

# Chord Substitutions

## the One Big Note

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How to understand and exploit the possibilities of harmonic substitution to enrich your vocabulary as an improvising accompanist. Informed by jazz 'comping approaches.

In the world of Irish music accompaniment, a wide range of approaches to chords is available, from the straightforward diatonic (I-IV-V) chord harmony of Irish piano playing in the style of Felix Dolan or Charlie Lennon, to the "three-chord-trick" guitar accompaniment of Michael Coleman's guitarists, to the complex polyrhythms of Micheal O Domhnaill and Donal Lunny, to the driving syncopations of John Doyle or Artie McGlynn, to the subtle harmonic colors of Dennis Cahill or Dean Magraw. In many cases, what differentiates the distinctive sounds of all of these accompanists from one another has to do with their approaches to harmony. A comprehensive survey and explanation of all the different possible approaches is not possible in the scope of this article, but we will focus here on how to think about **varying** harmonic choices: ways to substitute one chord for another in effective fashion that helps "lift" the music (for much more on how harmony can work in Irish traditional music, see other cjs articles on this site, and the print book/CD set [Celtic Backup for All Instrumentalists](#), available from [Mel Bay Publications](#)).

Improvising chords for Irish tunes is a very subtle art, for 2 basic reasons;

- 1) because there usually IS more than one possible "right answer," even if two different chords played at the same time may not work together, and
- 2) because chords in Irish music don't go the ways we expect them to if we've come up playing folk, rock, or classical music. This is because Irish trad's harmonic practice is a kind of amalgam between 18th century classical music practice a la Mozart and modal harmony, which has its own internal logic.

Some players (and a lot of melodists who haven't thought about it too hard) would say you have to memorize chords for every single tune. Some even go so far as to develop notebooks of handwritten chord charts for each tune they wish to accompany. While this can't hurt, and I would certainly agree that having developed specific approaches for specific tunes is a good thing, there are other ways of getting more useful insight in less time.

It might be a better use of your time (and less boring!) to spend time experimenting with a fairly small group of tunes (4 reels in D, G, E Dorian, A mixolydian, and B Aeolian respectively, jigs in D, G, and A mixolydian, hornpipes in D and G), and becoming very familiar with the sound of **certain chords against certain phrases**, thinking about how these chords/phrases might be applied in multiple tunes.

### Rule of Thumb #1

Generally (not always), you'll find that you can replace any chord with any other chord with which it shares 2 notes: e.g., G major (GBD) and E minor (EGB) share two notes (GB) and can often substitute for one another. D major can substitute for Bm and vice versa.

There are lots of other possible substitutions, but if you go through a small group of tunes as mentioned above, experimenting with the SOUND of each possible chord substitution in each place where it might be possible, you'll both expand your vocabulary of chords and more importantly, you'll begin to be able to **anticipate** the sound of the chords in certain situations. Plus you'll know the tunes much better.

If you play melodies as well as chords, try experimenting with different/substitution chords when you **FIRST** start learning the melody, so that right from the start, you're aware of the various possible different sounds. Most Irish tunes fall into one of four modes (scales). These are:

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                Ionian ("major"):
                1   2   3   4   5   6   7   1
Mixolydian ("major with a lowered 7th degree"):
                1   2   3   4   5   6   b7  1
Dorian ("minor with a lowered 7th degree"):
                1   2   b3  4   5   6   b7  1
Aeolian ("minor with a lowered sixth degree"; not common):
                1   2   b3  4   5   b6  b7  1
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In turn, with a little experimentation, you'll probably find that tunes in each of these modes tend to revolve around one or two crucial combinations of chords. For example, tunes in Ionian mode tend to use chords built on the 1st, 4th, and 5th scale degree (a D Ionian/major tune like "Wind that Shakes the Barley") will thus tend to emphasize D maj, G maj, and A maj chords), while tunes in Dorian mode tend to use chords built on the 1st and flat 7th scale degrees. For example

an E Dorian tune like "The Ships are Sailing" will tend to emphasize the E min ("I minor") and D maj chords ("Flat 7 major") chords.

With a little practice and experimentation with tunes you know well that are in each of the four modes mentioned above, you can begin to learn to anticipate and to "hear" (implicit in the melody) these common chord combinations.

In the case of melody notes which **don't** fall into these common chord combinations, you can apply the following procedures:

You can harmonize the other notes in the melody using the standard rules for harmonization. That is, to accompany a given phrase you use a chord which contains at least 1 or more of the notes in the phrase that fall on the strong beats. However, but that is a more "diatonic"/"Western" approach. It is not in fact strictly necessary that you harmonize every note with a chord containing that note; you don't even have to harmonize every emphasized note. The "common chord movements" are not the sole chord movements necessarily required; rather they are those movements which are probably most essential and less permeable. Certain tunes will demand additional chords as well.

However, even if some notes in the melody don't seem to fall into the principal chords (that is, they are notes not contained in the principal chords), you can sometimes **still** harmonize those other notes using the principal chords. When you do this right and in a thoughtful, listening-oriented way when you harmonize a melody note with a chord that does not contain that melody note you are bringing out the modal/droning aspect of the tune. Essentially what you're doing in this case is stacking extra notes on top of chords.

For example, in an A Dorian tune, where your principal chord movement is Am-G-Am, you may very well run across phrases which emphasize the notes D or F#. A phrase that emphasizes D can be harmonized with a G chord (GBD), or with a D chord (DF#A) because both chords contain the melody and there is thus "agreement" between melody and chord. This yields a more "diatonic"/"Western" sound.

But you can also harmonize that D with an Am chord (ACE), because even though the Am chord does not contain the note D, there is no crashing 1/2 step dissonance (Notes C-D-E are all a whole-step or more apart), and the sound of an Am chord with a D on top gives you what the jazz guys would call an "Amin 11" chord. Really all it means is that the note D does not crashingly conflict with anything in the Am chord. Try it and you'll see what I mean.

Not every emphasized note in a melody must be harmonized with a triad which contains that note. In Irish music, the following rule of thumb is much more important.

## **Rule of thumb #2**

Try to avoid clashes of 1/2 step between notes in the chord and the note in the melody. For example, in an A Dorian tune, you can harmonize the note E with an Am chord (ACE), with an Em chord (EGB), sometimes with a Cmaj chord (CEG), or even with a G chord (GBD).

For our purposes, that last case has extremely important implications: while the G chord does not contain the note E, neither does it contain any notes which involve a half-step dissonance with the E. And, taken together (GBDE), what you're getting is an inversion of an Em7 chord (EGBD). Either rationalization, or simply the recognition that in a drone texture you're going to get some notes that don't technically "fit" the drone, works out.

## **Understanding modes in Irish backup**

(Note: See also **Celtic Backup** for a much more detailed discussion and many practical exercises in print and on CD).

Certain modes have certain cultural associations, but that is only because of our own background as listeners: major sounds "happy" to us and minor "sad" because we have a bunch of associations with specific pieces or styles of music which use those connotations. Other cultures have other associations.

However, to the Western ear, the following are some common associations with the various modes. Note that these associations are not necessarily emotional (though medieval theorists loved to argue that these things were objective, not subjective), but rather associations with idioms or geographical styles.

**Ionian:** spelled 1 2 3 4 5 6 7

Western, diatonic, classical music, American folk songs (some)

**Dorian:** spelled 1 2 b3 4 5 6 b7

Medieval music, plainchant, American old-timey music, lots of Irish repertoire (note that Dorian is the commonest "minor mode" employed in these last two)

**Phrygian:** spelled 1 b2 b3 4 5 b6 b7

Spanish music and flamenco

**Lydian:** spelled 1 2 3 #4 5 6 7

Lots of Bulgarian and South European music; new classical music

**Mixolydian:** spelled 1 2 3 4 5 6 b7

Irish and American old-timey repertoire, Scots music (especially pipe music), medieval music

**Aeolian:** spelled 1 2 b3 4 5 b6 b7

Euro-American classical music (commonest "minor mode"), some American folksongs, some English folksongs

**Locrian:** spelled 1 b2 b3 4 b5 b6 b7

Highly dissonant, not widely used in anything except new classical music.

## **How to hear modes and deduce their harmonic implications**

There are several different factors that shape how we hear the associations of various modes, and how we recognize them in Irish music, and these factors interact differently in different tunes. So you need to use deductive reasoning to figure out how things are interacting in a particular tune. Also, we need to beware of being too literal or rigid in applying Western Classical terminology and notational tools to ITM. They can provide useful insights and organizing principles, but we need to realize that ITM is only in selective ways related to the Classical tradition; not all of these "foreign" tools and concepts work consistently.

1) Notation: even if the notation you see for a tune has a specific number of sharps or flats indicated in the key signature (say, for E Dorian, 2 sharps), that does not necessarily mean that the tune stays rigidly in E Dorian, or that the tune necessarily conforms to E Dorian in all particulars. Here are 2 scenarios in which you might see a specific key signature (say, 2 sharps) and nevertheless find that "non-diatonic" chords (eg, chords from outside that pitch set) work better.

Look at the melody itself. Using the example of E Dorian, and leaving aside whatever is indicated in the key signature, does the tune actually include a C# or F#? Does it, by contrast, include a C natural or F natural? The person who notated the tune has to make a choice about what key signature is required, but this can be highly subjective. Perhaps the tune actually includes only a C natural? or a C natural in one place and a C sharp in another? \* again, look at the tune. Does it in fact include ANY kind of C (eg, either C# or C natural)? Very often Irish tunes are written in what a Western theorist would call "gapped modes:" modes that contain fewer than 7 notes. Perhaps the tune doesn't use C natural OR C#; hence, the tune could be said to be in either

E Dorian: E-F#-G-A-B-(C#)-D-E 1 2 b3 4 5 6 b7 1 or

E Aeolian: E-F#-G-A-B-(C natural)-D-E 1 2 b3 4 5 b6 b7 1

In this case, you can make a subjective choice: You can take advantage of the "missing" 6th degree, and use either the chords from E Dorian or those from E Aeolian, or mix and match chords from both modes. You can use "E Dorian chords" in one repeat of the tune, and "E Aeolian chords" in another repeat.

Even if the tune unequivocally uses C#'s in the melody (for example), you can still make a C major triad (C-E-G) work as a substitution for the Em triad. This is because C major (C-E-G) shares 2 of 3 notes in common with Em (E-G-B). Generally speaking, any chord which shares 2 notes of 3 with another chord can be used interchangeably with that other chord. Even if you're using A major triads (A-C#-E), drawn from the E Dorian chords, at other points in the tune, the ear can accept the appearance of the C# (in the A triad) in one place, and the C natural (in the C triad) in another. The point is to choose chords which fit the particular phrases they are accompanying. So if you have the melody phrase B-e-d where the B and the e are the

important, accented notes, you can harmonize that phrase with Em (E-G-B), but you can also get away with substituting the bVI major chord (C-E-G), because both contain the note e, and because Em and C major share 2 of 3 notes.

You can actually discover many other substitutions that function for combinations of the above reasons. In E Dorian, for example, the following substitutions can work--note, however, that just because they CAN work does not necessarily mean that they are especially artful or musical in all circumstances:

E Dorian:

Em	F#m	Gmaj	Amaj	Bm	C#dim	DmajEm
E-G-B	F#-A-C#	G-B-D	A-C#-E	B-D-F#	C#-E-G	D-F#-A E-G-B
i min	ii min	bIII	IV	v min	vi dim	bVII i min

Available substitutions:

i min <-> bIII (Em) (Gmaj)

bIII <-> v min (Gmaj) (Bm)

ii min <-> bVII (F#m) (Dmaj)

ii min <-> IV (F#m) (Amaj)

etc

All modes, and all chords built on those modes, will have similar available substitutions. By figuring out which chords in a given "family" share 2 of 3 notes, you can discover many new combinations of chord progressions and substitutions. These can provide new ideas and new chordal colors, as well as new basslines and harmonization possibilities.

Try figuring out all the chord qualities (I-II-III-IV-V-VI-VII) for each of the four Celtic modes (Ionian, Mixolydian, Dorian, Aeolian), and then figuring out the patterns of substitution in each mode. Realize that the relationships between chords in a particular mode will be the same, even

if the tonic note/tonal center change (eg: the I-thru-VII chord qualities, and available substitutions, will be the same in E Dorian, D Dorian, A Dorian, and so on).

Be aware, however, that not all melody players appreciate this kind of chord substitution (which is a prized skill in jazz). So you'll want to be sensitive to the preferences of the melody players who you're accompanying.

The most important thing to do at this stage of the game is to apply the above: work through each of the above examples, using tunes in all four modes and based in the common key areas in Irish music (C, G, D, A, E, and selectively B and F#). If you're assiduous, you'll soon that your range of options, and even your sense of what's possible harmonically, dramatically increase.