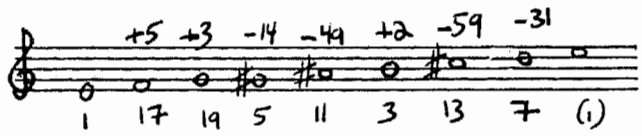
VIII. Clang

In Clang, we see Tenney's first use of the "diminished" mode made up of the first eight primes of the overtone series: 1,3,5,7,11,17,19. In ascending scale order (octave reduced) it is as follows (Example VIII.1).



This scale, though not this particular justification for it perhaps, has been of some importance in the music of the twentieth century, in everything from Stravinsky, Ives and Lou Harrison to Herbie Hancock and jazz. Harrison calls it the "octaphonic mode" and has used it often, most recently in the riveting second movement of his Double Concerto for violin, 'cello, and gamelan. It is also called the "octatonic", and jazz players know it as the "altered dominant" or the alternate mode of the diminshed scale (which is whole/half step rather than half/whole step). Its interesting property of containing two major triads a tritone apart has been of some harmonic consequence in modern music, and in the music of Chopin, Scriabin, and many others. Tenney's thoughts on the ramifications of these chords and this scale are best left for him to express, but it clearly ties in with many of his thoughts on the nature of consonance and dissonance, and the acoustical foundations for these concepts. Since Clang, most of his music has concerned itself with the overtone series, and this scale in particular. Clang is the first statement of the idea, and is extremely straightforward and elegant in this regard.

Tenney borrows the title from his own earlier reference to gestalt theory, and as in Fabric for Chè, conceives of the piece as "one single modulated sonic event". That it is itself a "swell" is no surprise, and like many other works (August Harp, Chorales) it concerns itself both on the large and small scale with the single breath.

> "... each player chooses, at random, one after another of these available pitches... and plays it very softly (almost inaudibly), gradually increasing the intensity to the dynamic level indicated..., then gradually decreasing the intensity again to inaudibility... this crescendo-decrescendo sequence

should be timed so that both segments of the tone are of approximately the same length, and so that the total duration of the tone is as long as it may comfortably be within one breath..."

(- from Instructions to Clang)

Clang is scored for orchestra, and the score consists of available pitches for each instrument in a set of temporal sections, gradually building up the entire scale (sections 1-7) and then breaking it down over the course of about fifteen minutes (sections 8b-). The buildup is achieved by gradually widening the "bandwidth" around the initial E natural, until the entire orchestral range is filled. The rate of density increase is of course exponential, as is the decay after about ten and a half minutes, and the timbral manipulation achieved by the choice of instrument entrances is done with great care to achieve a smooth textural transition throughout. The decay is a rather interesting octaval canon, beginning with the higher primes in the lowest octaves. At section 8b, the pitches F and G drop out (17th and 19th harmonic) in the lowest register. In the next section, these same pitches drop out in the next highest register while A# and C# (11th and 13th) drop out in the lowest. In the following section, the pattern continues up into the next highest register (17 and 19,11 and 13,5 and 7 for the three lowest octaves starting from the top) and so on until we percieve an approximation of the actual harmonic series, since the highest partials are only present in the higher octaves. Eventually, they drop out as well, and the piece ends with a six octave unison E. Note that the rate of "pitch-loss" is also exponential.

Clang, one of Tenney's finest and clearest works, awaits a valid performance. It has been played only once, to my knowledge, in a kind of reading by the L.A. Philharmonic, and one senses from the recording that the musicians were not entirely committed to the act of playing simple, sustained tones. With the growing acceptance of new music by more conservatively trained orchestral musicians, we might hope to someday hear the piece as it is intended, and I think this will be quite an experience, though we should have waited ten years for it.

In the Aeolian Mode (reproduced in full in Example VIII.2) is one of Tenney's simplest pieces, and was also written about this time (along with a few other experiments along the same lines). It was written for the California New Music Ensemble, an excellent group of Cal. Arts student performers. Like many of the postal pieces, it very simply expresses Tenney's continued interest in soft, continuous, and unassuming textures. Tenney has never been paricularly interested in improvisation, and this piece is one of the few cases where he allows the musicians to improvise

melodically, though in a very limited way.

I N T H E A E O L I A N M O D E

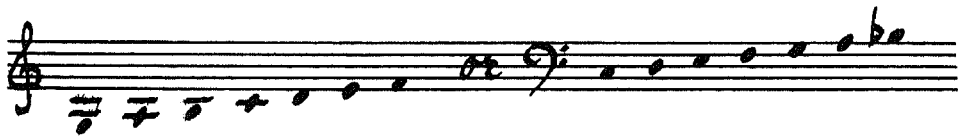
James Tenney
3/73

(for the California New Music Ensemble)

for prepared piano, marimba, vibraphone, flute and alto voice (this ensemble may be augmented by harp, clarinet, muted violin or viola, and/or other similarly gentle instrumental timbres).

Each player improvises a continuous melodic line on these pitches (always beginning on A, and using the G and F as neighboring tones only) -- legato, mp, mostly in eighth-notes at about mm = 180, with all players synchronous on the eighths. Let a performance begin with the prepared piano, the other players entering freely. Occasionally any player may drop out for a short time, but this is to be preceded by a "cadence" consisting of a sequence of different A's (in any octave), at any higher multiple of the eighth-note unit (i.e. quarters, dotted quarters, half-notes, etc.).

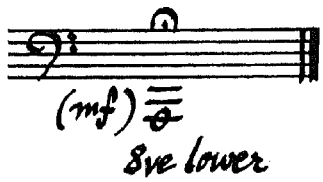
The pianist should prepare the following strings in such a way that the aggregates produced each contain a prominent pitch at the octave (or the twelfth). The damper-pedal should be held down throughout the performance.



The vibraphone pedal should be held down, with motor <u>off</u>.

Soft mallets should be used for both vibraphone and marimba.

The performance may be of any duration, but the longer the better. The end will be signalled by the pianist playing (for the first time) his lowest A, thus:



The other players then play their own "cadences", sustaining the last note until a cut-off cued by the pianist.