

## **The Harmonic-Bass Divorce in Rock: A Method for Conceptualizing the Organization of Chord Extensions**

### **Introduction**

Hello. If you would like to download the slides for my talk, you can do so at the web address shown here: [midside.com](http://midside.com) [slash] slides.

In the past decade or so, music theorists have begun to closely study the ways in which pitch organization in rock music departs from common-practice conventions. One well-known scenario is the “melodic-harmonic divorce,” in which the melody and the harmony appear to operate independently of one another.

[NEXT] A good example of “melodic-harmonic” divorce can be found in the song “Rock’n Me” by the Steve Miller Band. In the third bar of the verse, the harmony moves to a power chord on A. [NEXT] But while the guitar and bass move to a different chord, the melody seems stuck in the original tonic key of B major. Given the underlying A chord, most of the notes of the melody would be considered non-chord tones; but the song does not seem to treat them as non-chord-tones or dissonances in any traditional way. Instead, the melody appears to freely traverse the B major pentatonic scale without much apparent regard to the A chord underneath. Let’s listen. [NEXT]

In my paper today, I show that, in rock music, we can also find a related type of independence or stratification between the harmony and the *bass*—what I call the “harmonic-bass divorce.” [NEXT] In his 2015 *Spectrum* article, Drew Nobile identifies three types of “melodic-harmonic” divorce: “hierarchy,” “loop,” and “syntax divorce.” [NEXT] Two of these categories — hierarchy divorce and syntax divorce — are especially applicable in describing instances of harmonic-bass divorce. I will also show some cases of loop divorce, which seem to often occur in tandem with hierarchy and syntax divorce.

### **Hierarchy Divorce**

[NEXT] Returning to this Steve Miller Band example, Nobile classifies its harmonic-melodic divorce as a “hierarchy divorce,” which his Schenkerian analysis illustrates, as shown at the bottom of this slide. Specifically, Nobile views the melody alone to convey the underlying tonic of the first four bars; the power chord on A is merely a surface-level passing harmony.

Now I want to point out that a “divorce” exists here only if we categorize non-triadic notes as non-chord tones. That is to say, we might simply view the third bar of this example as an A major 9 chord or as an A 6 add 9 chord. In other words, the harmonic-melodic “divorce” can be seen as a way to explain how upper-voice chord extensions arise and organize. As I hope to show today, the harmonic-bass divorce is also useful as a conceptual method for organizing such chord extensions.

[NEXT] The most obvious example of harmonic-bass divorce—one with which we are all familiar—is the pedal point. Here is one of many examples from the classical repertoire. A pedal point is a “hierarchy divorce” between harmony and bass, since the upper-voices convey a syntactically-valid harmonic progression on the surface, even though the underlying and background harmony, as conveyed by the bass note, is a long span of tonic. Here is a recording of this example on organ, to highlight the sustaining bass note. [NEXT]

### **Syntax Divorce**

Pedal points are common in rock, too, of course. [NEXT] The opening to the song “Jump” by Van Halen is one of many possible examples. This song also shows evidence of another type of harmonic-bass divorce. What you see on the slide here is actually my own recomposition of the opening to this song. I have left the first three bars the same, but I have changed the bassline of the last bar to follow the upper-voices, so that we hear root-position F, C, and G chords. [NEXT] I’ll play my recomposition now, which I created by removing the original synthesizer part from the album and replacing it with my own synthesizer part. Again, focus on the harmony of the last bar. [NEXT]

As some of you may know, the real bassline looks like this. [NEXT] Instead of root-position F, C, and G chords, the tonic pedal continues through the F chord, but then as the upper voices move to a C major chord, the bass line moves to F. Only on the G chord do the upper voices and bass line come together. The penultimate sonority, therefore, looks like a tonic chord over scale-degree 4. [NEXT] Following Nobile’s work, I categorize this as a “syntax divorce.” In a syntax divorce, we find two coincident but separate goal-directed motions, as seen here in the approach to the final chord. Let’s listen, and pay particular attention to this C over F chord. This is the original recording, by the way [NEXT].

Personally, I think it is possible at the end of this phrase to hear both the tonic to dominant progression in the upper voices against the move from subdominant to dominant in the bass. That said, I must admit my hearing of chord function is strongly influenced by the bass. So if I were forced to use Roman numerals, I would choose IV going to V. This brings up an important point: When I talk about the “harmonic-bass” divorce, I use the term “harmony” as a convenient way to talk about the harmonies implied by the upper-voices considered separately from the bass.

[NEXT] I want to also concede that there are a few different ways to label or understand the penultimate chord without necessarily invoking the notion of the “harmonic-bass” divorce. For instance, we could simply label it as a IV major 9 chord. But that label seems to miss the mark since the chord is missing its third. We could also simply call it a passing chord, although that seems to avoid the question. Ultimately, the label C over F seems to be the best way to capture the particular sound of this event.

## Slash Notation

This C over F label is what jazz musicians often refer to as a “hybrid chord.” The possibility for such “hybrid chords” falls out of the standard slash notation of pop chord symbols, which inherently distinguishes between a chord and a bass note. And I believe this slash notation gives some evidence of a conceptual distinction among pop musicians between the chord (or harmony) and the bass.

[NEXT] To follow up on this idea, consider the chord chart shown here. For those of you not familiar with this format, this is an excerpt from a Nashville number chart, which is the standard way of notating songs in Nashville studios. The chord notation is not complicated; essentially, it converts pop symbols into Arabic numbers given the key of the song. [NEXT] For example, this chart is in G major, so the chords in the red box are E minor, D major, C major, a first inversion G major chord — that’s the 1 over 3 — and so on. [NEXT] In the third bar, notice how the author of this chart notates the 1 chords over scale-degree 4 in the bass. This is another instance of syntax divorce, where the bass and upper voices follow different tonal paths. Let’s listen [NEXT].

[NEXT] Here is an excerpt from a different Nashville chart. This song is in D major, so the second chord of the verse is a tonic chord over scale-degree 6—in other words, a D major chord over a B in the bass. As you listen to this excerpt, be aware that the song is in half-time, so the chords move quickly. [NEXT]

Now some of you may be thinking: “Trevor, isn’t a 1 chord over scale-degree 6 just a 6 minor 7 chord?” Well, yes, the scale-degree content is the same. But I should point out that Chas Williams—who authored this chart—is a very accomplished Berklee-trained session musician in Nashville. When I wrote to him about this 1 over 6 chord, he replied, [quote] I want the guitar players to think more in terms of hanging on a 1 chord while the bass does the movement [end quote]. Notice that he says he wants the guitar players to THINK in terms of a tonic chord, implying that his notation is a conceptual way to approach chord voicing. For me, this passage is another example of a hierarchy divorce, although there is an important difference from the standard pedal point. Here, the upper-voices express the background tonic prolongation against the surface-level embellishment of the bass — the opposite of a traditional pedal.

This sort of “flipped” pedal, where the upper voices sustain a chord against a moving bass, can be found in many other pop songs. For the sake of time, I’ll just give one example, which was suggested to me by our esteemed session chair. [NEXT] This is the song “With or Without You” by U2. At the beginning of this song, a looping guitar part pedals the tonic harmony while the bass reinterprets this ostinato in the context of an implied 1-5-6-4 chord progression. Let’s listen [NEXT].

It is important to mention that the distinction between a hierarchy divorce and a syntax divorce is sometimes unclear. [NEXT] Let's look at one more Nashville chart, this one by Jim Riley, who is the bandleader for Rascal Flatts. The divorce between bass and harmony found here occurs at the 4 minor chords over scale-degree flat-seven in the bass. [NEXT] But is this a hierarchy divorce, in that the flat seven in the bass is a surface-level embellishment to the underlying minor subdominant chord; or is this a syntax divorce, in that the 4 minor chord and the flat-seven bass note approach the cadence via two separate paths? Both explanations seem plausible. Here's what this sounds like. [NEXT].

### **Loop Divorce**

As I mentioned earlier, Drew Nobile discusses one other type of harmonic-melodic divorce, that being "loop divorce." In a "loop divorce," as Nobile defines it, the melody creates its own structural goals against the backdrop of a repeating chord progression. [NEXT] A similar effect can be found in certain types of harmonic-bass divorce, such as we see in the song "I Really Got the Feeling" by Dolly Parton. [NEXT] In the first two bars of the intro, the alternating C and G chords in the upper voices against the C pedal in the bass create a standard hierarchy divorce. The repetition of these two chords in the upper voices then sets up something very interesting, such that in the third bar, [NEXT] when the bass moves to F, I still hear the C to G progression in the upper voices, despite the obvious subdominant function implied by the bass. In other words, the upper voices continue to loop while the bass moves to a different pedal note. [NEXT] The last chord — the F over G — is a common sonority in pop/rock music known as the "soul dominant." The soul dominant — which we might also call a V 9 chord with a sus 4 — is a prototypical cases of syntax divorce, since the upper voices imply a subdominant chord over scale-degree 5 in the bass. Let's listen. [NEXT]

The particular strategy that we see here — a hierarchy divorce at the beginning of the phrase, followed by a loop divorce, cadencing in a syntax divorce at the end of the phrase — seems to be a common blueprint. [NEXT] As just one example, consider the intro to REO Speedwagon's "I Can't Fight This Feeling." [NEXT] Here again, we have a traditional hierarchy divorce in the first two bars, with the bass pedaling tonic while the upper-voices imply A major, E major, F# minor, and then E major again. [NEXT] That looping chord progression in the upper voices continues through bars three and four while the bass moves to scale-degree 6. [NEXT] And one more iteration of the upper-voice chord loop continues in bars 5 and 6 over scale-degree 4 in the bass, [NEXT] only to be interrupted by the soul dominant at the cadence. The soul dominant quickly resolves to a regular V chord, so we may not want to call it a true syntax divorce. But the overall strategy for this intro seems rather similar to the previous song. Here's the recording. [NEXT]

## Chord Extension Organization

As I near the end of my talk, I would like to connect the idea of harmonic-bass divorce back to the idea of melodic-harmonic divorce. [NEXT] In this regard, consider the opening verse of the song “I Can’t Make You Love Me.” If we just look at the melody and the chord changes, as shown here, we find a rather clear instance of melodic-harmonic divorce. Notice especially the first bar, in which the melody leaps from F to D over an E-flat major chord, and then comes to rest on a C over a G minor chord. Let’s listen to Bonnie Raitt sing this passage. Be aware that she includes some embellishments in her vocal melody that I have not transcribed here. [NEXT]

One of the reasons I transcribed the melody as I did, is because a more “straight” version can be heard in the keyboard introduction, as played by Bruce Hornsby. In his keyboard playing, Bruce Hornsby includes a number of chordal extensions, especially on the repeat of this phrase. Here’s what that sounds like [NEXT].

This is the point of the talk where I admit that I found it basically impossible to transcribe exactly what Bruce Hornsby plays on the recording, which is why I am not showing a transcription on this slide. But as I thought about how to get close to his keyboard part, I found the concept of harmonic-bass divorce to be helpful. [NEXT] Here is what I came up with. I’ll play this now, so that you can hear it, and I think it fairly closely approximates what Bruce Hornsby plays. For the sake of time, what you’ll hear skips the repeat and goes from the first ending directly to the second. [NEXT] My strategy in creating this version was to harmonize the melody in the right hand with simple triads — either 1, 4, or 5 — and play these against the bassline, which reinterprets them as chordal sevenths, ninths, and elevenths. Notice that the voice-leading in the upper parts, including the melody, is entirely conventional if taken separately from the bass. It is only when these upper voices are considered in the context of the bass that a divorce exists. To put this another way, the melodic-harmonic divorce that we observed in the previous slide, may be more a result of the bass divorcing from the rest of the texture than the entire harmony, per se.

## Conclusion

In conclusion, therefore, I think it might be best to think about the texture of a rock song as having not two but three different layers, each of which may achieve independence from the others. These three layers are: melody, bass, and the inner voices or “harmony.” [NEXT] To bring home this point, here is my final example, the song “Jumpin’ Jack Flash” by the Rolling Stones. This particular example was used by Davy Temperley in his 2007 article on the melodic-harmonic divorce. [NEXT] Indeed, there seems to be a stratification of melody and harmony in the second full bar, with the melody prolonging the B-flat tonic while the guitar chords move to A-flat. But as we listen to this excerpt, note that the bass stays on tonic throughout. In other words, the melody and the bass are not divorced — they are married; it is only the inner parts, or harmony, that has divorced. I’ll play this example, and that will conclude my talk. [NEXT]

[NEXT]