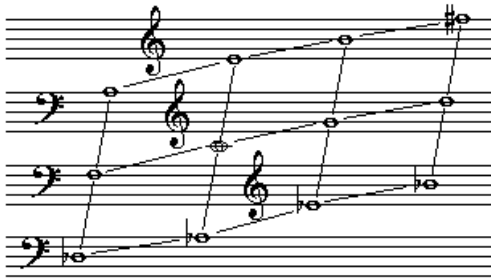


Modes

Expanding our Modal Palette

The five limit lattice of 12 tones and the corresponding reference scale:

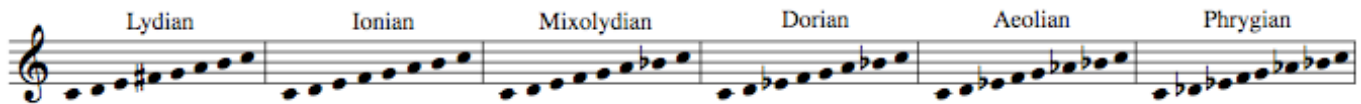


Sa (C) and Pa (G) have only one form, where as the other scale degrees have two forms. At this time we will concern ourselves with diatonic modes, i.e. modes that proceed from one scale degree to the next and in which no letter name is repeated. Therefore the modes we construct will have as fixed Sa and Pa,

but we may decide between the two forms of Re, Ga, Ma, Da and Ni. There are 32 7-tone modes available from this procedure.

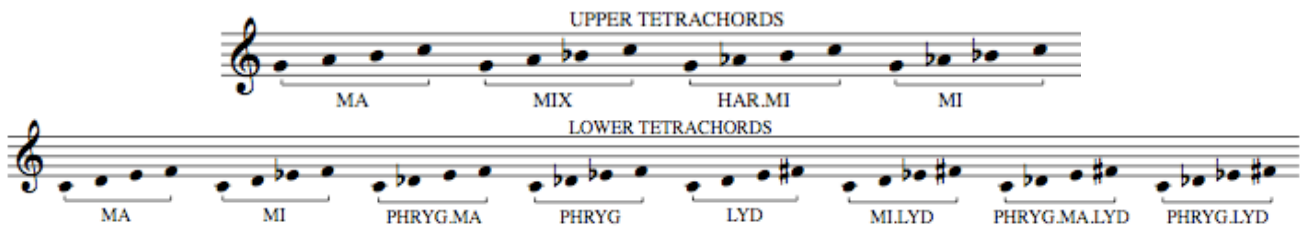
“Church Modes”

When we teach modes in the West, the first example is usually the “church modes.” It is taught that these modes derive from the white keys on the keyboard and are constructed by beginning a seven note scale on C, then D, then E, etc. For our purpose we will display these modes from the perspective of C.



Thirty-Two Seven-note Modes

Rather than name every individual mode, it is more efficient to name parts of modes and speak of the entire mode in terms of its parts. A *tetrachord* is any four consecutive scale degrees. If we divide a 7-note mode in half, we will have two tetrachords (from the tonic to the fourth and from the fifth to the octave). Here are all the possible tetrachords within the limits we have set (to find all 32 modes, simply make all possible combinations of the top and bottom tetrachords):



“*Mood* and *mode* are both from the Latin *modus*, which refers to the measure of something, its limit. *Mode* refers to a limit that regulates the way in which a thing is done. *Mood* has come to mean the temper or condition of the mind or the heart. Our progression of the modes is also a progression of moods. To understand this better, let’s take a look at the harmonic map [its lattice representation] of each mode in turn...” (W. A. Mathieu *HE* 70)