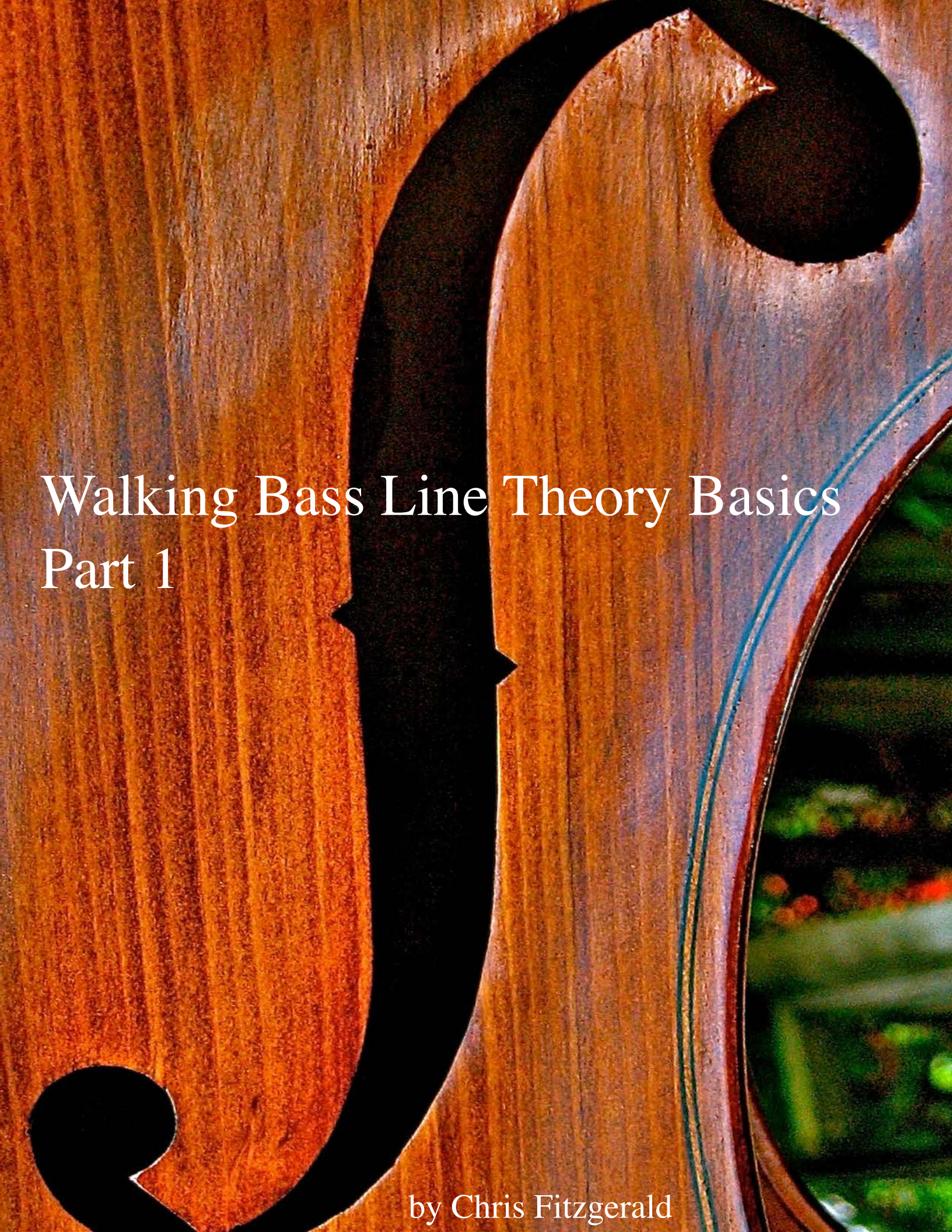

# Walking Bass Line Theory Basics Part 1

by Chris Fitzgerald

# Walking Bass Line Theory Basics

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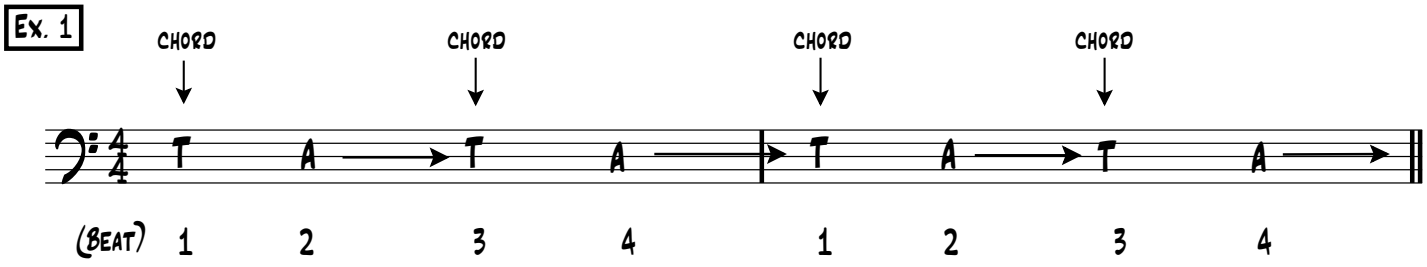
**Target Note:** a note that is played with the intent to outline a chord in a chord progression, usually on the first beat that the chord appears within the progression. For beginning bass lines, the Root of the chord is the most common target note to play because it is the fundamental note of the chord.

**Approach Note:** a note that leads into a target note in an aurally logical way. Approach notes usually occur on the beat before a target note.

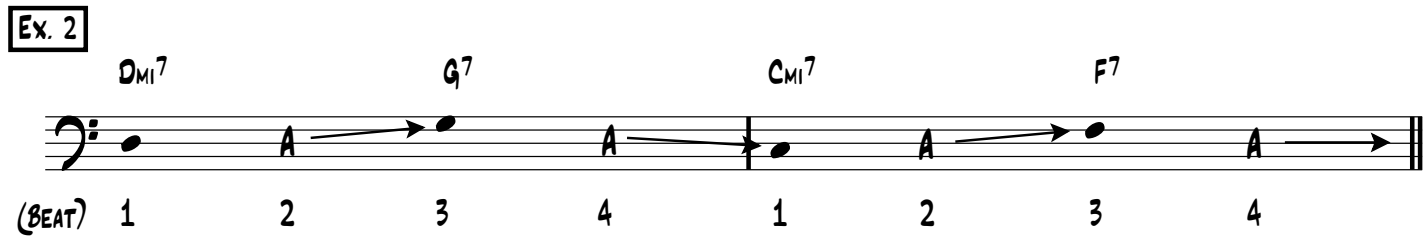
**Harmonic Rhythm:** the rate at which chords change in a progression. In 4/4 time the most common harmonic rhythms are one chord per measure or two chords per measure. It is common for the harmonic rhythm to vary within most chord progressions.

When the harmonic rhythm of a progression of a song is two chords per bar, the bass player will often play a target note on beats 1 and 3, and an approach note on beats 2 and 4.

The following is an example of a common bass line construction when the harmonic rhythm is moving at the rate of two chords per bar (Target notes are designated with "T", and approach notes are designated with "A").

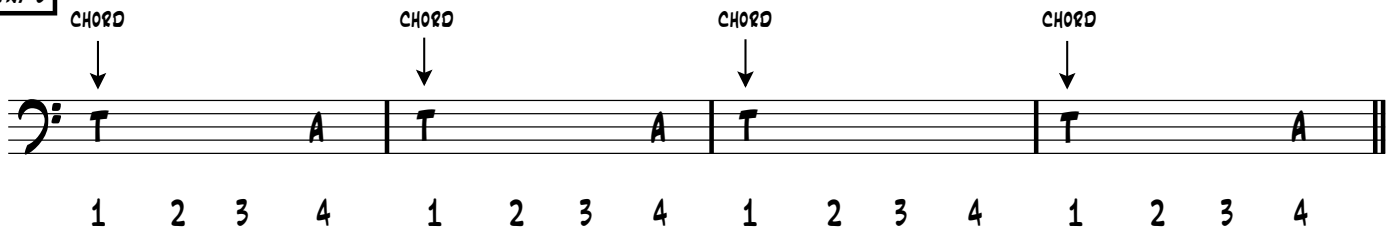



Since the root is the most common target note used in beginning bass lines, a bass line for the following progression could be constructed as follows:



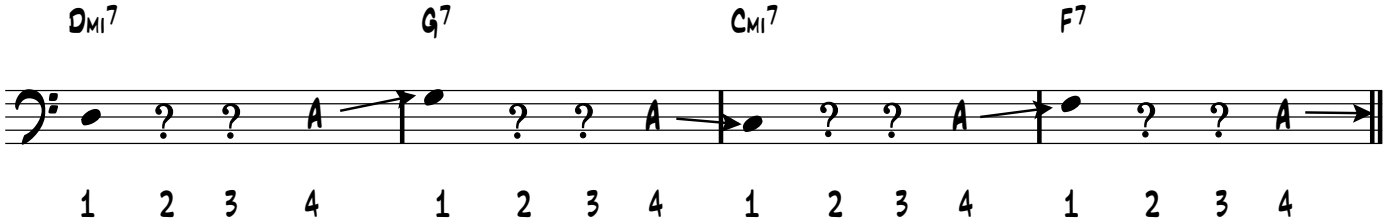
Where the harmonic rhythm is one chord per bar, the groups of target and approach notes are separated by two beats of space where the player has to decide how to fill the space between them.

Ex. 3




Using the root for each target tone, a bass line for the following progression could be constructed as follows (notes on beats 2 and 3 are designated with question marks here):

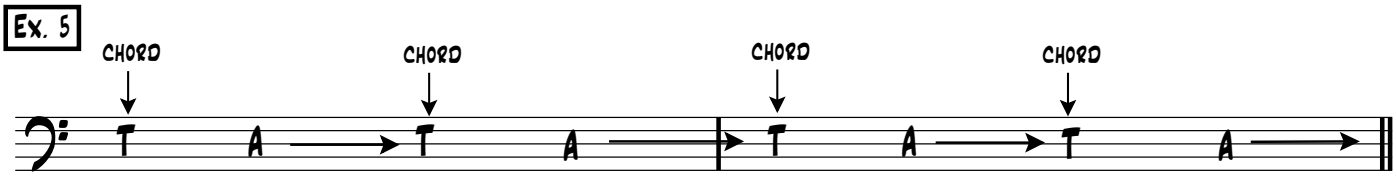
Ex. 4




**Based on the preceeding examples, it could be argued that the concept behind much bass line construction (at least in the beginning stages) could be simplified down to the following big-picture formulas:**

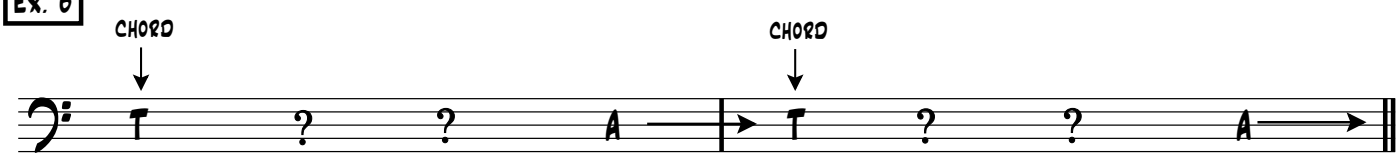
Where the harmonic rhythm is two chords per bar, the player is thinking only about target notes and how to approach them (same as Ex. 1):

Ex. 5




Where the harmonic rhythm is one chord per bar, the player is thinking about a target note on beat one, an approach note on beat four, and two variable notes to flesh out the harmony and lead to the next aproach note:

Ex. 6



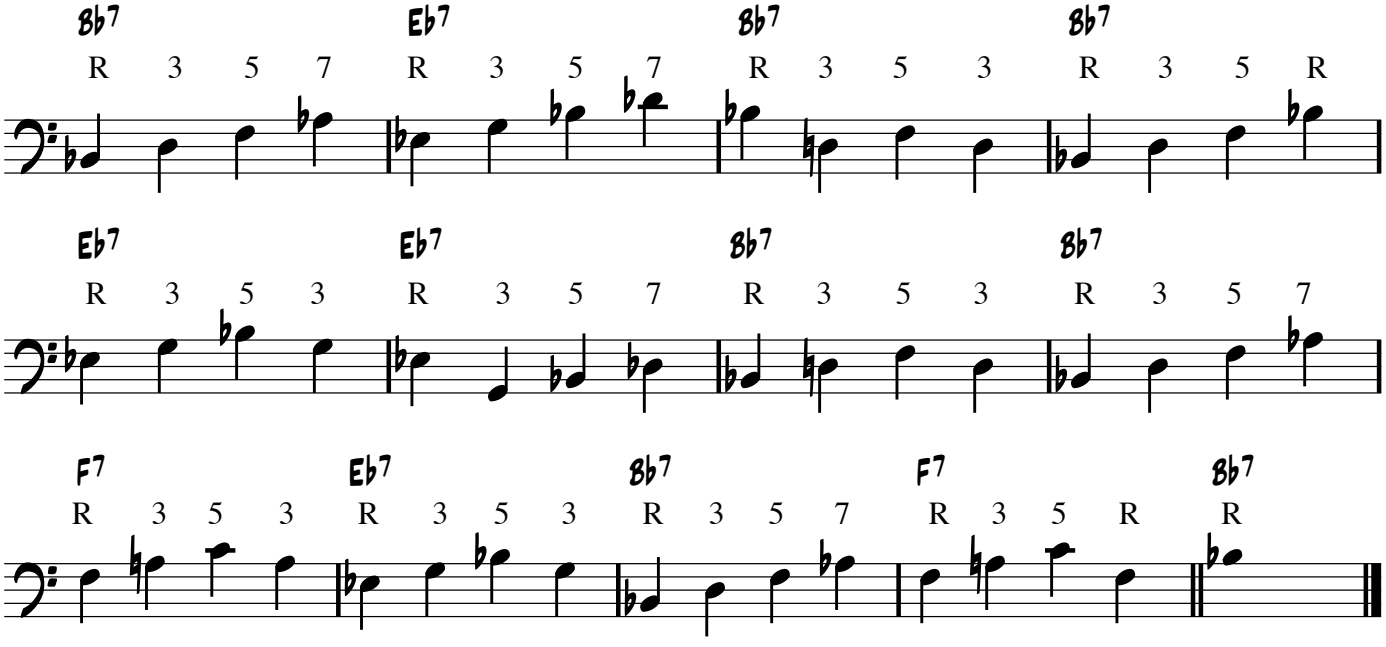
***Observation:*** *the preceeding examples illustrate an important point - progressions that feature a faster harmonic rhythm may be difficult to execute on the instrument (especially at faster tempos) because of the number of details that need to be realized in order for the outlining of the progression to take place, but they are actually very simple on a conceptual level because the player is left with fewer choices to make than when the chords are spaced farther apart. In Ex. 5, assuming that the target note chosen will be the root, the player's only real time choice is what kind of approach note to use. In Ex. 6, the player has two open-ended choices to make for each chord change in addition to choosing the type of approach note to use to lead into the next target. In progressions where the harmonic rhythm is even slower (i.e. - where there is a new chord only every two, four, or eight bars), this effect is multiplied, resulting in many more decisions which must be made by the player in real time.*

At this point, for the level of bass line construction we are discussing, the root of each chord is usually the best choice for the sake of simplicity of thought and clarity of the overall musical result. This leads us to a discussion of the different types of approach notes commonly found in walking lines.

**Types of Approach Notes:** earlier in this document, we defined the term "Approach Note" as "a note that leads into a target note in an aurally logical way". The key question, then, is how to define the words " aurally logical". For our purposes here, we'll examine two general categories of approach notes, then get into more specific details of each from there.

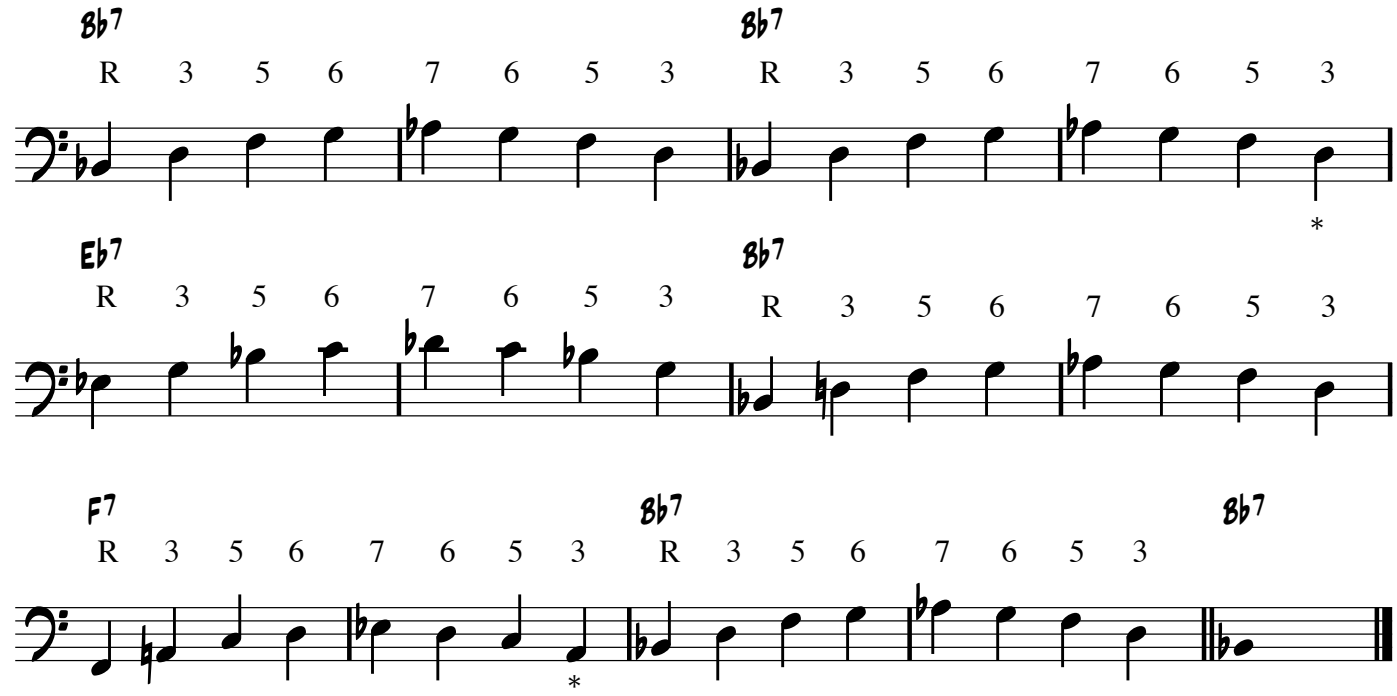
***Non-Stepwise Approach Notes:*** as the name suggests, these are approach notes that lead to the target note of the next chord change by intervallic leap rather than by step. The most common way that this is done while still maintaining the "aural logic" mentioned above is to jump to the target note from a chord tone that is part of the previous harmony. An example is given below:

Ex. 7



In this example, the bass line consists of simple arpeggiations of each chord, giving the overall effect of a simple blues bass line. A slightly embellished version of this kind of line would also be typical of a basic "boogie woogie" type bass line, as in the following example:

Ex. 8




While both of the previous examples are certainly "aurally logical" and fairly typical of the style, it could be argued that when it comes to the connections between each chord and the next, most of the "approach tones" that occur right before the root of the next chord aren't really approach tones at all but are rather simply part of the preceeding harmony. In other words, in all the lines above, if the music were to stop on beat four right before a new chord was about to be outlined, the listener would have a great sense of what harmony had just been played but little or no sense of what the next chord root was likely to be if they didn't already know the progression. But two of the approach note resolutions in Ex. 8, marked by asterisks above, are arguably stronger and more compelling resolutions because in addition to continuing the ornamented arpeggio pattern that the line begins with, they also resolve to the root of the next chord *by step rather than by leap*. This leads us to the discussion of *stepwise approach notes*.

**Stepwise Approach Notes:** as the name suggests, stepwise approach notes are notes that lead into a target note by stepwise motion (i.e. - by half step or whole) rather than by a musical leap. If we look at these scientifically, there are four different kinds of stepwise approach notes:

- approach by whole step from above
- approach by whole step from below
- approach by half step from above
- approach by half step from below

Stepwise motion fits the definition of "aurally logical" perfectly because of the way this kind of approach note leads directly into the target note that follows it. While the four types of stepwise approach notes above cover all four possible ways that stepwise approach notes could occur in a line, for the purposes of deciding how to use each kind of approach note in the moment, it is useful to further group stepwise approach notes into two basic categories: *Diatonic* approach notes, and *Chromatic* approach notes.

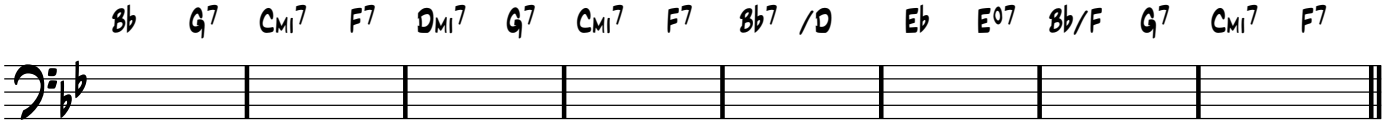
**Diatonic Stepwise Approach Notes:** in general musical usage, the term "diatonic" means *within the tonality or scale without chromatic alterations*. For our purposes, this means that a diatonic approach note would already exist within the chord currently being played, or be chosen from the scale tones between the chord tones that would be considered within the tonality of that chord. Because of this, we can make several general observations about diatonic stepwise approach notes:

- They tend to sound very logical, and don't challenge the ear by bringing in notes from outside the key.
- Because they are part of the tonality that's happening, they don't create dissonant clashes within the line; in other words, they almost never sound "wrong".
- Because most scales and tonalities contain both half and whole steps, a stepwise diatonic approach note can be any of the four types of stepwise approach notes listed above.
- Because this type of approach note is by definition "from within the key", the player must have a solid theoretical knowledge of the progression being played in order to play them consistently.

This last point is important, especially when you stop to consider that walking bass lines are usually constructed and executed in the moment. Players who consistently construct logical lines are usually those who have absorbed the concept and sound of line construction over a period of years to the point where the theoretical concepts have been absorbed and internalized so completely that they are automatic. In musical execution, as in most other skills, thought and creativity share the same mental bandwidth; the more you have to think while in the flow of the activity, the less creative you can be. For this reason, it's a good idea to practice creating each type of approach note systematically in the practice room, so that when it comes time to perform, you can do so with as little thought as possible devoted to music theory in order to leave your mental bandwidth free to hear and create melodic ideas.

The next few examples will explore how the concept of stepwise diatonic approach notes could be applied to a chord progression like the first 8 bars of the song "I Got Rhythm", commonly known as "Rhythm Changes".

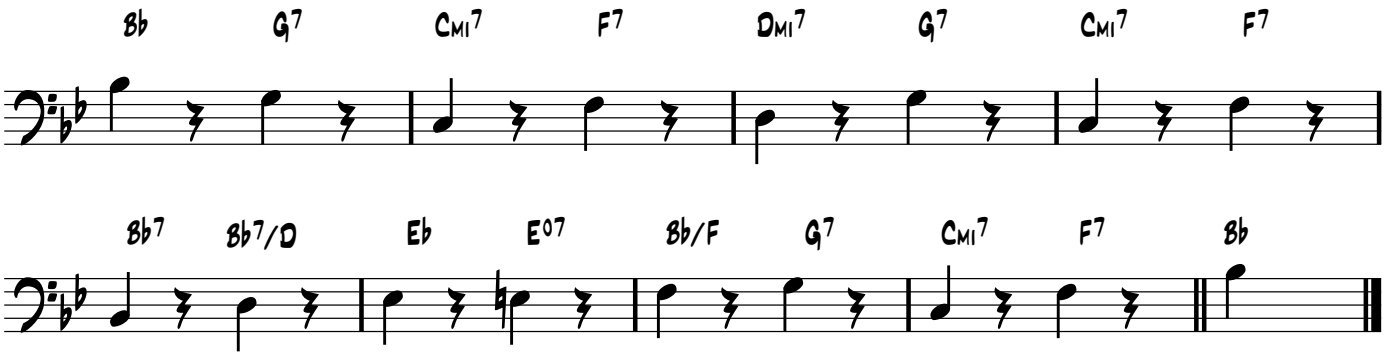
Ex. 9



(Note: while there are many ways to harmonize the Rhythm Changes progression, these chords were chosen because they are pretty standard and because they maintain a consistent harmonic rhythm, which helps us focus on the approach notes)

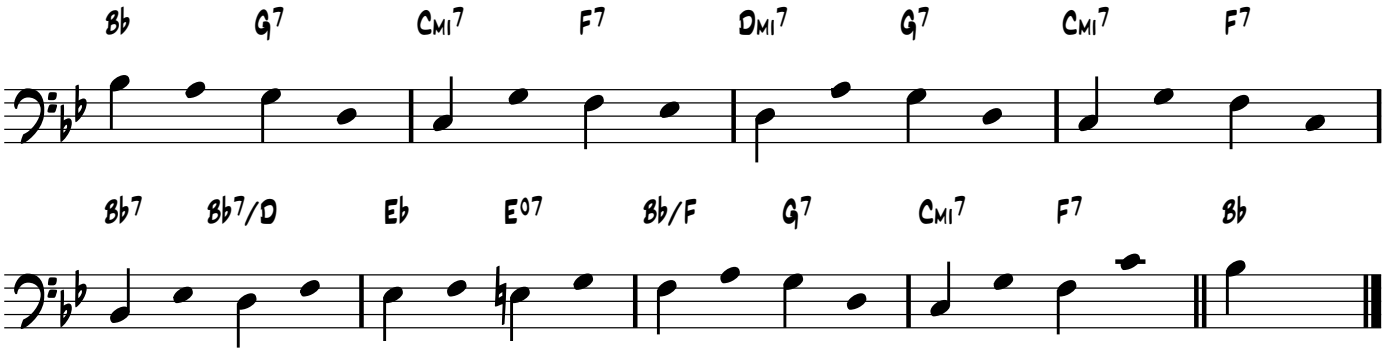
If we fill in the root of each harmony (or the bass note where the chord is in inversion), the result would look something like this:

Ex. 10



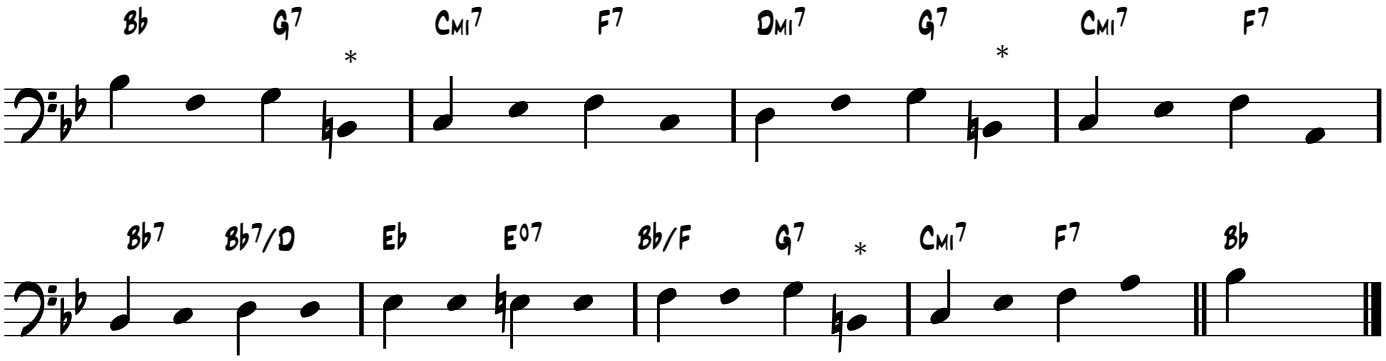

Next, we'll fill in diatonic stepwise approach notes that approach each target from above (approach notes drawn without stems):

Ex. 11




Now we'll fill in diatonic stepwise approach notes that approach each target from below:

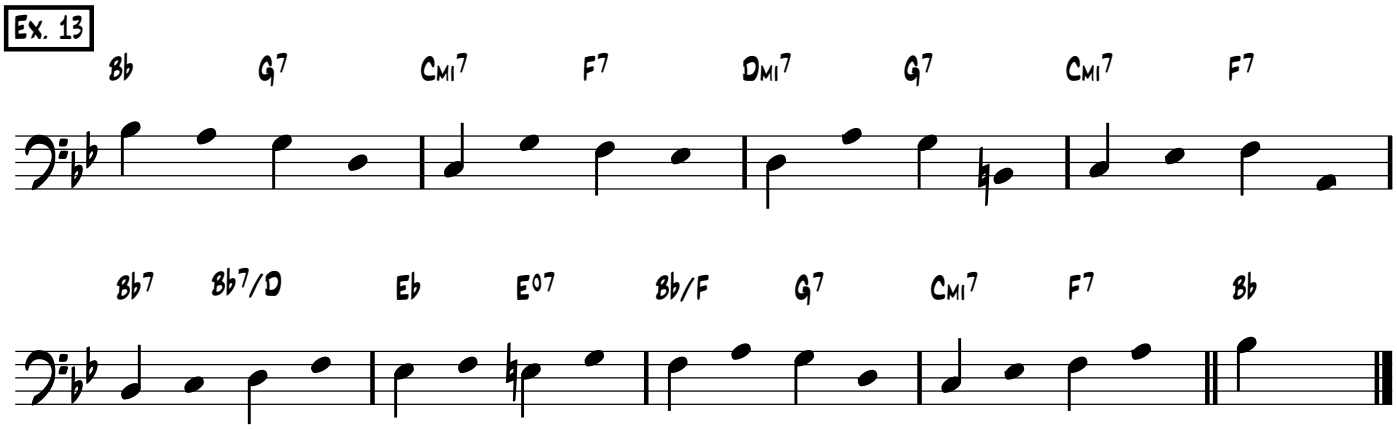
Ex. 12



There are several notable things about the approaches from below in the previous example:

- Where there is an approach note in the duration of the G7 chords leading to C, the B flat is raised to a B natural, because B natural is the 3rd of the G7 chord.
- There are a fair number of repeated notes in the line where the motion of the chord roots is stepwise. In spite of an "urban myth" to the contrary, it is common for walking bass lines to include repeated notes where they make musical sense to the player.

Last, we'll close this section on diatonic stepwise approach notes with an example that mixes both upper and lower diatonic approach notes:

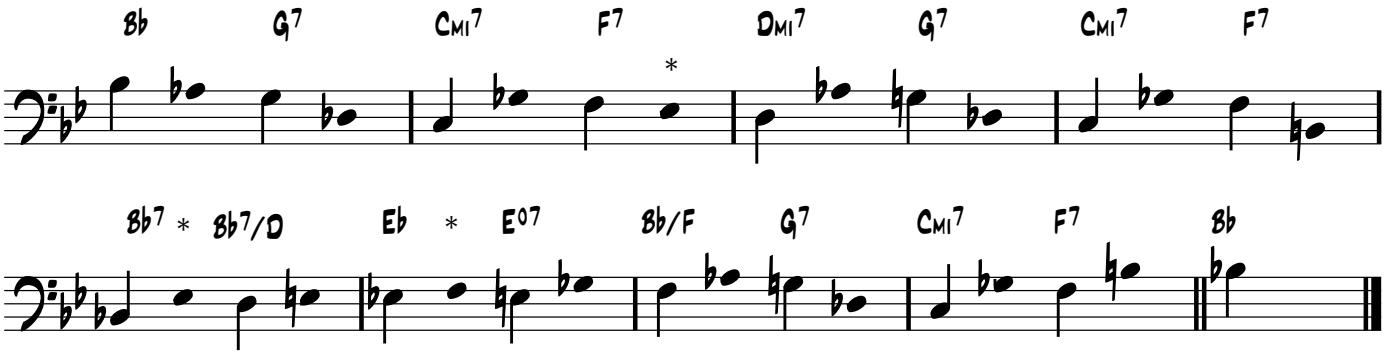



**Chromatic Stepwise Approach Notes:** While the term "chromatic" has several different musical definitions, for our purposes here we'll define chromatic approach note as *a note that resolves to a target note by half step from either above or below*. This definition allows us to greatly simplify the matter, because by using it we no longer need to concern ourselves with whether or how a note fits into an existing tonality or scale; rather, by defining the term this way, we admit that what makes this type of note work is its strong *tendency to resolve* rather than how it fits into a tonality or scale. We can make several observations about chromatic approach notes:

- While the upper and lower chromatic aproach notes sound different from each other, both resolutions have an unmistakable sonic logic to them, even when the approach note taken out of context would be a "wrong note" in terms of the tonality or scale of the moment.
- They require no theoretical knowledge on the part of the player other than how to play a half step above or below a target note on the beat right before the target note is played.
- Some diatonic approach note resolutions, both from above and below, are by half step: for example, in the excerpt above, the diatonic approach note resolution "Eb to D" at the end of measure 2 is an example of a descending stepwise approach note that is both diatonic and chromatic; likewise, the ascending "A to Bb" resolution at the end of measure 8 is an example of an ascending stepwise approach note that by our definition is both diatonic and chromatic.
- In light of the last point made above, a chromatic approach note will not necessarily have to be written with an accidental when written in musical notation.

The following example continues our exploration of building lines on Rhythm Changes by approaching each target note with a chromatic approach note from above (notes that are also diatonic approach notes are marked with an asterisk):

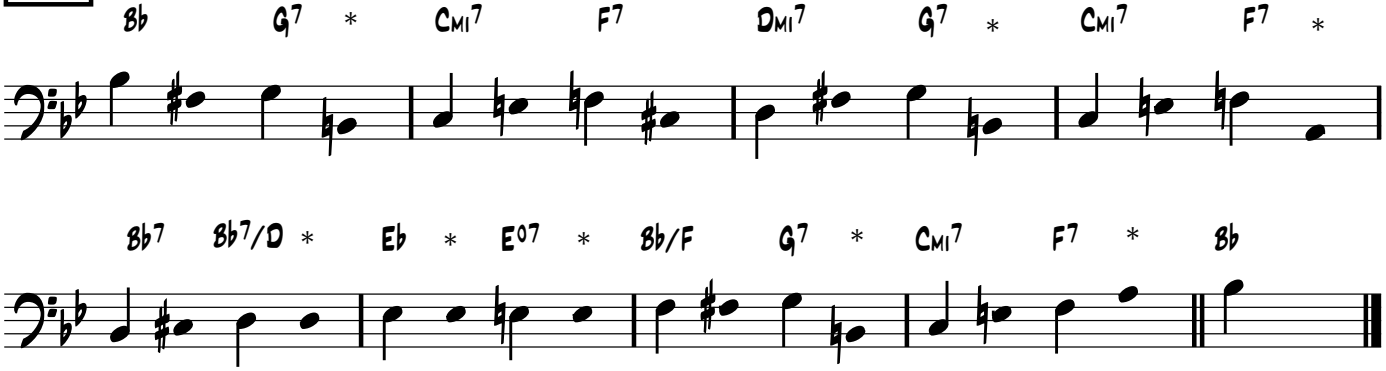
Ex. 14




Notice the way that many of the upper chromatic approach notes sound dissonant against the key of the chord progression. This can be somewhat disconcerting to many beginners to line building, but in fact it is neither a good thing or a bad thing; rather it is something to simply be aware of. The dissonance or "wrongness" of these notes is actually the very thing that makes their resolution to a "right" note so effective in terms of tension and release.

Next, we'll follow with an example of the same progression approaching each target note with a chromatic approach from below (notes that are also diatonic approach notes are again marked with an asterisk):

Ex. 15



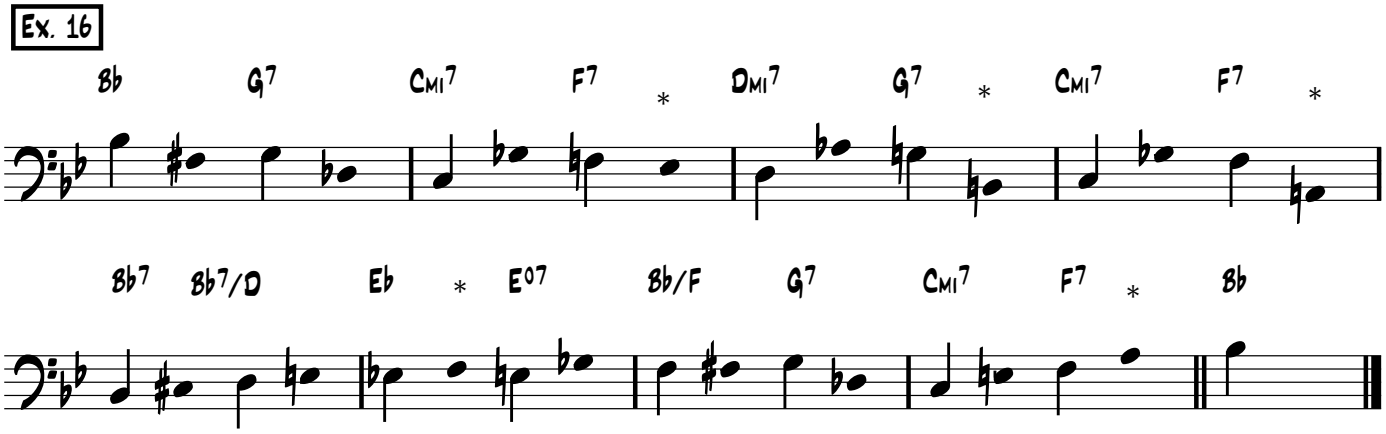

A couple of interesting observations can be made after listening to this example:

- In most progressions, lower chromatic approach notes are more likely to also be diatonic approach that upper chromatic approach notes are; in this example, 8 of the 16 (lower) chromatic approach notes were also diatonic approach notes, while in the previous example only 3 of the 16 approach notes were also diatonic. There is a theoreical explanation for this but it's not terribly important for our purposes here.

- Much more of interest is the way that most people hear the non-diatonic lower chromatic approach notes as being less dissonant than the upper chromatic ones. This likely has to do with the fact that they sound like "leading tones", which have been a staple of melodic resolution in western music for hundreds of years as the strongest and most foundational kind of imperative aural resolution the music has to offer.

- For our purposes in line building, these two perceptions of chromatic approach tones (from above being more dissonant, and from below being more consonant) can be extremely useful to anyone building a line in real time, as it gives the improviser a big picture control over how consonant or dissonant they want their line to be at any given point by making a very simple decision:  chromatic from above or below? Dissonant, or consonant?

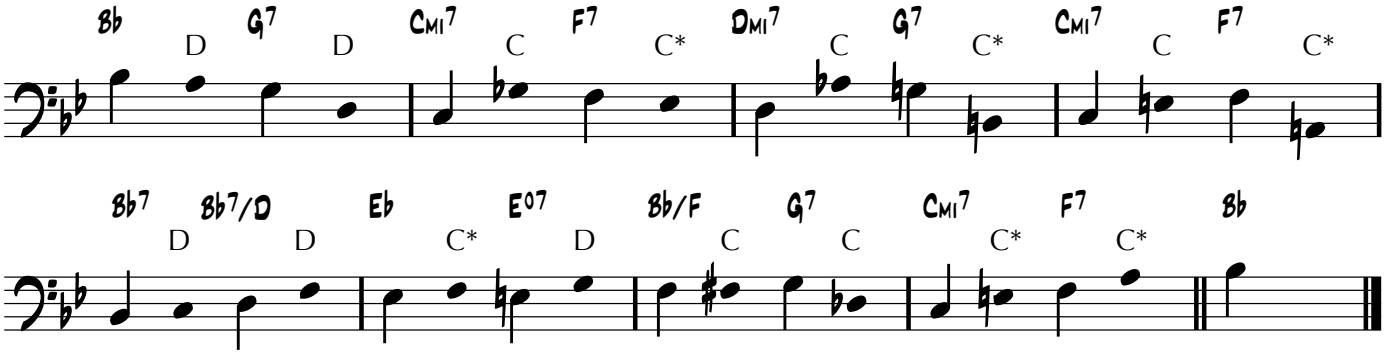
The following example combines both types of chromatic approach notes to get the best of both types:




At this point, we've systematically examimed both diatonic and chromatic stepwise approach notes, looking at and listening to how they each sound when applied to a chord progression from above, from below, and in combination. Rather than attemping to discern which is more useful or somehow "better sounding", it is probably best to simply observe that each type of approach note is useful in its own way, and that limiting ourselves to only one or two types because we favor them for whatever reason (many young players tend to favor the chromatic ones because they don't require as much theoretical knowledge as the diatonic ones) is in effect only limiting our melodic vocabulary that we use to construct our lines. Each of the previous examples works as a clear melodic outlining of the chord changes, with the third example in each category - the example in which the approach notes from above and below are combined - exemplifying the most varied usage of that type to construct a line which allows the improvising bassist to have some creative input into the contour and sound of the line while still being able to minimize the number of decisions to be made in real time. And in the end, as improvising musicians, when creating melody we want our decisions to ultimately be intuitive decisions we make because we hear with our inner ear that a certain decision will lead to a better melodic line. Practicing building and hearing each of the components of these decisions individually is a great way to build a vocaulary that will eventually result in a natural intuitive melodic flow.

Our final example in this chapter, then, would logically be one which combines all of the previous types of approach notes, drawing on the possibilities of each. The example will be analyzed with notations showing whether each stepwise approach note used is diatonic (D), chromatic (C) or both (C*):

Ex. 17




The above example uses five diatonic whole step resolutions, five purely chromatic resolutions (that are not part of the chord or tonality), and five "hybrid" chromatic resolutions (half step resolutions that also happen to be diatonic). Having all of these different types of resolution under the fingers and in the ear is important not only to build compelling bass lines, but also to have the means to vary the melodic content of the lines at will. Remember that this is only one "A" section of one chorus of what often turns out to be an extended improvisational vehicle. Great improvising bassists tend to vary their lines with each new section and chorus, and it takes a great command of vocabulary to do that in real time. With just these few tools and the ability to vary the octaves in which the target notes are played from section to section and chorus to chorus, a great bassist could create a vast amount of melodic variation out of just these few devices we have discussed here.

In our next chapter, we'll begin to discuss building lines on chord progressions where the harmonic rhythm is slower (chords spaced farther apart), resulting in the player having many more choices to make just to get from the target note at the beginning of the measure to the approach note that may be 3, 7, or many more beats away. In the meantime, there is plenty to practice!