"Chord Scales" and accompanying Irish dance music.

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I - Which Scales Are Relevant ?

[*You 'd better believe this. To prove it, one would have to collect numerous Irish trad. dance tunes and classify them according to the scales they use. This is a huge task. Breandan Breathnach is one who performed such a task, resulting in his 3-part tune collection "Ceol Rince na hEirann". He also published an analysis of Irish trad. music, in which he presents this classification of the scales used. I have used his work as one of my starting points.*]

According to Breandan Breathnach in his "Folk Music & Dances of Ireland" there are only two major scales relevant to Irish folk music: the Dmajor scale and the Gmajor scale. Both of these scales fit naturally on the whistle/flute /pipes in D. [*Note: Most Irish musicians who play an instrument in a different key than D still tend to think about it (and talk about it) as if it were in D. But the accompanists will have to transpose in such a case. Guitar/bouzouki players will usually resort to using a capo.*]

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        I  II III IV V  VI VII I
Dmajor: D  E  F#  G  A  B  C#  d

Gmajor: G  A  B   C  D  E  F#  g
```

By repeatedly applying a process that Breathnach calls "inversion", which simply means detaching the first note from the scale, and appending it (actually, it's octave higher equivalent) to the end of the scale, 7 alternate scales can be derived from this major scale: the "modal" or church music scales. Of these "modal" scales (again according to Breathnach) only 3 are relevant for Irish folk music: the ones based on the 2nd, 5th and 6th note of the major (or Ionian, as it is called in church music) scale, resulting respectively in Dorian, Mixolydian and Aeolian scales.

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Scales based on Dmajor:
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D major/D Ionian: D  E  F#  G  A  B  C#  d
E Dorian:            E  F#  G  A  B  C#  d  e
A Mixolydian:               A  B  C#  d  e  f#  g  a
B Natural minor/Aeolian:       B  C#  d  e  f#  g  a  b

Scales based on Gmajor:
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G major/G Ionian: G  A  B  C  D  E  F#  g
A Dorian:            A  B  C  D  E  F#  g  a
D Mixolydian:              D  E  F#  g  a  b  c  d
E Natural minor/Aeolian:      E  F#  g  a  b  c  d  e
```

These 8 scales are the basis for Irish folk/dance music, and will lead us to deriving the appropriate chords for providing backup for this type of music. [*Note: occasionally you will come across a tune in Amajor, a key which is not listed here. I've heard a theory (I think it was Arty McGlynn who told me this) that these tunes are not originally Irish, but imported from Scotland. The ideas presented here do not apply to such tunes - these can be dealt with using ordinary "Western art music" chord theory.*]

II - From Scales To Chords.

Generally speaking, a chord is formed for any note in a scale by stacking 2 3rd intervals on top of it:

1. pick a note (any note) in the scale (call it the "root").
2. skip the next note in the scale
3. use the next note (call it 3rd)
4. skip another
5. use the next (3rd of the "3rd", but 5th of our "root")

(If you run into the end of the scale, then treat it like the snake that bit it's own tail - continue counting at the start of the scale. Mind the octave note; it should be discarded in this case.) This way you can derive the basic triad for each chord.

For the Dmajor scale it would result in:

```
root: D   E   F#  G   A   B   C#
3rd : F#  G   A   B   C#  D   E
5th : A   B   C#  D   E   F#  G
```

(The same method can be applied to the other 7 scales. The results of that will be presented later. For now, we will continue the discussion, looking only at the Dmajor scale, since this is probably the most familiar to everyone.)

So far, making the step from scale to the elementary triads doesn't differ from what the chord theory for "Western art music" also teaches us.

The next step would be to analyze, and name, the chords we have found. We used 3rd intervals to build these triads, and there are *2 kinds of 3rd intervals*: *major 3rd* (skip 3 positions on guitar/bouzouki fretboard: D - F#) and *minor 3rd* (skip 2 positions on fretboard: E - G). A chord with a *minor 3rd* between root and 3rd is called a "minor" chord.

```
chord on D :  D   major 3rd  F#  minor 3rd  A   : Dmajor
chord on E :  E   minor 3rd  G   major 3rd  B   : Eminor
chord on F#:  F#  minor 3rd  A   major 3rd  C#  : F#minor
chord on G :  G   major 3rd  B   minor 3rd  D   : Gmajor
chord on A :  A   major 3rd  C#  minor 3rd  E   : Amajor
chord on B :  B   minor 3rd  D   major 3rd  F#  : Bminor
chord on C#:  C#  minor 3rd  E   minor 3rd  G   : Edim (2 minor 3rds stacked
is called a "diminished" chord in Western art music)
```

Here we encounter our first difference between "Western art music" theory,

and what applies to Irish dance music accompaniment: "diminished" chords are _NOT_ used. So instead of the G in the chord on C#, we use the next note in the scale: A, which is 2 _major_ 3rd's away from C#. This results in:

```
chord on C#:  C#  minor 3rd  E
                  |
                   ----- our new note -----   A   : A/C#, 1st inversion of Amajor
```

[*Note: An inversion of a chord can be obtained by applying the same circular shift as we used to get the derived scales from the major scale to the 3 notes that form the basic triad of a chord. The first shift results in a chord with the same 3 notes, but the 3rd as the root note - "1st inversion"; the second shift gives us the 5th as the root note - "2nd inversion".*]

III - Extending on the basic triads.

Since on both guitar and bouzouki (piano is a different case altogether) it is possible to play more than 3 notes simultaneously, our next step could be to see which notes might be added to the basic triads we have just derived.

Note doubling.

The simplest way to extend on the basic triad is note doubling: adding a note already present in the chord, either in the same octave or in a higher/lower octave than what we already have. Example: the D chord can be played as D - F# -A - D, or D - F# - A - F#, or even D - F# - A - F# - D (if you can find a fingering for this). This doubling of notes doesn't change the name of the chord, since we still only use notes of the basic triad.

The 7th note.

Another likely note to add to a chord is the 7th step of the scale. Since we found our triads by stacking 3rd intervals, you might be tempted to find out what happens if you stack another 3rd. If you do so, you will have added a 7th - and it works. But the resulting chord's use in Irish trad. music is not so frequent as it is in classical, pop, or for instance American folk music. In fact, there are only 2 chords in the chord scale where this 7th note isn't obtrusive: the II and the V position of the chord scale. In all other positions of the scale it tends to stand out - it adds a jazzy flavour to the chord that often violates the character of the music.<.br> Applied to the II chord in the scale this adds to the chord the note which is the root note of the scale. This is something that works out quite pleasing for the other chords in our chord scale as well, and brings us close to a concept that is native to Irish music: droning, i.e. having one tone (usually the root) continuously present behind the actual tune. This is quite common practice in accompanying Irish music, no matter on what instrument, and is one of the reasons why open guitar tunings are so popular for backing up this type of music - the open strings are usually tuned to convenient drone notes.

IV - "Will-do" Chords

Up to now we 've gone strictly "by the book", so to speak. Everything I said up to now is thoroughly documented in literature. Now we've come to the point where we will leave this path, and introduce a concept that make life a lot easier. One thing you will probably have noticed about Irish dance music is that it's usually played rather fast. And reading the above you will have thought: I won't have time to change chords so often and so fast. Not to worry - most musicians, even the pro's, don't. Often they will substitute the theoretically correct chord with something that's easier to change to, or even the chord they were already holding down, with a suitable bass note to create the *impression* that they were using the proper chord progression. These chords I have, just for ease of discussion, named "will-do" chords, because they "will do" the job of an other chord with a lot less work. One very frequently used example of this would be the 1st inversion of D, the D/F#, which is almost always used in the place of an F#m in the D scale. Similarly, the G/B can be used instead of the Bm. Some people, including Arty McGlynn, will often even use a D chord with an E bass instead of an Em, something that wouldn't make sense normally (how's that for a chord - D, E and F# together in one chord. Try naming this one :-)), but in places where you're just "passing thru'" the Em chord in a chord progression, it works. And it's a lot easier (especially if you're using DADGAD) than trying to quickly change from fingering a D chord to an Em.

V - The Most Useful Chord Scales.

[*Note: the indicated 7ths (between brackets) are optional*]

```
Dmajor chord scale:
root: D    E    F#   G    A    B    C#
3rd : F#   G    A    B    C#   D    E
5th : A    B    C#   D    E    F#   A
7th :      (D)            (G)

Name: D    Em   F#m  G    A    Bm   A/C#
           (7)            (7)
```

```
E Dorian chord scale:
root: E    F#   G    A    B    C#   D
3rd : G    A    B    C#   D    E    F#
5th : B    C#   D    E    F#   A    A
7th :      (E)            (A)

Name: Em   F#m  G    A    Bm   A/C# D
           (7)            (7)
```

```
A Mixolydian chord scale:
root: A    B    C#   D    E    F#   G
3rd : C#   D    E    F#   G    A    B
5th : E    F#   A    A    B    C#   D
7th :      (A)            (D)

Name: A    Bm   A/C# D    Em   F#m  G
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```
                (7)             (7)


        B Natural minor/Aeolian chord scale:
        root: B   C#   D    E    F#   G    A
        3rd : D    E   F#    G    A    B   C#
        5th : F#   A    A    B   C#    D    E
        7th :     (B)            (E)

        Name: Bm  A/C# D    Em   F#m G    A
                  (+B)           (7)


        G major/G Ionian chord scale:
        root: G    A    B    C    D    E    F#
        3rd : B    C    D    E   F#    G    A
        5th : D    E   F#    G    A    B    D
        7th :     (G)            (C)

        Name: G    Am   Bm   C    D    Em   D/F#
                  (7)             (7)


        A Dorian chord scale:
        root: A    B    C    D    E    F#    G
        3rd : C    D    E   F#    G    A     B
        5th : E   F#    G    A    B    D     D
        7th :     (A)            (D)

        Name: Am   Bm   C    D    Em   D/F# G
                  (7)             (7)


        D Mixolydian chord scale:
        root: D    E   F#    G    A    B    C
        3rd : F#   G    A    B    C    D    E
        5th : A    B    D    D    E   F#    G
        7th :     (D)            (G)

        Name: D    Em   D/F# G    Am   Bm   C
                  (7)             (7)


        E Natural minor/Aeolian chord scale:
        root: E   F#    G    A    B    C    D
        3rd : G    A    B    C    D    E   F#
        5th : B    D    D    E   F#    G    A
        7th :     (E)            (A)

        Name: Em   D/F# G    Am   Bm   C    D
                  (+E)           (7)
```

[*Since many players I've met find Em hard to deal with in DADGAD, an option
would be to capo at 2nd fret, and play Dm. But then you would need a scale for
Dm. Here it is.*]

```
        D Natural minor/Aeolian chord scale:
        root: D    E    F    G    A    Bb   C
        3rd : F    G    A    Bb   C    D    E
        5th : A    C    C    D    E    F    G
        7th :     (D)            (G)

        Name: Dm   C/E  F    Gm   Am   Bb   C
                  (+D)           (7)
```

```
[This one shouldn't be here, really, since it's derived from the scale of C.
But I've come across it a couple of times, mostly for Irish tunes that were
arranged by American musicians. So it may be handy to have available.]
D Dorian chord scale:
root: D   E   F   G   A   B   C
3rd : F   G   A   B   C   D   E
5th : A   B   C   D   E   G   G
7th :     (D)         (G)

Name: Dm  Em  F   G   Am  G/B  C
          (7)         (7)
```

(Modified: Wed Nov 14 00:28am by [han](#) / [H.Speek@hccnet.nl](#)).