

MOS Scales

Meantone[5] - 5 5 8 5 8 - C D E G A C

Meantone[7] - 5 5 3 5 5 5 3 - C D E F G A B C

- Three 4:5:6:9 chords.
- Two 1359 hexanies.
- T: Imaj, D: V7

Meantone[12] - 3 2 3 2 3 2 3 3 2 3 2 3 - C Db D Eb E F F# G Ab A Bb B C

- Different modes and modmoses can be used as the standard from which YB and GR scales are derived.
- Two 4:5:6:7:9 chords.

Orwell[4] - 7 7 7 10 - C D# Ft Ab C

- Standard tetrad.

Orwell[5] - 7 7 7 7 3 - C D# Ft Ab B C

Orwell[9] - 4 3 4 3 4 3 4 3 3 - C Dd D# Et Ft G Ab A# B C

- Smooth and bittersweet.
- One 4:6:7:11 chord.
- T: Is7, D: tIVO

Orwell[13] - 3 1 3 3 1 3 3 1 3 3 1 3 3 - C Db Dd Edb E Et Ft Gd G Ab At Bdb B C

- As the chromatic scale of Orwell, contains important 9-note MODMOSES.
- Two 4:5:6:7:11 chords.

Squares[5] - 9 9 2 9 2 - C Ed G Adb Bt C

- Useful chord scale for neutral triads, while including the basic neutral sixth to perfect fifth resolution.

Squares[8] - 2 7 2 7 2 2 7 2 - C C# Ed Et G G# Ad Bt C

- Includes neutral-to-perfect resolutions to the fifth and octave, using 9/7/6 as the root chord.
- Two 6:7:9:11 chords.
- T: IS, D: dbllsn7, with a similar idea to a tritone sub.

Squares[11] - 2 5 2 2 2 5 2 2 2 5 2 - C C# D# Ed Et F G G# Ad At Bt C

- Adds new resolutions and root chord options.
- Mode 8 is Secor no-fives.
- One 4:6:7:9:11 chord.

Squares[14] - 2 3 2 2 2 3 2 2 2 3 2 2 2 - C C# D D# Ed Et Ft Gb G G# Ad A# Bd Bt C

- Four 4:6:7:9:11 chords.
- Two 5:6:7:9:11 chords.

Neutral[7] - 5 4 5 4 5 4 4 - C D Ed Ft G A Bd C

- The most basic component of neutral harmony.
- Modes can be named Neutral Lydian, Aeolian, Ionian, and Phrygian, Mixolydian, Locrian, and Dorian consecutively.
- Two 4:6:9:11 chords.
- T: I59h11, resolutions are more melodic than harmonic.

Mohajira[10] - 1 4 4 1 4 4 4 1 4 4 - C Ct D Ed E Ft G Ad A Bd C

- Two 4:5:6:9:11 chords.
- Three 13911 hexanies.

Tutone[6] - 5 5 5 5 5 6 - C D E F# G# A# C

- 6- and 7-note MOSes used for basic shell voicings, specifically 4:5:7s and 4:5:7:9s.
- One 4:5:7:9 chord.
- T: 1h7\$, resolutions are more melodic than harmonic.

Tutone[13] - 4 1 4 1 4 1 4 1 4 1 4 1 1 - C Dd D Ed E Ft F# Gt G# At A# Bt Cd C

- Four 4:5:7:9:11 chords.

Slendric[5] - 6 6 6 7 6 - C Dt Fd G Bdb C

- Contains a basic version of a subminor 7/11 chord.

Slendric[6] - 6 6 6 6 1 6 - C Dt Fd G At Bdb C

- Keeps the hazy uncertain sound of the 5-note MOS, but with a diesis adding a new “shimmering” sound.
- T: 15h7, resolutions are more melodic than harmonic.

Mothra[11] - 1 5 1 5 1 5 1 1 5 1 5 - C Ct Dt Edb Fd F G Gt Adb Bdb Bb C

- The two diesis in a row form an alphastep, adding direction, generally to the fifth or octave.
- Principle and symmetric modes have a blackwood-like structure.
- One 1379 hexany.
- T: 1s7, D: IVs(add4)

Miracle[10] - 3 4 3 3 3 3 3 3 3 3 - C Db D# E F Gb Gt Ad A# B C

- Disorienting feel from the cascading half-steps that gives a very different atmosphere than a standard chromatic scale.
- Two 4:5:7:13:17 chords.

Greeley[8] - 3 4 4 4 4 4 4 4 - C Db D# Et F# Gt A Bd C

- Has a spicy eastern sound, both from the abundance of nuseconds and the lack of many traditional 3- or 5- limit consonances.
- T: 1 6:7:10:11, D: dVII 6:7:10:11:13, 13 played later to indicate the arrival of the tonic.

Nusecond[15] - 3 1 3 3 1 3 1 3 1 3 1 3 1 3 1 - C Db Dd D# E Et Ft F# G Gt Ad A Bb Bd Cd C

Valentine[15] - 2 2 2 2 2 2 2 2 2 3 2 2 2 2 - C C# Dd Dt Eb E Fd Ft Gb G G# A A# Bd Bt C

- Generator can be stretched to 78 cents to purify the fifth and optimize the thirds, with the nonoctave version being Carlos Alpha.
- Can be used as the basis for several other scales, such as an adjusted blackwood or mavila, as well as the 16-note MOS being called Semi-Equalized Armodue.

A-Team[5] - 5 7 5 7 7 - C D Fd Gd At C

- Good 13:17:19 and 19/17/13 chord scale.

A-Team[8] - 5 5 2 5 5 2 5 2 - C D E Fd Gd Ad At Bt C

- Basic oneirotonic scale, with a dreamy and directional sound.
- T: 1maj(x5), D: dVIO

A-Team[13] - 3 2 3 2 2 3 2 2 3 2 2 3 2 2 - C Db D Eb E Fd F# Gd Gt Ad At Bd Bt C

- Two 4:5:13:17:19 chords.

Joan[5] - 11 3 11 3 3 - C Et Ft A# B C

- Includes 7th, 11th, and 15th harmonics.

Joan[7] - 8 3 3 8 3 3 3 - C Eb Et Ft Ad A# B C

- Adds 13th and 19th harmonics.
- Extreme mavila.

Joan[9] - 5 3 3 3 5 3 3 3 3 - C D Eb Et Ft Gt Ad A# B C

- Adds 9th harmonic, allowing for very interesting harmonic shell voicings.
- Includes two 4:7:9:11:15 chords and one 4:7:13:17:19 chord.

Joan[11] - 3 2 3 3 3 3 2 3 3 3 3 - C Db D Eb Et Ft Gd Gt Ad A# B C

- Includes four 4:7:9:11:15 and three 4:7:13:17:19 chords.

Würschmidt[7] - 9 1 9 1 9 1 1 - C Ed E Gt G# Cb Cd C

Würschmidt[10] - 8 1 1 8 1 1 8 1 1 1 - C Eb Ed E G Gt G# B Cb Cd C

- Can be used for any sort of augmented type harmony, with perfect and augmented fifths, and major and augmented sevenths. Many 7:9:11s and 8:10:13s.
- T: Imaj, D: EdS(#5)

Myna[7] - 7 7 1 7 1 7 1 - C D# Ft F# Ad A Cd C

Myna[11] - 1 1 6 1 1 6 1 1 6 1 6 - C Ct C# Eb Ed E Gb Gd G At A# C

- Can be used for any sort of diminished type harmony, with sub and diminished fifths, as well as one perfect fifth, allowing a harmonic seventh chord. Includes Orwell tetrads and 5:6:7s.
- T: Ih7, D: dbIIIO

Tritonic[9] - 1 1 12 1 1 1 1 12 1 - C Ct C# Ft F# Gb Gd G Cd C

- A very challenging scale to work with.
- T: Isus(t4), D: dbIIJ

Tritonic[13] - 10 1 1 1 1 1 10 1 1 1 1 1 - C E Et Fd F Ft F# A# Bb Bd B Bt Cd C

- T: Ih7t11\$, D: tVIIJ

MODMOS Scales

Melodic Minor - 5 3 5 5 5 5 3 - C D Eb F G A B C

Harmonic Minor - 5 3 5 5 3 7 3 - C D Eb F G Ab B C

Harmonic Major - 5 5 3 5 3 7 3 - C D E F G Ab B C

Double Harmonic Major - 3 7 3 5 3 7 3 - C Db E F G Ab B C

- bII augmented sixth chord is a 4:5:6:7, and iii minor diminished seventh is a 12/10/8/7.

Neapolitan Minor - 3 5 5 5 3 7 3 - C Db Eb F G Ab B C

Neapolitan Major - 3 5 5 5 5 5 3 - C Db Eb F G A B C

Lydian #6 - 5 5 5 3 7 3 3 - C D E F# G A# B C

- #2 is a decent modification.

Graham Orwell - 3 4 3 4 4 3 4 3 3 - C Db D# E Ft G Ab A# B C

- Keeps a fairly standard Orwell sound, while including more chord options on the root and more perfect fifths.

Graham Orwell Inverse - 4 4 3 4 3 3 3 4 3 - C Dd Eb Et F# G Ab At B C

Onydim - 7 2 7 2 7 2 2 2 - C D# Ed Gb G A# Bd Bt C

- Mode 5 has Ad->Bd which changes little.
- Name comes from Archeodim, with the Onyx MOS pattern.

Squares Major - 5 5 2 2 2 2 5 2 2 2 2 - C D E Fd Ft Gb G A A# Bd Bt C

Turkish Major - 5 5 3 5 4 5 4 - C D E F G Ad Bd C

Thaïic - 4 5 5 4 4 4 5 - C Dd Ed Ft G Ad Bb C

Altered Dorian - 5 3 5 5 5 4 4 - C D Eb F G A Bd C

Altered Neapolitan Major - 3 5 5 5 5 4 4 - C Db Eb F G A Bd C

Sheimanic - 4 4 4 4 5 5 5 - C Dd Eb Fd Gb Ab Bb C
 Harmonic Whole Tone - 5 5 4 6 5 6 - C D E Ft G# A# C
 - Includes a squares and a squares neutral triad.
 Dylidian - 5 5 5 2 5 2 5 2 - C D E F# Gd Ad At Bt C
 Harmonic Mnarian - 5 2 5 2 5 2 8 2 - C D Edb Fd Ft Gt Ab Bt C
 Five Mod Mode 10 - 2 3 2 3 2 2 2 2 3 2 3 3 - C C# D D# E Fd Ft Gb G G# A A# B C
 - A-Team[13] Mode 10 Up(Ed) Down(Gt:Bb)
 Supermajor Pentatonic - 5 6 7 6 7 - C D Et G At C
 - Both are MODMOSes of Mothra[5].
 Subminor Pentatonic - 7 6 5 7 6 - C Edb F G Bdb C
 Miracle Major - 3 4 3 2 3 3 3 4 3 3 - C Db D# E Fd F# G Ab A# B C
 Greeley Major - 3 4 3 4 4 5 4 4 - C Db D# E Ft G A Bd C
 Submyna - 1 6 1 1 1 6 1 1 6 1 6 - C Ct D# Eb Ed E Gb Gd G At A# C

Maqam

Rast - 5 4 4 5 5 4 4 - C D Ed F G A Bd C
 - An important Neutral[7] MODMOS, including other triad types.
 - Mode 4 has a rooted major triad, with a 4:5:6:9:11 chord.
 Bayati - 4 4 5 5 3 5 5 - C Dd Eb F G Ab Bb C
 - Mode 6 is screamapillar.
 Huzam - 4 5 3 7 3 5 4 - C Dd Ed Fd Gt Ad Bd C
 Hijaz - 3 7 3 5 4 4 5 - C Db E F G Ab/Ad Bb C
 Saba - 4 4 3 7 3 5 3 (7) - C Dd Eb Fb G Ab Bb Cb (D)
 - Similar to Bayati, with a more “yearning and heartbroken” sound.

MOS Cradles

Lumma - 4 2 4 2 4 2 4 3 3 3 - C Dd Dt E Fd Gb G Ad A# B C
 - Miracle[4] Mode 4 4242424
 - Similar to Blackwood, but completes the octave with secors from 22\31.
 Nested Bees - 1 7 1 2 1 7 1 2 1 7 1 - C Ct Eb Ed Et Fd Gt G# Ad A Cd C
 - Squares[5] Mode 3 171
 Scorp - 5 4 5 3 5 4 5 - C D Ed Ft Gd Ad Bb C
 - Joan[3] Mode 2 545
 Arc Aurelius - 3 1 6 1 3 3 1 6 1 3 3 - C Db Dd E Et Ft Gd G At A# B C
 - Joan[7] Mode 2 161
 Xenosquare - 5 4 5 4 2 5 4 2 - C D Ed Ft G Adb A# Bt C
 - Squares[5] Mode 5 54
 Animal Farm - 1 6 3 1 6 1 6 1 6 - C Ct D# E Et Gd G At A# C
 - Orwell[5] Mode 4 16
 Augmented 3&7 - 5 7 1 5 5 7 1 - C D E# F G A B# C
 - Scottish Pentatonic 71
 Harrison Major - 5 6 2 5 5 6 2 - C D Et F G A Bt C
 - Scottish Pentatonic 62
 Harrison Minor - 5 2 6 5 2 6 5 - C D Edb F G Adb Bb C

- Suspended Pentatonic 26

Mothra[5] Mode 2 42 - 4 2 4 2 4 2 7 4 2 - C Dd Dt E Fd Gb G A# Bt C

Mothra[6] Mode 2 42 - 4 2 4 2 4 2 4 2 1 4 2 - C Dd Dt E Fd Gb G Ad At A# Bt C

- Mode 3 replaces Ad and At with Gt and A.

Hard Diminished - 2 6 2 6 2 6 2 5 - C Ddb Eb E Gb G At Bb C

- Tutone[2] Mode 2 2626262
- Mode 4 starting on E or inverse is the more important mode, but it's not a proper cradle. It's the same but the top tetrachord is G A Bdb C, which makes the scale a solid harmonic seven chord scale, so the base scale is also a decent utonal and minor chord scale.

AugmentedPlus - 8 2 8 2 8 2 1 - C Eb E G G# B Cd C

- Würschmidt[4] Mode 1 82
- Würschmidt[10] without the centers of clusters.

Hexany

1 3 5 9 - 5 5 8 5 5 3 - C D E G A B C

1 3 7 9 - 5 6 7 6 5 2 - C D Et G At Bt C

1 3 5 7 - 3 7 6 2 6 7 - C Db E Gb G At C

1 3 9 11 - 9 4 1 4 9 4 - C Ed F Ft G Bd C

1 3 5 11 - 4 4 6 4 4 9 - C Dd Eb Ft G Ad C

1 3 7 11 - 4 7 7 7 4 2 - C Dd Et G A# Bt C

1 3 5 13 - 8 4 6 4 8 1 - C Eb E# G Gx B# C

1 3 5 7 9 11 Eikosany (/21) - 1 2 2 1 1 3 1 1 2 2 1 1 2 1 2 2 2 1 2 1 - C Ct Db D Dt D# E Et Fd Ft Gb Gd G G# Ab A A# Bd B Cd C

Harmonic Series Scales

Mode 5 - 8 7 6 5 5 - C Eb F# Ab Bb C

Mode 6 - 7 6 5 5 4 4 - C D# F G A Bd C

Mode 7 - 6 5 5 4 4 4 3 - C Dt Et Gb G# At B C

Mode 8 - 5 5 4 4 4 3 3 3 - C D E Ft G Ad A# B C

- Considered the "diatonic" harmonic series scale, with every note using the root as the fundamental.

Mode 10 - 4 4 4 3 3 3 2 3 2 - C Dd Eb Fd F# G Ab At Bb Bt C

Mode 12 - 4 3 3 3 3 2 3 2 2 2 2 2 - C Dd D# E F Gb G Ab A A# Bd Bt C

Mode 14 - 3 3 3 2 3 2 2 2 2 2 2 1 2 - C Db Dt Ed Et Ft Gb G G# Ad At Bb B Bt C

- Useful as chord scale over a lower 9-over tetrad.

Euler-Fokker Genera

Genus primum - 5 8 5 13 - C D F G C

Genus secundum - 10 3 5 5 5 3 - C E F G A B C

Genus tertium - 8 2 8 3 7 3 - C Eb E G Ab B C

Genus quartum - 10 10 10 1 - C E G# B# C

- Würschmidt[4]

Genus quintum - 5 7 6 7 5 1 - C D Fd G Bdb Cd C

Genus sextum - 4 6 2 6 4 3 3 3 - C Dd E Fd G Ad Bdb B C
 Genus septimum - 4 6 5 6 4 6 - C Dd E F# Ab Bdb C
 Genus octavum - 6 6 6 1 6 6 - C Dt Fd G Gt Bdb C
 - Slendric[6]
 Genus nonum - 4 6 9 6 4 2 - C Dd E Gt A# Bt C
 Genus decimum - 13 6 6 6 - C F Gt A# C
 - Slendric[4]
 Genus diatonicum - 5 5 3 5 5 3 2 3 - C D E F G A Bb B C
 Genus chromaticum - 3 5 2 3 5 3 2 5 3 - C Db Eb E F G Ab A B C
 Genus diatonicum septimis - 5 5 2 1 5 5 2 3 3 - C D E Fd F G A A# B C
 Genus enharmonicum vocale - 3 4 3 3 2 1 4 1 4 1 2 3 - C Db D# E F F# Gb G# Ab A# Bb B C
 Genus enharmonicum instrumentale - 2 2 4 2 2 3 3 3 1 3 3 3 - C C# Dd Eb E Fd F# G Ab Ad A# B C
 Genus diatonico-chromaticum - 3 2 3 2 3 2 3 3 2 3 2 3 - C Db D Eb E F F# G Ab A Bb B C
 - Meantone[12]
 Genus bichromaticum - 5 2 1 2 5 3 2 1 4 1 2 3 - C D D# Eb E F# G G# Ab A# Bb B C
 Genus [3577] - 3 1 2 4 2 4 2 4 2 1 3 3 - C Db Dd Dt E Fd Gb G Ad At A# B C

Tetrachords

Tense Diatonic - 3 5 5 - C Db Eb F
 Soft Diatonic - 2 5 6 - C Ddb Edb F
 Tonic / Archytas Diatonic - 2 6 5 - C Ddb Eb F
 Even Diatonic - 4 4 5 - C Dd Eb F
 Didymos Chromatic - 3 2 8 - C Db D F
 Soft / Archytas Chromatic - 2 3 8 - C C# D F
 Tense Chromatic - 2 4 7 - C C# Dt F
 Hemiolic Chromatic - 2 2 9 - C C# Dd F
 ? Chromatic - 1 4 8 - C Ct D F
 Enharmonic - 1 2 10 - C Ct Db F
 Archytas Enharmonic - 2 1 10 - C C# Db F
 Hijaz - 3 7 3 - C Db E F
 Saba - 4 4 3 - C Dd Eb Fb
 Altered - 3 5 3 - C Db Eb Fb
 Otonal - 5 5 4 - C D E Ft
 Nikriz - 5 3 7 - C D Eb F#
 Athar Kurd - 3 5 7 - C Db Eb F#
 Lydian - 5 5 5 - C D E F#

Synthetic Scales

Iceface - 4 1 4 1 3 4 1 4 1 4 1 3 - C Dd D Ed E F Gd G Ad A Bd B C
 - A key scale for neutral type music, adding 11-limit accidentals on top of standard major harmony.
 Centaurus - 1 4 2 3 3 1 4 2 3 2 3 3 - C Ct D D# E F Ft G G# A A# B C
 - A useful scale for playing over harmonic structures.

- Includes Graham Hexatonic.

Melodic Diatonic - 5 6 2 5 6 5 2 - C D Et F G At Bt C

- 9/7/6/5 chord on fifth.
- 12/10/7 shell voicing on second.

Septimal Natural Minor - 5 2 6 5 2 5 6 - C D Edb F G Adb Bdb C

- 9/7/5 shell voicing on seventh.
- 6:7:9:10 chord on fourth.

Supermajor Blues - 5 4 2 7 6 7 - C D Ed Et G At C

- Neutral third blue note can be used as a main part of melodic material, as it's a directional distance from the third.

Subminor Blues - 7 2 4 5 7 6 - C Edb Ed F G Bdb C

- Yeah

Blues - 8 5 3 2 8 5 - C Eb F Gb G Bb C

- Basic minor blues.

Enharmonic Dorian - 1 2 10 5 1 2 10 - C Ct Db F G Gt Ab C

Dimension ECT - 3 2 3 1 4 3 2 3 2 3 1 4 - C Db D Eb Ed F Gb G Ab A Bb Bd C

- The superimposition of Locrian and Rast.

Dominant Diminished - 3 5 2 5 3 5 3 5 - C Db Eb E F# G A Bb C

- The version of diminished with both a dominant seventh chord and 5:6:7 on the root.

Diminished Diatonic - 3 7 1 7 3 5 5 - C Db E Fb G Ab Bb C

- Four minor thirds in a row starting on E followed by three major thirds.

Tropical Major - 5 7 1 5 7 5 1 - C D E# F G A# B# C

- Allows basic barbados-type chords in a diatonic context.

Tropical Minor - 5 1 7 5 1 5 7 - C D Ebb F G Abb Bbb C

- What he said

Silver - 6 4 4 6 2 7 2 - C Dt E Ft G# Ad Bt C

Inverse Augton - 4 6 4 4 6 3 4 - C Dd E Ft G At Bd C

- Both are valentine subsets with an interesting melodic sound.

Mode 6-over - 4 4 5 5 6 7 - C Dd Eb F G At C

- Good minor/utonal tetrad chord scale.

Mode 9-over - 2 3 3 3 3 4 4 5 - C Ddb D Eb Et Ft G Ad Bb C

- May be used with the second degree replaced with a m2. A good chord scale for 9/7/6/5 chords.

Mode 15-over - 1 2 2 1 2 2 2 2 2 2 3 2 3 3 - C Ct Db D Dt Eb E Fd Ft Gb G G# A A# B C

- May be used in the bass under a major seventh chord, possibly with mode 8 above.

Cyprian Scale - 2 8 3 5 2 8 3 5 2 8 3 5 2 8 - C Ddb E F G Adb B C D Edb F# G A Bdb C#

- Two octave scale stacking nonoctave romanian minor on double harmonic major.

Septimal Bipentatonic - 2 3 2 3 2 6 2 3 2 6 - C C# D D# E Fd G G# A A# C

Undecimal Bipentatonic - 4 1 4 1 7 1 4 1 7 1 - C Dd D Ed E Gd G Ad A Cd C

Major Miniscale - 3 2 3 2 2 2 2 2 3 2 3 3 - C Db D Eb E Fd Ft Gb G G# A A# B C

- Intersection between Mode 15-over and Mode 16 due to their 13 note similarity, both of which are useful major seventh chord scales.

Major Megascale - 1 2 2 1 2 2 2 2 2 2 2 1 2 2 1 2 1 - C Ct Db D Dt Eb E Fd Ft Gb G G# Ad A A# Bd B Cd C

- Composition of Mode 15-over and Mode 16.
- Harmonic Prometheus - 5 5 4 8 3 6 - C D E Ft Ad Bdb C
- Mode 8 without fifth and major seventh.
- Mark 10 - 10 6 2 5 2 6 - C E F# G A Bdb C
- Mark 8 - 3 7 8 7 3 3 - C Db E G A# B C
- Mark 7 - 2 8 2 6 7 6 - C Ddb E Fd G Bdb C
- Mark 6 - 7 3 5 3 7 6 - C D# E F# G A# C
- Mark 15 - 4 6 7 1 7 6 - C Dd E Gd G A# C
- Mark 18 - 8 2 8 6 1 6 - C Eb E G At A# C
- The three scales include the characteristic triads of a 1357 hexany organized in a 4:5:6:7 and 7/6/5/4. The number clarifies the interval shared between the tetrads.
- Graham Hexatonic - 7 3 4 4 7 6 - C D# E Ft G A# C
- Every note works with every other.
- Augmented - 8 2 8 2 8 3 - C Eb E G G# B C
- Zeus 7 Trivalent - 4 6 4 6 6 4 3 - C Dd E Ft G At B C
- Orwell Anti-Ionian - 4 3 7 4 3 4 6 - C Dd D# Ft G Ab A# C
- Melodic scale for representing a well tempered mavila.
- Scott Thompson - 7 2 4 5 4 1 1 2 5 - C D# Ed F G Ad A At Bb C
- No-Fifths - 2 3 5 4 3 5 3 4 2 - C C# D E Ft Gd Ad A# Bt C

Yellow/Blue Scales

- YB Melodic Minor - 5 2 6 5 5 3 - C D Edb F G A B C
- YB Melodic Major - 5 5 3 5 2 5 6 - C D E F G Adb Bdb C
- YB Harmonic Minor - 5 2 6 5 2 8 3 - C D Edb F G Adb B C
- YB Harmonic Major - 5 5 3 5 2 8 3 - C D E F G Adb B C
- Phrygian Harmonic - 2 8 3 5 2 5 6 - C Ddb E F G Adb Bdb C
- Bebop Harmonic - 5 5 3 5 5 2 3 3 - C D E F G A Bdb B C
- YB Bebop Melodic Major - 5 5 3 5 2 3 5 3 - C D E F G Adb A B C
- YB Bebop Major - 5 5 3 5 2 5 3 3 - C D E F G Adb Bdb B C
- YB Bebop Dorian - 5 2 6 5 5 2 3 3 - C D Edb F G A Bdb B C
- YB Bebop Harmonic Minor - 5 2 6 5 2 5 3 3 - C D Edb F G Adb Bdb B C
- YB Bebop Melodic Minor - 5 2 6 5 2 3 5 3 - C D Edb F G Adb A B C
- YB Neapolitan Minor - 2 5 6 5 2 8 3 - C Ddb Edb F G Adb B C
- YB Neapolitan Major - 2 5 6 5 5 5 3 - C Ddb Edb F G A B C
- YB Double Harmonic Minor - 5 2 8 3 2 8 3 - C D Edb F# G Adb B C
- YB Double Harmonic Major - 2 8 3 5 2 8 3 - C Ddb E F G Adb B C
- YB Altered - 2 5 3 5 5 5 6 - C Ddb Edb Fdb Gdb Adb Bdb C
- A key jazz scale making use of the dual role of subminor and major pitches.
- YB Diminished - 2 5 3 5 3 5 2 6 - C C# D# E F# G A A# C
- The version of diminished with both a harmonic seventh chord and 7/6/5 on the root.
- YB Augmented - 7 3 8 2 8 3 - C D# E G G# B C
- May also use the Cd.

Green/Red Scales

GR Melodic Minor - 5 3 5 5 6 5 2 - C D Eb F G At Bt C

GR Melodic Major - 5 6 2 5 3 5 5 - C D Et F G Ab Bb C

GR Harmonic Minor - 5 3 5 5 3 8 2 - C D Eb F G Ab Bt C

- A more directional version of the standard harmonic minor.

GR Harmonic Major - 5 6 2 5 3 8 2 - C D Et F G Ab Bt C

GR Phrygian Dominant - 3 8 2 5 3 5 5 - C Db Et F G Ab Bb C

GR Bebop Dominant - 5 6 2 5 6 2 3 2 - C D Et F G At Bb Bt C

GR Bebop Melodic Major - 5 6 2 5 3 5 3 2 - C D Et F G Ab Bb Bt C

GR Bebop Major - 5 6 2 5 3 3 5 2 - C D Et F G Ab At Bt C

GR Bebop Dorian - 5 3 5 5 6 2 3 2 - C D Eb F G At Bb Bt C

GR Bebop Harmonic Minor - 5 3 5 5 3 5 3 2 - C D Eb F G Ab Bb Bt C

GR Bebop Melodic Minor - 5 3 5 5 3 3 5 2 - C D Eb F G Ab At Bt C

GR Neapolitan Minor - 3 5 5 5 3 8 2 - C Db Eb F G Ab Bt C

GR Neapolitan Major - 3 5 5 5 6 5 2 - C Db Eb F G At Bt C

GR Double Harmonic Minor - 5 3 8 2 3 8 2 - C D Eb F# G Ab Bt C

GR Double Harmonic Major - 3 8 2 5 3 8 2 - C Db Et F G Ab Bt C

GR Diminished - 3 5 3 5 2 6 2 5 - C Db Eb Et Gb G At Bb C

- The version of diminished with both an under-9 chord and diminished triad on the root.

GR Augmented - 8 3 7 3 8 2 - C Eb Et G Ab Bt C

Nonoctave Scales

Blackwood - 4 2 4 2 4 2 4 2 4 2 - C Dd Dt E Fd Gb G Ad At B Cd

- An interesting format to use cascading major and minor triads, with some nice extensions.

Hard Blackwood - 5 1 5 1 5 1 5 1 5 1 - C D Dt Et Fd Gd G A At Bt Cd

- Similar, but with supermajor and subminor triads and "weaker" melodic lines.

Suboctave Augmented - 8 2 8 2 8 2 - C Eb E G G# B Cd

- Brings back the symmetry of augmented structures, as well as allowing the dual use of the minor third and augmented ninth. Suboctave also serves as an augmented seventh.

Superoctave Diminished - 2 6 2 6 2 6 2 6 - C Ddb Eb E Gb G At Bb Ct

- Harder than standard diminished to avoid a superfifth, also meaning that, unlike asymmetrical diminished scales, every second note has a perfect fifth above it. Better minor than dominant chord scale, due to sixth and seventh both working better with the minor third than major.

Mavila - 4 4 6 4 4 4 6 - C Dd Eb Ft G Ad Bb Ct

- Adds valentine melodies to a scale with meantone reminiscent chords and structures.

Soft Mavila - 4 4 5 4 4 4 5 - C Dd Eb F Gd Ab Bdb Cd

Melodic Mavila - 4 6 4 4 4 4 6 - C Dd E Ft G Ad Bb Ct

Harmonic Ionivila - 4 4 6 4 6 2 6 - C Dd Eb Ft G At Bb Ct

Harmonic Aeolivila - 4 6 4 4 6 2 6 - C Dd E Ft G At Bb Ct

Double Harmonic Mavila - 6 2 6 4 6 2 6 - C Dt Eb Ft G At Bb Ct

Exotic Major - 4 6 2 6 4 6 2 (6) - C Dd E Fd G Ad B Cd (D)

- Bears a resemblance to the structure of a just Ptolemy diatonic scale with a 10/9 on the root, with steps replaced for valentine steps, allowing standard meantone chords with fresh melodies.

Superlydian - 5 5 5 3 5 5 5 - C D E F# G A B C#

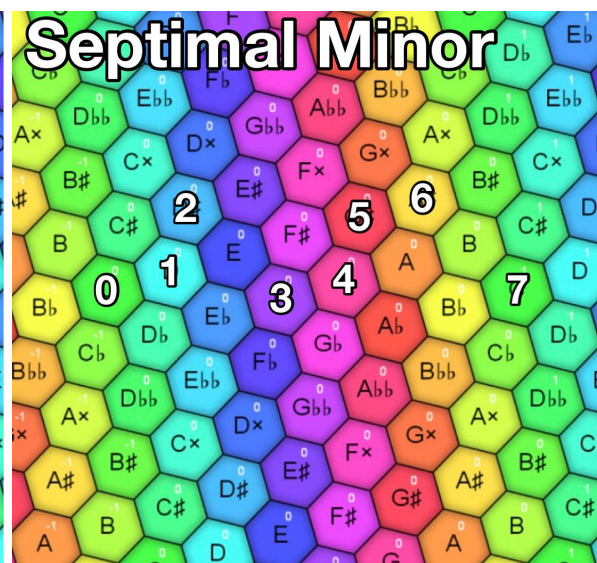
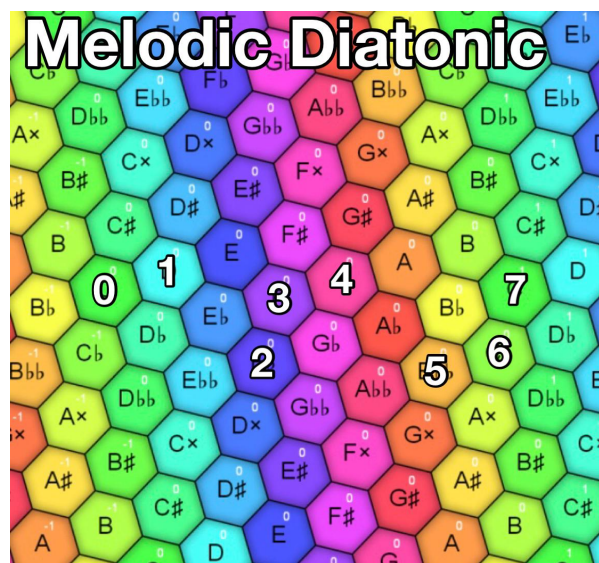
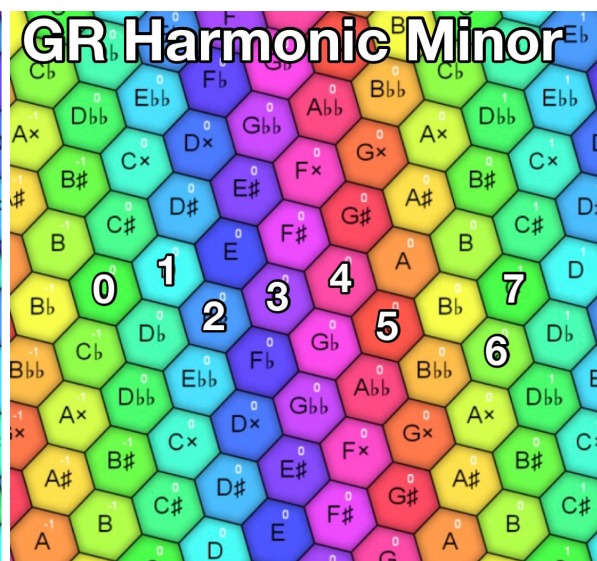
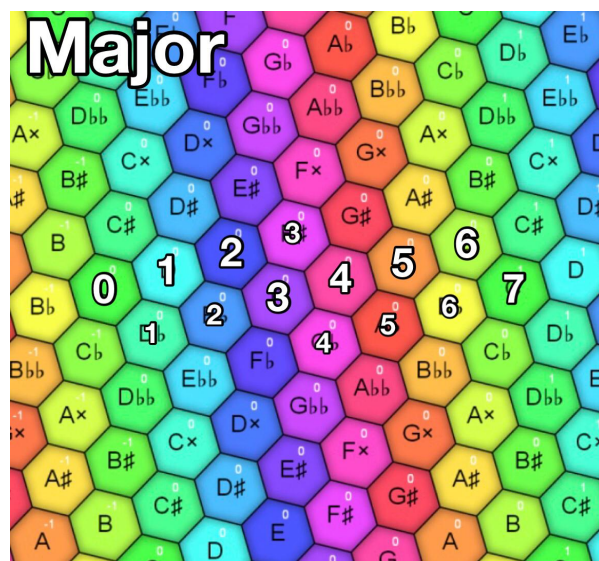
Graham UDF - 3 4 3 4 4 3 4 3 4 4 - C Db D# E Ft G Ab A# B Ct D

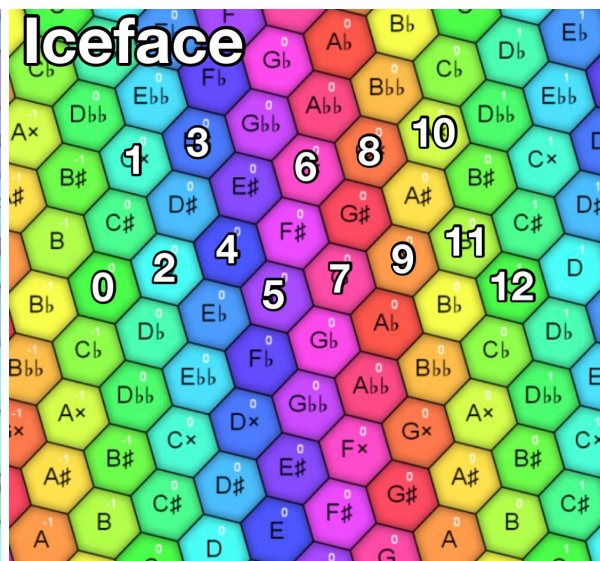
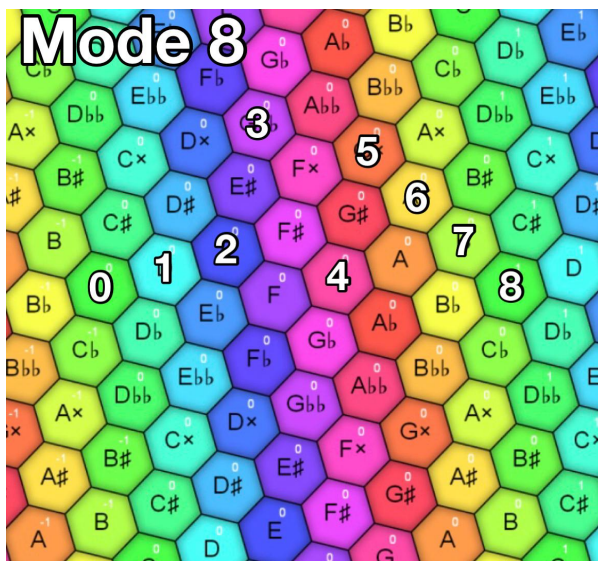
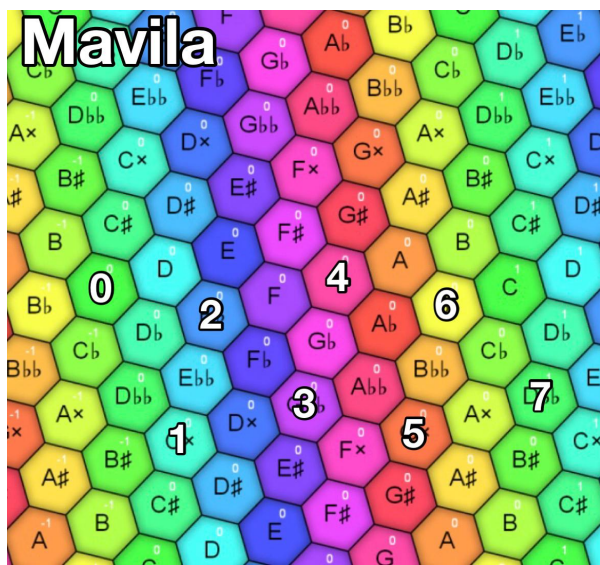
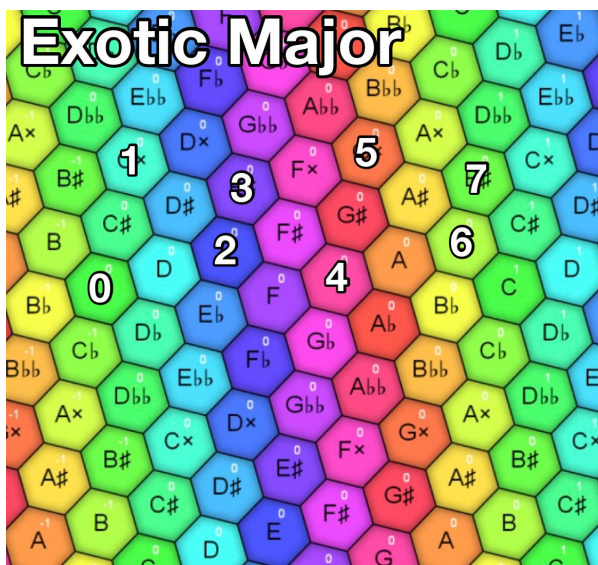
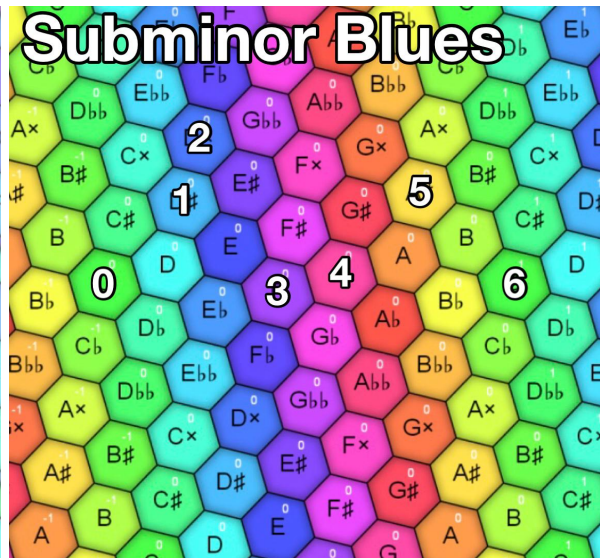
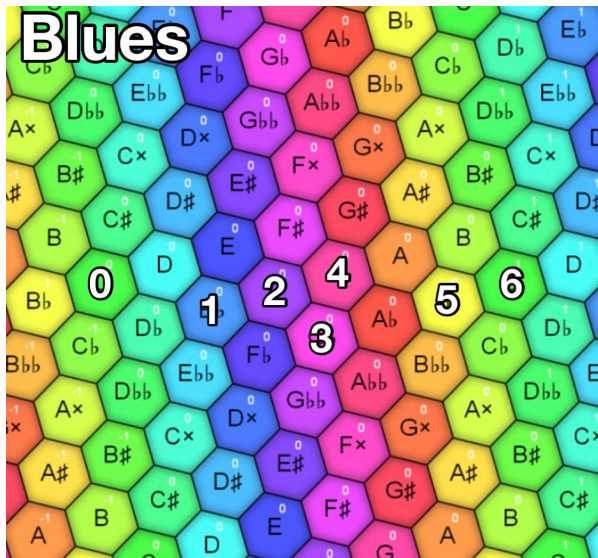
Chromatic Scales

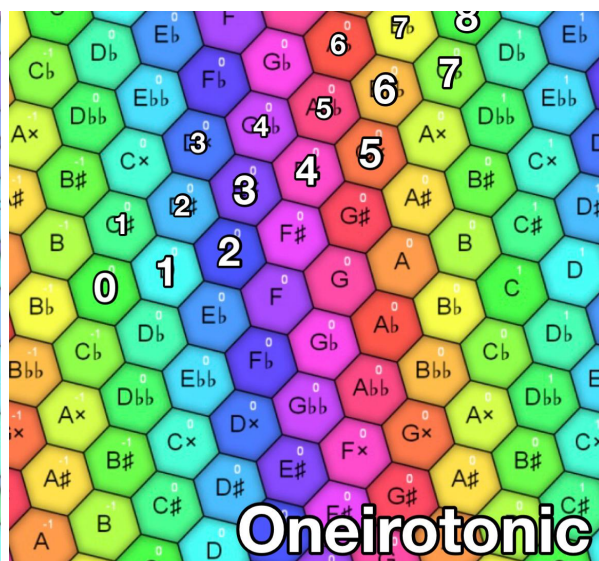
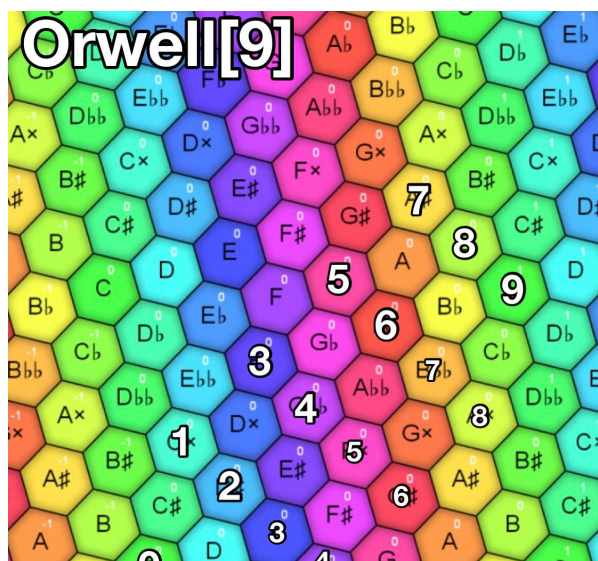
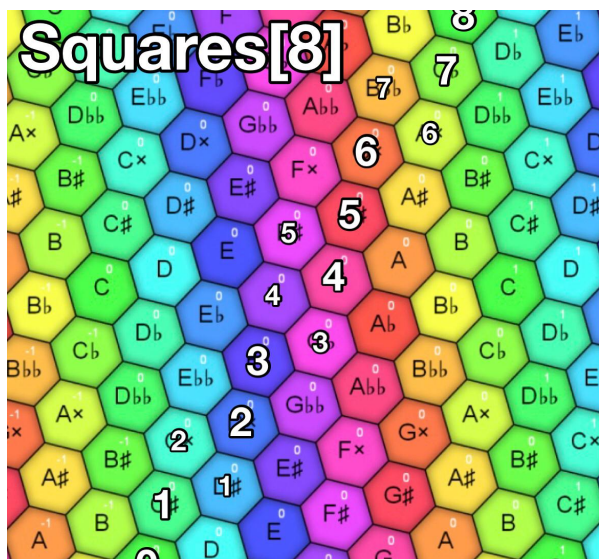
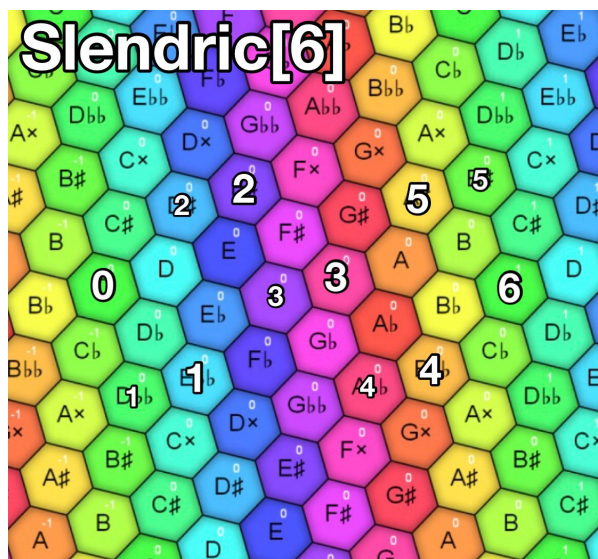
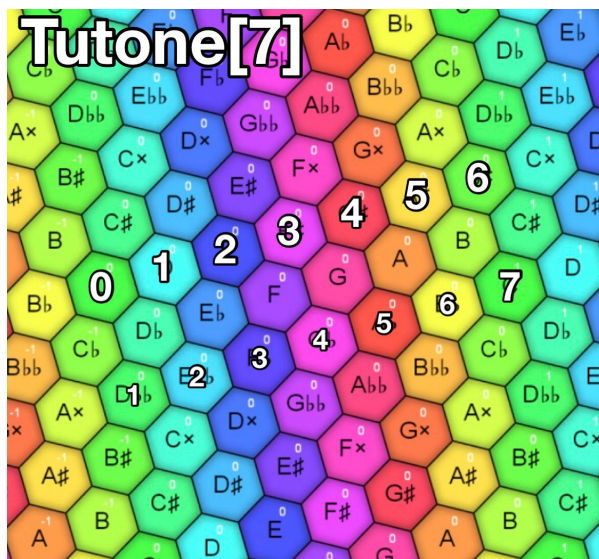
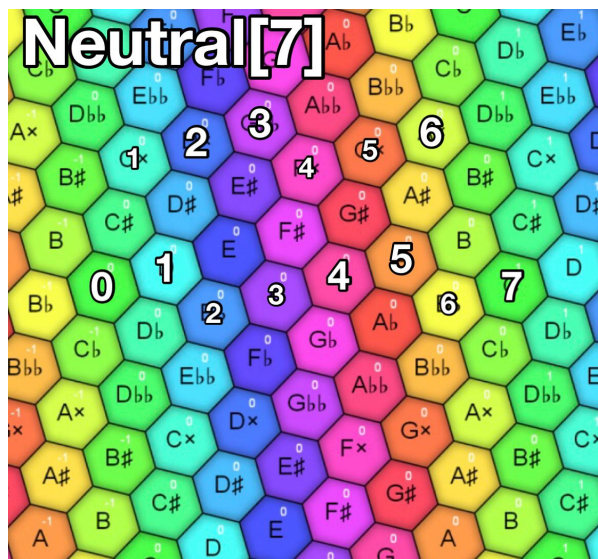
Subchromatic Scale / Canasta - 1 1 1 ... - C Ct C# Db Dd D Dt D# Eb Ed E Et Fd F Ft F# Gb Gd G Gt G# Ab Ad A At A# Bb Bd B Bt Cd C

- Generator can be stretched to 39 cents to purify fifth and optimize thirds.

Lumatone Patterns







15 Temperaments Best to Worst

1. Meantone - S+

Meantone is the defining temperament of 31, so much so that one could easily never venture outside of it and still find too much new material and opportunity to require stopping. The basic pentatonic and diatonic scales are useful and filled with consonance, due to the perfect fifth generator, and pentatonic triads are generated very simply. One small issue may be the wider semitones being less useful for direction, though the 12-note provides a solution through subsets that replace the leading tone with a supermajor one. These subsets may only use major and sub pitches, or just minor and super, emphasizing this idea. Beyond this, septimal triads and tetrads are represented relatively very simply, especially harmonic structures such as 4:5:6:7 and 9/7/6/5, and these chords are placed in a way such that their tritones may resolve in a sensible manner. Septimal subsets of the 12-note also manage to avoid the traditional wolf fifths except when ideal by replacing pitches, specifically the second and sixth, with the appropriate alternative that is also part of the mother scale. Harmonic series structures such as 4:5:6:7:9 also exist, and the 4:5:6:9 especially is abundant even in the 7-note. Meantone[19] additionally acts as a 19-WT, splitting the interseptimal intervals into purer septimal ratios.

2. Squares - S

The world of Squares is interesting, as diesis aren't generated until the 17-note MOS, so the full melodic potential of each scale is usable, and scales such as the 8-note and 11-note have characteristics that make them fantastic for alternative types of resolution. The small semitones in the scales resolve to tones used in perfect intervals, meaning that neutral sixths, sevenths, and thirds, as well as some superfourths and subfifths, resolve to the most consonant "perfect" intervals, which can contain any tonality and any extensions. These include sub and super triads, with super sevenths and sub sixths being most common, and the softer super sixth and sub seventh found in the 11-note. Pairs of small semitones can be replaced with neutral seconds to reduce long "chromatic" strings, an example being the Xenosquare Cradle. Two modes of the 8-note include subminor and supermajor root chords, with possible extensions for either. Other characteristic chords include the squares triad, which is a 7:9:11, neutral triads and tetrads, and 6:7:9:11 chords, all of which have the ability to resolve to the aforementioned simple consonances. Harmonic series chords found include the 4:6:7:9:11, one of which exists in the 11-note, and 5:6:7:9:11, two of which exist in the 14-note. The sound of squares tends to feel very dramatic and jagged, though not overly so as may be the case with harder scales.

3. Orwell - S

Built around orwell tetrads, the temperament both produces harmonics simply and includes useful chords, such as sub 7 and super 6 tetrads. Orwell[9] is useful for its soft sound and useful harmonic structures, including 4:6:7:11 and 4:5:11 chords. The principle and second modes include subminor and supermajor roots, allowing a switch between tonalities within the same mode, with the mode switch changing the extension from a sub seventh to super sixth respectively. The 13-note expands on this, as while the diesis should be generally avoided, the harmony becomes more complex, further simple triads and tetrads are available, and a 9-note MODMOS such as Graham Orwell is available, including more perfect fifths and a 4:5:6:7:11, while retaining the same general melodic feel due to the softness.

4. Mohajira - A

Neutral[7] is a simple scale, introducing the neutral sound and providing harmonic useful structures. This sound, however, is greatly expanded on through MODMOSES and Mohajira[10], the first of which includes scales like Rast and Bayati, and is an entire important class of fantastic melodic scales, while the latter introduces 4:5:6:9:11 chords and includes certain important tetrachords and MODMOSES. Neutral triads are the defining sound of Mohajira, though harmonic series chords and the occasional major or minor triad are very important options. Overall, the scales are mainly known for their melodic features as opposed to harmonic, like the maqamat they share similarities with.

5. Tutone - A

Similar to the whole tone scale, the 6-note MOS forms the basis of what Tutone can do, with a 4:5:7:9 shell chord in the principle mode. The 7-note adds another, as well as a diesis for some mild direction, while the 13-note includes a vast depth of chords. Four modes include a 4:5:7:9:11, while four more just have a 4:5:7:9, and three more can choose between 4:5:9 with access to augmented fourths and fifths for color, a dominant seventh, or a 13/8. Despite not having fifths, the harmonic potential of Tutone is extremely vast, though the melodic side can be difficult to work with, as the whole tone scale can feel limiting, but the small semitone in the 13-note adds to the possibilities, with the neutral intervals adding color. A 6-note MODMOS can bring some of this neutral flavor to a smaller scale, with Harmonic Whole Tone being a clear example, outlining the Tutone Harmonic chord.

6. Mothra - A

Mothra's simple 4:6:7 chords are a key part of the sound, though subminor and supermajor triads are quite important as well, with four of each in Mothra[11]. They also have the addition of the fourth and major second respectively. Melodic material mainly comes from the equitemporal scale, which can already outline perfect fifths with super sixths or sub sevenths on top. Mothra also supports barbados type chords, with the augmented and diminished 3&7 chords being represented very simply. Parent chords for modes of the 5- and 6-note MOSes can be used due to the fairly equal distance between pitches, with a warped but very interesting sound. Diesis in the 11-note MOS give it a very unbalanced feel, though the one small semitone preserves a useful sense of direction. Both the 11- and 16- note MOSes can be used in a Blackwood fashion, with alternating subminor and supermajor triads or tetrads falling from the subfourth in the principle modes. These subminor triads can add either a perfect fourth or harmonic seventh and possibly sub eleventh, and the supermajor can add either a major second/ninth or super sixth, with the principle root having a super seventh, which pairs well with the ninth.

7. Joan - B

Despite a near complete lack of perfect fifths, MOSes of Joan are characterized by an abundance of harmonics, even in Joan[5], where 4:7:11:15 is an available chord. Harmonics 9, 13, and 19 are found in higher number MOSes, and the 11-note uses a 17 as an extension to the chords, allowing very interesting harmonic options, all with a structure characterized by

antidiatonic and superdiatonic type patterns, with Joan[7] able to be used as an extreme mavila. The duality of 4:7:9:11:15 and 4:7:13:17:19 chords is part of what makes Joan interesting, especially with no 3s or 5s and yet very meantone chromatic-like melodic structures.

8. Valentine - B

Valentine[15] and [16] are the two main scales of the temperament that can be used, and they exist partly as a way to recolor meantone harmonies with fresh exotic melodies. There exist many nonoctave scales based on these melodic steps, these being the small semitone, neutral second, and large tone. These are often much more colorful than the simple whole tones and semitones found in diatonic modes. The 16-note MOS, Semi-Equalized Armodue, can utilize mavila-type ideas.

9. Myna - C

Myna is defined by diminished chords and structures, with 5:6:7 chords and Orwell triads being some of the lowest complexity triads in the temperament. The principal mode of Myna[11] is especially useful, however, as it makes use of a superfourth to perfect fifth resolution, with a harmonic seventh root chord. The abundance of dissonance from the diminished chords in Myna is what makes this root chord feel so stable, and there is another option for the root chord, that being the utonal tetrad. These split roots are a defining feature of the sound, and they provide an avenue for melodic material, despite the disjointed feeling of such a hard scale.

10. Würschmidt - C

Würschmidt is defined by augmented chords and structures, with 8:10:13 chords and Squares triads being some of the lowest complexity triads in the temperament. The principal mode of Würschmidt[10] is especially useful, however, as it makes use of a neutral sixth to perfect fifth resolution, with a major seventh root chord, as well as other augmented chord types as possible roots. Split roots also exist in this mode, allowing the balancing of two different sounds, and the second mode leans into this minor sound with a b6. There are also two major sevenths, with the standard being more useful harmonically and the larger being a good option for resolution, retained in the 'minor' second mode. Most melodic material will come from either the smaller 7-note MOS, or by making use of notes two dieses apart to create some movement, despite the very disjointed feeling of such a hard scale.

11. Miracle - C

Miracle is generally known for its simple generation of the 11-limit tonality diamond, though in 31, its main uses come in the form of combining Slendric and Neutral melodic ideas, as well as using its role as 6edf and a semitone to create disorienting runs on top of relatively simple chords, not as much for standalone scales. Miracle[11] contains 4:5:7:13:17 chords, as well as certain major-type shell voicings combining the major and subminor thirds and sevenths in latter modes, and some simple options from both slendric and neutral.

12. A-Team - D

A-Team has two main scales, Oneirotonic and A-Team[13], with a pentatonic scale that can be used for melodic material. Oneirotonic is an odd scale, as it has hardly any traditionally useful

harmonic structures, outside of one 8:10:13 and two orwell tetrads, on opposite ends of the modes. However, the main chords used in Oneirotonic theory are known as Delta Rational chords, which use similar arithmetic distances between intervals, and are theoretically abundant in Oneirotonic. The sound of Oneirotonic can be described as a warped diatonic, with the extra semitone providing a very odd sense of melodic location to untrained ears. 13:17:19 chords are a common suspended chord option, closely matching the harmonic series. A-Team[13] contains 8:10:13:17:19 chords and Orwell pentads, though the complete lack of perfect fifths or traditional harmonic resources in these scales makes them difficult to approach.

13. Nusecond - D

Nusecond has two main scales for use, Greeley[8] and Nusecond[15]. The first is useful for its 6:7:10:11 chords, one of which has a 13/6 extension, while the other has a semitone over the root. The equioctatonic feel is what makes the scale interesting, and is why it's used. The second scale makes use of how the generator is 11/10, 12/11, and 13/12 all in one, so when the 13 is generated, the others all follow. Melodic material mainly consists of the same quasioctatonic runs of Greeley, with more semitones as a possibility.

14. Slender - F

The pathological MOSes of Slender are quite useless, though they serve as a way to conceptualize “octave-stretched” 31, even on a pure octave, by stretching the generator of slender. A generator size of 39 cents makes fifths pure and some other intervals are optimized, while octaves can still be used. Regular Slender MOSes, however, are only ever used because theoretically they're the same as subchromatic runs, as a piece solely using it would have to focus around the octave exclusively. In this specific case, 4:7:9:15 chords are a main option, though they're found starting in Slender[12].

15. Tritonic - F

The chord option that is most accessible in Tritonic MOSes is the 8:11:12, though these harmonics are found on opposite sides of the generator chain, so the chord isn't found without a 9-tone MOS, and other harmonic resources are relatively lackluster. The possible resolution of superfourth to perfect fifth can be used, but using a superfourth as a dissonance is hard when it's one of a few potential consonances in the scales. These scales feel very jagged as a whole, due to the large jumps generated from the tritones, and the dieses. Creating interesting music with a small Tritonic MOS would be quite a challenge.

S+: Meantone

S: Squares, Orwell

A: Mohajira, Tutone, Mothra

B: Joan, Valentine

C: Myna, Würschmidt, Miracle

D: A-Team, Nusecond

F: Slender, Tritonic

Pentatonics:

Meantone[5]
Orwell[5]
Squares[5]
Slendric[5]
A-Team[5]
Joan[5]
Super/Sub Pentatonic
Mode 5

Hexatonics:

Tutone[6]
Slendric[6]
Harmonic Whole Tone
Mode 6
Mode 6-over
Hexanies
Genus 2,3,5,7,8,9
Blues Scales
Mark Scales
Augmented Scales
Graham Hexatonic

Heptatonics:

Meantone[7]
Neutral[7]
Tutone[7]
Joan[7]
Würschmidt[7]
Myna[7]
Meantone and Neutral MODMOSES
Meantone[5] Cradles
Scorp
Mode 7
Melodic Diatonic / Septimal Natural Minor
Diminished Diatonic
Tropical Major / Minor
Silver / Inverse Augton
AugmentedPlus
All YB / GR Meantone[7] Variants
All Mavila Mods
Superlydian

Octatonics:

Squares[8]

Greeley[8]

A-Team[8]

Onydim

Dylydian

Harmonic Mnarian

Xenosquare

PFTF

Mode 8

Genus Sextum

Genus Diatonicum

Dominant Diminished

Hard Diminished

All YB / GR Bebop and Diminished Scales

Superoctave Diminished

Nonatonics:

Orwell[9]

Joan[9]

Tritonic[9]

Graham Orwell / GO Inverse

Genus chromaticum

Genus diatonicum septimis

Mode 9-over

