Cycles

Ted Greene 1988-08-28

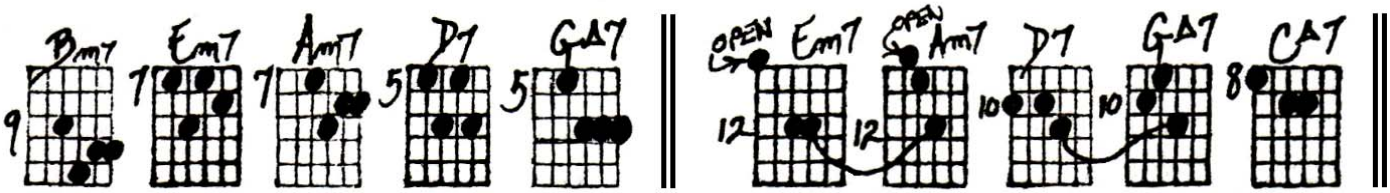
Fascinating little rascals these cycles. They've been around in one form or another for hundreds of years. They are *all* understandable if we just take a little time to think clearly. Let's start at the beginning…a general definition won't hurt anyone.

CYCLE: Any series of notes, intervals or chords that has 1) a built-in symmetry between adjacent members and 2) comes "back home" to the same letter name it started on…but normally one octave higher or lower. This second requirement is sometimes not actually fulfilled…. Example: C G D A would still be called a cycle of 5ths (each note being the 5th of its prior note…just count up the alphabet:

1 2 3 4 5 1 2 3 4 5
C D E F G, G A B C D, etc.

even though it does not complete its run by returning home to C [C G D A E B F# (or Gb) Db Ab Eb Bb F C]. Really C G D A is an *incomplete* cycle, but musicians, being lovers of abbreviations and short-cuts, still would often call this a "cycle."

Unquestionably, the most popular cycles or incomplete cycles in the history of music have been various forms of the **Cycle of 4ths**. Try the following chord progressions:



Can you see the cycle at work here in these little examples, incomplete though they may be?
Each chord is built on the note which is the 4th of the previous chord. To put it another way, each chord moves forward 4 letters (counting itself) of the musical alphabet to reach the next chord.

The *most* common cycle of 4ths by far is one that uses only the notes of either a major or Aeolian scale to build chords on. Observe: take say the key of C major, arrange the notes of this scale so that each time, you're moving forward a 4th…result → C F B E A D G C…now add the diatonic chord qualities, say as 7th chords, and you'll have Cmaj7, Fmaj7, Bm7b5, Em7, Am7, Dm7, G7, and Cmaj7 again.

Oftentimes this cycle will start from I as just given, but equally often it will be heard in songs, classical works and who knows what, starting from *other* degrees of the key, such as IV or iii or vi or ii…. That's what was happening in the above little chord progressions….they were in G, starting from iii and vi respectively.

Take a breather now and then reread everything you have just read…*please*. *Write down* your questions.

So, what we have just been talking about is a special form of "cycle 4" that we will call the **Diatonic Cycle of 4ths.** Note: the interval between F and B is a 4th, but not a "pure" 4th, rather, it's an augmented 4th. This is one of the beauties of the Diatonic Cycle of 4ths which allows it to return to the starting note. Without it, you get a progression of roots which are harder to make *musical* and which go on for an awfully long time before returning home…*Great* for practicing certain drills, not so great usually if carried out too far in actual *music*, without *some* other interval between successive roots *somewhere* for relief or variety.

There is a good chance that you may have a lot of interesting questions by now. Let's talk about them, and also maybe many of them will be answered on the next page. For now, *think* and *experiment*…and keep studying the works of the--- [*scanned page cuts off last sentence, but probably said something like, "great composers" etc.*]

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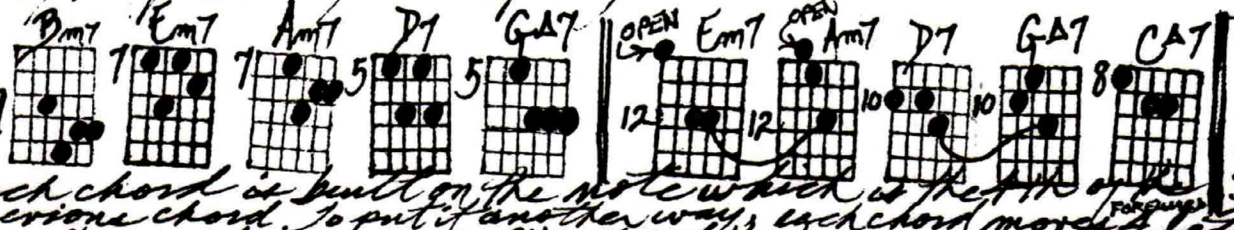
CYCLES

fascinating little rascals these cycles. They've been around in one form or another for hundreds of years. They are all understandable if we just take a little time to think clearly. Let's start at the beginning.... a general definition won't hurt anyone.

★**CYCLE**: Any series of notes, intervals or chords that has ① a built-in symmetry between adjacent members and ② comes "back home" to the same letter name it started on..... but normally one octave higher or lower. This second requirement is sometimes not actually fulfilled..... example: C G D A would still be called a CYCLE of 5ths (each note being the 5th of its prior note.... just count up the alphabet C D E F G, 1 2 3 4 5 G A B C D, etc.) even though it does not complete its turn by returning home to C [C G D A E B F♯ (or G♭) D♭ A♭ E♭ B♭ F C]. Really C G D A is an incomplete cycle, but musicians being lovers of abbreviations and short-cuts still would often call this a 'cycle'.

Unquestionably, the most popular cycles or incomplete cycles in the history of music have been various forms of the **CYCLE of 4ths**. Try the following chord progressions:



Can you see the CYCLE at work here in these little examples, incomplete though they may be? Each chord is built on the note which is the 4th of the previous chord. To put it another way, each chord moves a letter of the name exactly a 4th to reach the next chord.

The most common CYCLE of 4ths by far is one that uses only the notes of either a major or aeolian scale to build chords on.

Observe: Take say the key of C MAJOR, arrange the notes of this scale so that each time, you're moving forward a 4th.... result → C F B E A D G C..... now add the DIATONIC chord qualities, say as 7th chords, and you'll have CΔ7 FΔ7 Bm7♭5 Em7 Am7 Dm7 G7 and CΔ7 again.

Often times this cycle will start from I as just given, but equally often it will be heard in songs, classical works and who knows what, starting from other degrees of the key such as IV or iii or vi or ii..... that's what was happening in the above little chord progressions.... they were in C, starting from iii and vi respectively. TAKE A BREATHER NOW and then REREAD EVERYTHING you have just read.... PLEASE. Write down your questions.

So, what we have just been talking about is a special form of 'CYCLE 4' that we will call the DIATONIC CYCLE of 4ths.

NOTE: The interval between F and B is a 4th but not a 'PURE' 4th, rather, it's an AUGMENTED 4th. This is one of the beauties of the DIATONIC cycle of 4ths which allows it to return to the starting note. Without it, you get a progression of roots which are harder to make musical and which go on for an awfully long time before returning home..... GREAT for practicing certain drills, not so great usually if carried out too far in actual music, without some other interval between successive roots somewhere for relief or variety.

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