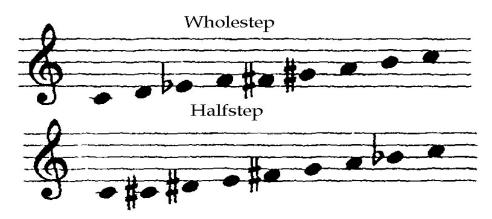
A discussion with Ivan Bertolla

Scary Scales

This month we are looking at diminished scales . The various diminished scales are very flexible in function and use . The main interval in the diminished seventh chord /scale (the diminished fifth) can be used to create many exciting diminished themes. You can hear diminished scales in jazz, in Bach's music and of course heavy metal . It creates a scary, evil and eerie ambience.

1st of all let us look at the 2 types of Diminished scales. If you notice there is one version that starts with a half step and one with the whole step. You will notice that unlike many typical western scales there are 8 intervals not 7.

Interval	I	II	III	IV	V	VI	VII	VIII
Whole Step	С	D	Eb	F	Gb	G#	A	В
Half Step	С	C#	D#	Е	F#	G	A	Bb



The important thing to remember with diminished scales is that you only need to know 3 of them. In other words if you start the scale from C , C# , and D you have covered all the other alphabetical keys . This is derived from the intervals I, III, V, VII. So in C the Eb, Gb, and A diminished scales share the same notes. This gives you the player a lot of power and scope.

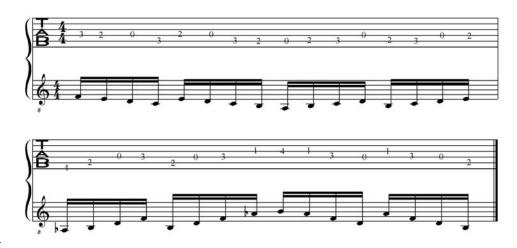
Lets take this to the next step.

This example shows you a more "jazz" approach on how a diminished scale like the C half step diminished scale can be used over most altered chords. Eg C7#9, C7b9b5, and C13#11



Now for you guitarists who listen to heavy metal and just want to shred your axe up let us simplify the scale . Most of the diminished scales used in the metal genre are cut up versions of the above whole/half step scales. In other words most heavy metal guitarists use the I III V VII steps of the scale as these are the pivoting points of the scale. And you will only get 4 notes to play with but still it can be very effective when you start using

So with this in mind I have concluded with a challenging exercise for guitarists. The second part of the piece is diminished . You will need to do this with alternate picking and also sweep picking (start of bar 2). It is the intro to my piece Gothic Castle and it is played FAST!!!!!!!!!.VERY FAST ... I hope you enjoy



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Chapter 4: WHOLE TONES – THEIR CARE AND MAINTENANCE

Bass guitars with Tony Murray

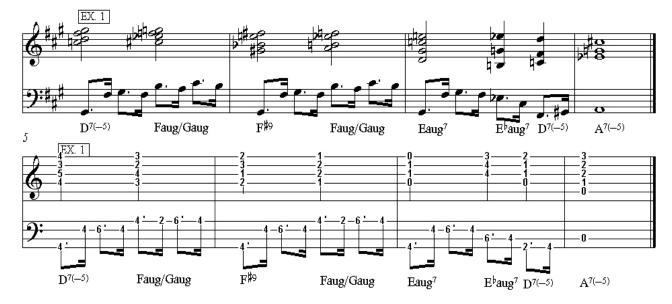
Last time we looked at a progression which passed through some unusual chords but at the end could be heard as an easily intelligible musical 'sentence'. Now, suppose these passing chords assumed center stage, as it were, and we decided to use them for their own sake at the end of a piece. Let's go fairly extreme and use, say, all whole-tone chords. These are notoriously the least definite of musical statements, possibly because the intervals contained in them are equal and have no implication of movement in any particular direction. Which is precisely their charm, of course. But the challenge is, can we make an intelligible ending out of such harmonies?

There are only two whole-tone scales: C D E F# G# Bb, and C# Eb F G A B - we'll alternate between them to build our chord progression. NOTE: Since these chords amount to superimposed augmented chords in some cases, e.g. the second chord in Ex. 1, they do not translate easily to guitar, or chord symbols, so the diagram simplifies the progression for guitarists.

One way of creating a 'dying fall' to suggest the end of a piece is with a descending chromatic scale: the highest note in each chord in Ex. 1 creates this downward line ending on a sustained C#. Just before the long C# the movement of the chords (2 beats long each) doubles (2 x 1 beat each) , which has the effect of highlighting the long note and giving it a sense of rest or finality.

Working towards the same goal, our bass line establishes a similar pattern: 1 bar phrase, repeat, repeat with slight variation just before the end, long note. Note that the variation is in the melody, not the rhythm: having established a particular melodic phrase and repeated it, just before the end it descends and then rises to the final note A, which has not been heard before in this register.

I said above that there is no sense of direction in a whole tone chord considered in isolation, as opposed to the way, say, a G7 chord likes



to be followed by a C chord. But in Ex. 1we have created a feeling of movement by alternating between the two different whole-tone scales, and accelerating the movement just before the final note. So we have a number of elements combining to suggest the finality of that last chord: the alternating scales, the descending chromatic melody at the top, and the bass line melody, together with the rhythmic application of each of these. In performance still more factors such as the instrumentation, voicing and pacing of the final phrase would leave the listener in no doubt the piece had ended.

After all this, though, it is clear that the finality we are talking about here is not the finality of Beethoven's Fifth Symphony, with its hammered C major chords, or the Beatles' Sergeant Pepper's album with its monumental piano chord. We have made an ending for our piece, but

by choosing to use whole-tone harmonies we have opted to make no definitive statements about the human condition. Maybe we'll do that next time, using the octatonic scale.

Tony Murray is a composer and songwriter with BA (Music Major), working in Melbourne. He is currently playing bass with Melbourne group The Glory Boys, whose new EP More Requests, including two songs written by Tony, was launched at the Corner Hotel, Richmond on 22 Sept 2004. Contact me with queries and comments: tonymu rray@pacific.net.au