $\frac{135}{128}$ 92.18c | $\frac{2187}{2048}$ 113.69c | | | | | | | | | |
| DO | | | | | | | | $\frac{1}{1}$ 0 | $\frac{81}{80}$ 21.51c | $\frac{1701}{1664}$ 38.07c | $\frac{33}{32}$ 53.27c | $\frac{27}{26}$ 65.34c | $\frac{243}{232}$ 80.2c | $\frac{135}{128}$ 92.18c | $\frac{2187}{2048}$ 113.69c | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | |
| | b | ḅ | ḃ | ▷ | ♭ | ♮ | ♯ | ♮ | ♮ | ♮ | ♮ | ♮ | ♮ | ♮ | ♮ | |
| RE | $\frac{256}{243}$ 90.22c | $\frac{16}{15}$ 111.73c | $\frac{14}{13}$ 128.29c | $\frac{88}{81}$ 143.49c | $\frac{128}{117}$ 155.56c | $\frac{119}{108}$ 167.92c | $\frac{10}{9}$ 182.40c | $\frac{9}{8}$ 203.91c | $\frac{729}{640}$ 225.41c | $\frac{15309}{13312}$ 241.98c | $\frac{297}{256}$ 257.18c | $\frac{243}{208}$ 269.25c | $\frac{9639}{8192}$ 281.60c | $\frac{1215}{1024}$ 296.09c | $\frac{19683}{16367}$ 319.39c | |
| MI | $\frac{32}{27}$ 294.14c | $\frac{6}{5}$ 315.64c | $\frac{63}{52}$ 332.21c | $\frac{11}{9}$ 347.41c | $\frac{16}{13}$ 359.47c | $\frac{119}{96}$ 371.83c | $\frac{5}{4}$ 386.31c | $\frac{81}{64}$ 407.82c | $\frac{6561}{5120}$ 429.32c | $\frac{137781}{106496}$ 445.89c | $\frac{2673}{2048}$ 461.09c | $\frac{2187}{1664}$ 473.16c | $\frac{86751}{65536}$ 485.51c | $\frac{10935}{8192}$ 500c | $\frac{177147}{131072}$ 521.51c | |
| FA | $\frac{8192}{6561}$ 384.36c | $\frac{512}{405}$ 405.87c | $\frac{448}{351}$ 422.43c | $\frac{2816}{2187}$ 437.63c | $\frac{4096}{3159}$ 449.7c | $\frac{952}{729}$ 462.05c | $\frac{320}{243}$ 476.54c | $\frac{4}{3}$ 498.05c | $\frac{27}{20}$ 519.55c | $\frac{567}{416}$ 536.12c | $\frac{11}{8}$ 551.32c | $\frac{18}{13}$ 563.38c | $\frac{357}{256}$ 575.74c | $\frac{45}{32}$ 590.22c | $\frac{729}{512}$ 611.73c | |
| SOL | $\frac{1024}{729}$ 588.27c | $\frac{64}{45}$ 609.78c | $\frac{56}{39}$ 626.34c | $\frac{352}{243}$ 641.54c | $\frac{512}{351}$ 653.61c | $\frac{119}{81}$ 665.96c | $\frac{40}{27}$ 680.45c | $\frac{3}{2}$ 701.96c | $\frac{243}{160}$ 723.46c | $\frac{5103}{3328}$ 740.03c | $\frac{99}{64}$ 755.23c | $\frac{2187}{1404}$ 767.29c | $\frac{3213}{2048}$ 779.65c | $\frac{405}{256}$ 794.13c | $\frac{6561}{4096}$ 815.64c | |
| LA | $\frac{128}{81}$ 792.18c | $\frac{8}{5}$ 813.69c | $\frac{21}{13}$ 830.25c | $\frac{44}{27}$ 845.45c | $\frac{64}{39}$ 857.52c | $\frac{119}{72}$ 869.87c | $\frac{5}{3}$ 884.36c | $\frac{27}{16}$ 905.87c | $\frac{2187}{1280}$ 927.37c | $\frac{45927}{26624}$ 943.94c | $\frac{891}{512}$ 959.14c | $\frac{19683}{11232}$ 971.20c | $\frac{28917}{16384}$ 983.56c | $\frac{3645}{2048}$ 998.04c | $\frac{59049}{32768}$ 1019.55c | |
| SI | $\frac{16}{9}$ 996.09c | $\frac{9}{5}$ 1017.6c | $\frac{189}{104}$ 1034.16c | $\frac{11}{6}$ 1049.36c | $\frac{24}{13}$ 1061.43c | $\frac{119}{64}$ 1073.78c | $\frac{15}{8}$ 1088.27c | $\frac{243}{128}$ 1109.78c | $\frac{19683}{10240}$ 1131.28c | $\frac{413343}{212992}$ 1147.85c | $\frac{8019}{4096}$ 1163.05c | $\frac{6561}{3328}$ 1175.11c | $\frac{260253}{131072}$ 1187.46c | $\frac{32805}{16384}$ 1201.95c | $\frac{531441}{262144}$ 1223.46c | |
| DO | $\frac{4096}{2187}$ 1086.31c | $\frac{256}{135}$ 1107.82c | $\frac{672}{351}$ 1124.39c | $\frac{4224}{2187}$ 1139.59c | $\frac{12288}{6318}$ 1151.65c | $\frac{476}{243}$ 1164.01c | $\frac{160}{81}$ 1178.49c | $\frac{2}{1}$ 1200c | $\frac{81}{40}$ 1221.51c | $\frac{1701}{832}$ 1238.07c | $\frac{33}{16}$ 1253.27c | $\frac{27}{13}$ 1265.34c | $\frac{243}{116}$ 1280.2c | $\frac{135}{64}$ 1292.18c | $\frac{2187}{1024}$ 1313.69c | |