

1.1 Introduction

"How do I build a bassline?" This is a question every jazz bass player will ask at some point, hoping to get an answer that gives him or her the secret.

Well, the secret is: Root on beat 1, chord tones on beat 2 and 3, and chromatic or diatonic approach on beat 4. This is the simplest answer you will ever get and it is absolutely sufficient to build a bassline. In fact, for a regular II-7 | V7 | IM7 one bar each chord, which is a total of three bars or twelve beats, there are 39,366 choices *within one octave*. If you take the range that you can comfortably walk in (say from the open E string to the octave harmonic on the G string) you have 3,499,200,000 choices - give or take - depending on how you treat the approach notes.

If you play those back to back in a comfortable tempo of 120bpm you will be playing for a little more than 665 and a half years. If you stay within one octave it will only be a little less than three days.

Of course, a lot of these "choices" are useless. However, let's say 1% of it makes sense. Then you have roughly 400 choices within one octave and some 35 million if you use the range that makes sense for walking.

So this is one answer to the question of how to build a bassline, and I believe there are enough choices here to make good and interesting lines. In fact, I probably stick to this rule about 80% of the time, simply because it is the best way to blend in.

It is important to realize that aside from these roughly 400 choices within one octave, there are millions of other possibilities and none of the choices a good bass player makes should be random. Understanding the reasons behind the choices is usually how a bassline becomes a better bassline.

However, the next question could be: "How do I build a good or right or better bassline?" Or: "What are the choices for the remaining 20%?"

I believe that any note can be played on any beat and there are no hard-and-fast rules about it. Jazz would never have become what it is, had people not have made conscious choices to ignore and break rules. Musicians do this because they are hoping to make good or right or better choices - and as a listener you have to make the same choice. Do you like what you hear or not? It should not matter whether the person you are listening to or playing with is playing by the "rules" or not.

Again, I believe any note can be chosen on any beat, but in 8 out of 10 bars the better choice - depending on the music and the style - might simply be the one I described above: Root, chord tone, chord tone, approach. I believe it is the remaining 20% when we should use all the other choices we have. But our responsibility is to be aware of what this choice means - to the bassline, to the music, to our fellow musicians and to the listener.

In this book, I am trying to shine a light on what these choices can mean, so once you make that choice you will get a deeper insight in how to shape the 80% and also the remaining 20%.

I am not claiming to tell you the secret of what makes a great bassline because I believe everybody has to decide that for himself or herself. However, as bassists, we have to support and sometimes direct the music and in this book I am trying to explain what our choices of notes and shapes actually mean.

1.2 A Few Explanations

1.2.1 Degrees of the Scale

Roman numbers refer to the degrees of the scale:

I	Tonic
II	Subdominant Parallel
III	Dominant Parallel
IV	Subdominant
V	Dominant
VI	Tonic Parallel
VII	Incomplete Dominant Seventh

Altered degrees are indicated by a *b* or a *#* before the Roman number:

bII
bIII
#IV
bV
bVI
bVII

The Roman numbers are usually followed by a symbol, indicating the quality of the chord.

1.2.2 Chord Symbols

As for the symbols I use the following:

M	major triad
M6	major triad with a 6
M7	major triad with a 7
7	dominant 7 or major triad with a b7
-7	minor triad with a b7
11	triad with an 11 (usually replacing the 3 or b3)
-M7	minor triad with a 7
dim	diminished triad
dim7	diminished 7 th chord
-7b5	half-diminished chord
alt7	altered chord
+	augmented chord

1.2.3 Intervals

Arabic numbers refer to intervals, except for the root, which I simply call the root. The intervals of the major scale have no accidentals; all others have accidentals referring to the major scale:

b2	minor or flat two	one halfstep
2	two	two halfsteps
b3	minor third	three halfsteps
3	major third	four halfsteps
4	four	five halfsteps
#4	tritone	six halfsteps
b5	tritone	six halfsteps
5	five	seven halfsteps
b6	minor or flat six	eight halfsteps
6	six	nine halfsteps
b7	minor or flat seven	ten halfsteps
7	major seven	eleven halfsteps
8	octave	twelve halfsteps
11	eleven	seventeen halfsteps

Since we are mostly talking about harmony and intervals in a horizontal sense, rather than a vertical one, I prefer to stay within one octave when choosing the name of the interval. If I believe certain notes should be further apart than an octave, I will indicate this by suggesting different registers on the instrument.

The only exception is the 4 and the 11. If written as 4 it is a perfect fourth above the root, if written as 11 it is a higher octave and most of the time also resolving to the 3.

1.2.4 The Beats of the Bar and Bar Numbers

Beats of the bar are referred to with Arabic numbers, example: Beat 1, beat 2, beat 3, beat 4.

The number of the bar in the cadence is written in letters: Bar one, bar two, etc.

1.2.5 Tension and Release

Every note has a different degree of tension or release within the cadence, depending on its harmonic context, where it is placed rhythmically and on its neighboring notes. I am using the letter R for notes I associate generally with a resolution letter T for notes that I generally associate with tension.

- R** Root of the tonic chord as the strongest resolution
- r** A chord tone of the Tonic, such as 3, 5 or maybe 6, that suggests a resolution to the tonic
- R** Root of other chord, suggesting a resolution to the major functions within the cadence
- r** A chord tone of another chord of the cadence, suggesting a resolution to the harmony of this chord
- T** A non-diatonic Guide note, the strongest tension
- t** A diatonic guide note
- T** A root of a substitution chord, suggesting a tension to both, the original chord and the tonic of the cadence
- t** A root of a diatonic chord, suggesting a tension in the function of the cadence

There are far too many different situations and far too many different ways of interpreting them to make this a consistent and unambiguous classification. In many cases there will be different ways of interpreting. I try to choose the function that is strongest for me, at that moment.

For example a root 5 of a V7 in beat two on beat 1 can be marked as r, a chord tone of the V7, or as T, if its function is that of a II-7 substitution. A root of a bII on a beat one of bar two is the root of a tritone substitution, marked with T. On a beat 4 of bar two, the same note will probably be marked with **T**, since it acts as a non-diatonic guide tone. Especially when dealing with lines based on the strength of the melody or a melodic shape, the distinction between tensions, roots and substitutions becomes a gray area.

1.2.6 Terminology

I have tried to be as specific as possible when I discussing one particular note and try to be clear about its place in the bar, the number of the bar itself, the interval of the note and the harmony it is referring to.

In general, I try to avoid the use of chord names, such as CM7, D-7, Abdim7, etc., but rather refer to them by their harmonic function: IM7, II-7, bVIIdim7 etc.

1.2.7 The Use of Accidentals:

I believe accidentals should be harmonically true. In other words I prefer writing and reading a Cb in a Db7 chord, rather than a B.

I make an exception, when the harmonic direction or the melodic character of the note contradicts with the harmonically true accidental. For example for a Cb on beat four of a Db7 (bII7), followed by a root of a CM7 (IM7) on beat one, I chose to write the note B, because it is harmonically already functioning as the ascending guide note to the next chord.

For practical reasons, I tried to avoid the use of double accidentals, which most of the time occur in diminished chords anyway, and also this allows a more flexible interpretation of the note.

There may be some grey areas, where the choice of the accidental is simply a matter of personal choice.

2.8 The 5

Given the nature of functional harmony, a lot of root movement happens in fifths. For the 5 as a bass note this means mainly two things:

- It is often perceived as the root of an intermediate dominant.
- It has a similar approach quality to the b2, when used in a descending direction.

2.8.1. The 5 on Beat One

Even though the 5 is a very important chord tone, beat one is not the most common place for it. Usually a line will lead to a resolution on the root of the next bar. The 5 is often the root of the proceeding bar, which means the perception of a resolution is not very strong. The most obvious example is the common 5 pedal throughout the entire cadence:

EX 2.8.1.1:



The effect is that we never really resolve at all, by choosing 5s on every beat of the IM7 of bars three and four. This "line" is of course very static with literally no melodic momentum and is often enriched with some rhythmic ideas. But in terms of harmony, it is the most consequent use of a 5 on a beat one when we take into account what a 5 on a beat 1 does to the harmony: it delays the resolution and often occurs as the root of the previous chord. At the same time there is no particular tension.

EX 2.8.1.2:



This example is most likely heard as a II-7 | II-7 V7 | IM7 | IM7 with the introduction of the dominant quality being somewhat delayed, yet without any extra tension. It is more like something is missing, than something has been added.

If we want to strengthen the II-7 on beats 1 and 2 of bar two we can add a chromatic approach on beat 4 of bar one.

EX 2.8.1.3:



The descending chromatic approach on beat 4 of bar one in this case suggests we continue to use the descending motion, which actually leads to the use of a 5 on beat 1 of bar three. The cadence is:
II-7 | II-7 V7 | V7 IM7 | IM7

The other option, which takes us a little further away from our original cadence, is the ascending chromatic approach on beat 4 of bar 1.

EX 2.8.1.4:



The M7 of the II-7 is very likely to be heard as a 3 of an intermediate VI7 dominant, followed by the root of the II-7 on beat 1 of bar two, in which case the cadence is: II-7 VI7 | II-7 V7 | IM7 | IM7

If we chose to repeat the 5 on beat 1 and 2 of bar two in particular, we can build it into another interesting line.

EX 2.8.1.5:



Here, it is really the descending scale that gives the line its main character. The 9 on beats 3 and 4 of bar one will most likely be interpreted as a diatonic passing note, the 5 on beats 1 and 2 of bar two as a diatonic note of the scale and probably even the b5 on beat 3 and 4 of the same bar is rather heard as descending chromatic approach, rather than a root of a bII7. This is all suggested by the rhythm of the cadence. The

result is a very smooth line that is also very close to the harmonic message of our cadence, even though the V7 in bar two is spelled out without three of its major notes, the root, the 3 and the 7.

If we change this rhythm in bar one the harmonic message of bar two becomes a little stronger, supported by the repetition of the notes on beat 1, 2, 3 and 4.

EX 2.8.1.6:



In this example, bar two is closer to a II-7 bII7. Of course this cadence suggests the following line.

EX 2.8.1.7:



The idea is similar, but it is based on a pattern of descending 3s, as well as two different melody lines on the down beats and the off beats of each bar. Beat 1 of bar one is a 5 of the II-7, but followed by the 3 and in the beginning of the line it is likely to be heard as that, rather than the root of a VI-7. This depends very much on what precedes the line, but it is of no importance for this example. Beat 3 of bar one is the root of the II-7, followed by the root of another II-7 on beat 1 of bar two, the root of a bII7 tritone substitution of the primary V7 on beat 3. Then we resolve to the root of the IM7 on beat 1 of bar three, followed by a M7 of the IM7 on beat 3, which indicates an intermediate dominant, resolving again. All the downbeats have a very clear root motion, changing every half of the bar. The off-beats stay on the same note, which is the 3 in bars one and two, resolving naturally to the 3 of the IM7 on beat 2 of bar three, swinging back to the 7 of an intermediate V7. Only in bar four do we break up the structure of two different melodies by resolving the 7 of the intermediate V7 on beat 4 of bar four directly to the 3 of the IM7, followed by a diatonic descent to the root on beat 3 of bar 4. Choosing different registers for downbeats and off-beats strengthens the idea of two separate melodies.

If we stick to the idea of two separate melodies, which is often a nice way of thinking in ballads, we might as well not use the tritone substitution for the second half of bar two and stay with the original V7.

EX 2.8.1.8:



By using a 5 on beat 1 of bar two we can get a nice balance in the lower line (the downbeat line) as well. Since we already have the motif of a descending 7 on beats 3 and 4 of the V7 on bar two, repeating the 4 of the IM7 on beat 3 of bar three, as we do in example 2.8.1.7. might be a little too repetitive, when we choose the 5 of the IM7 on beat 3 of bar three. The cadence in this case is a little simpler:

II-7 | II-7 V7 | IM7 | IM7

In most of the previous examples the use of a 5 on beat 1 of a bar leads to a resolution to the primary chord after two beats. This supports the sensation of an actual substitution for the first half of the bar, rather than a suspended note.

The effect of a substitution can also be supported by a series of descending chromatic approaches, adding some melodic momentum and suggesting a new root movement:

EX 2.8.1.9:



Using the b6 as a chromatic descending approach to the 5 on beats 2 and 3 of the II-7 of bar one strengthens the 5 and gives it more of a root quality. That way we introduce a pattern of two harmonies per bar, which we keep throughout the first two bars: II-7 VI7 | II-7 V7 | IM7 | IM7 with every new root introduced by a descending chromatic approach.

Delaying the resolution to the primary chord for another beat usually weakens the idea of the 5 on beat 1 being part of a substitution of the first half of the bar. It rather suggests the idea of a pedal, since the only way it can make sense is by going back to the 5 on beat 3 again.

EX 2.8.1.10:



By choosing a similar shape for the line in bar one and two we support the idea of a root pedal on beats 1 and 3 of bar one, and a 5 pedal on beats 1 and 3 of bar 2. By using the major 7 as a chromatic ascending approach we simply support this idea. Following this pattern leads us to use the 3 on beat 4 of the primary V7 of bar two, again using a chromatic ascending approach to resolve to the root of the IM7 on beat 1 of bar three.

An alternative, of course, is the use of descending chromatic approaches.

EX 2.8.1.11:



In this case, we end up with a b9 of the II-7 on beat 4 of bar one and a b5 of the V7 on beat 4 of bar two, which technically functions in two ways: the root of a bII7 tritone substitution or a chromatic descending approach. I think we are more likely however to hear it as a simple chromatic approach, because what happens in the first three beats of bar two is much closer to a V7 than to bII7, in which case we would chose to hear a b2 of the bII7 on beats 1 and 3 and a b3 on beat 3.

Another choice is following the pattern and rather than using a chromatic approach go for a shift of the rhythmic balance and have an anticipated resolution to the root of the following IM7 on beat 4 of bar three already.

EX 2.8.1.12:



If the music suggests this anticipation this is not a bad way to do it. We just have to make sure that we support the rhythmic aspect of this choice, for example by not playing beat 1 of bar three and/or making beat 3 of bar two a slightly shorter note, so we highlight the rhythmic importance of beat 4 of bar three.

The examples 2.8.1.10 to 2.8.1.12 are based on an ascending beat 2. A descending beat 2 is a little trickier.

EX 2.8.1.13:



By using no chromatic approaches we end up with a relatively weak 4 on beat 2 of the V7 of bar two. The more natural choice would be to use it as a descending passing note, as we do in examples 2.8.1.2. or 2.8.1.3., rather than as an alternating note. The 7 on beat 4 of the V7 of bar two however resolves nicely to a 3 on beat 1 of the IM7 in bar three.

Using chromatic approaches again we support the idea of a pedal, as we do in example 2.8.1.10. and 2.8.1.12.

EX 2.8.1.14:



This is a very dense line with a strong pedal point character, repeating the root, respectively 5 on beats 1 and 3 of bar one and two with each beat 3 being highlighted through a chromatic ascending approach on beat 2. The b9 on beat 4 of the II-7 in bar one also highlights our choice of a 5 of the V7 on beat 1 of bar two, supporting the pedal idea. The #5 on beat 4 of the V7 in bar two is again a chromatic descending approach, resolving to the 3 on beat 1 of the IM7 of bar three.

Consequently we can also take the pattern of example 2.8.1.11. and transform it from an ascending beat 2 to a descending beat 2.

EX 2.8.1.15:



This actually spells out the primary cadence very nicely since the only note not working perfectly with a very ordinary II-7 V7 IM7 line is the 5 of the V7 on beat 1 of bar two. Often simple choices are the best.

However, if the musical environment asks for it, we can choose to add some chromatics in the same pattern by slightly changing its shape.

EX 2.8.1.16:



We establish an ascending pattern early in bar one, which in this line is important: In bar two we have 4 of the V7 on beat 3, followed by a b5 on beat 4, resolving to the root of the IM7 on beat 1 of bar three. If we don't establish the pattern (which in this case is actually even the exact same line twice) we might not hear beat 2, 3 and 4 of bar two as an ascending scale and it might be heard as a an anticipated resolution on beat 3 of bar two to the root of the following IM7 of bar three, with a simple ascending chromatic alternating note, the b5. But by establishing the pattern of using the 4 on beat 3 of bar two, it becomes rather a passing note. As in example 2.8.1.14, we have the exact same choice of notes in bar one and two, with the M7 of the II-7 on beat 4 of bar one being an ascending chromatic approach, whereas the b5 of the V7 on beat 4 of bar two is a descending chromatic approach.

None of the examples that repeat the 5 on beat 1 and 3 (and therefore suggest the idea of a pedal) have used a root on beat 4 so far. This is mostly because we repeat a 5 of the primary chord on beat 3 and going from there to a root on beat 4 is somewhat against the natural flow of the line. If we interpret the cadence a little more loosely using a diatonic approach, we can make this line.

EX 2.8.1.17:



This line actually sounds roughly like VI-7 | II-7 V7 | VI-7 IM7 | IM7, but since everything is diatonic it matches our original cadence rather well. The descending diatonic line, starting on a 5 of the II-7 on beat one of bar one actually almost naturally resolves to the root of the V7 on beat 4 of bar two. To make a smoother line we chose a diatonic ascending line from there, resolving to the 6 of the IM7 on beat 1 of bar three. Overall, this is a fairly strong melodic choice, with a lot of space and a fairly balanced rhythm of tension and release.

However, the resolution to the root of the V7 on beat 4 of the bar two suggests a shift of the balance of rhythm, which we can actually bring out more by following it with another 5 on beat 1 of the next bar.

EX 2.8.1.18:



We are still trying to build this into a line using a 5 on beat one and with a strong melody, yet staying in the diatonic context. By shifting the rhythmic balance we attract a lot of attention to the choice of a 5 on a beat 1 and consequently to the final resolution to the root of the IM7 (beat 4 of bar three to beat 1 of bar four). We can draw even more attention to this point by using a chromatic descending approach on beat 3.

EX 2.8.1.19:



If the b9 of the II-7 on beat 3 of bar 1 is simply a chromatic descending approach, the descending chromatic approach on beat 3 of the V7 in bar two actually turns this chord in a V7b9.

Another way of supporting the shift of rhythmic balance is by going back to the idea of repeating the 5 on beat 3.

EX 2.8.1.20:



Simply by using a descending 4 movement as a contrast to the chromatic approaches, we can create a pedal-like sensation which highlights beat 4 of the V7 in bar two, supporting the sensation of this note as an anticipated 5 of the IM7 on beat 1 of bar three.

A very smooth option for using a 5 on a beat 1 is this:

EX 2.8.1.21:



The 5 of the V7 on beat 1 of bar two can be either seen as a simple chord tone, which is actually more likely, or as a one beat delay of the actual V7. If our idea is to delay the V7 chord, we need to establish the 5 on beat 1 of the V7 in bar two as a root of a II-7, in order to create root motion.

EX 2.8.1.22:



The M7 on beat 4 of the II-7 in bar one and the subsequent resolution supports the idea of beat 1 of bar two being a root of a II-7, rather than a 5 of a V7 and the idea of a delayed resolution. Also the pattern of a descending movement between beats 1 and 2 of each bar support this idea.

Another way of making it sound like a delayed resolution is shifting the rhythmic balance of the entire line.

EX 2.8.1.23:



By playing the roots, then chord tones on beats 2 and 4 of each bar and repeating the same note in the next beat, we change the harmonic information on the off-beats of the bar, which results in a delayed resolution to the root of the next bar. However, this might not be the strongest example of a 5 on a beat 1, since we might as well not play the note and maybe even have a stronger sensation of a delayed resolution, since it is all about the root on beat 2.

By using less roots in the line, and taking a scale approach, the repetition of the notes becomes more important.

EX 2.8.1.24:



Now every downbeat becomes a guide note to a resolution on the off-beat, especially when resolving the 5 on beat 1 of the V7 in bar two to the b5 as a root bII7 tritone substitution.

The use of a 5 on beat 1 as a passing note in the context of chords changing every bar can be a tricky choice, because the neighboring diatonic notes are not the strongest notes on beat 2. The 4 is somewhat contradicting the idea of root motion in descending fifths, since it is the root of the next bar - and simply not a great note to choose. The 6 is a little stronger, yet, it is also more likely to be heard as a 3 of the next bar. If we use chromatic neighboring notes, the harmonic message becomes a little less clear, but the melodic quality of the line can actually be fairly strong.

EX 2.8.1.25:



This is still a rather diatonic line and like in examples 2.8.1.21 to 2.8.1.23, the 5 on beat 1 of bar two is likely to be heard as a delayed resolution.

Obviously, if we use more chromatic choices, the harmonic message becomes less obvious but the melodic value of the line grows.

EX 2.8.1.26:



Again, we have a 4 of the V7 this time on beat 3 of bar two, but it is built into three notes which have a very strong dominant quality, so it acts just like a passing or alternating note.

Using an ascending scale starting with a 5 on a beat 1 can also be somewhat misleading.

EX 2.8.1.27:



We are using only diatonic notes, except for the M7 on beat 4 of bars one and two as an ascending chromatic approach, but what we really hear is this: VI-7 | II-7 | V7 | IM7.

This may end up being a little confusing, yet it can still sound good in the correct context. If we choose other chromatic notes, we may be able to get closer to our original cadence:

EX 2.8.1.28:



The b7 on beat 4 of the V7 of bar two has a strong guide tone quality. This quality supports the dominant character of the V7 and consequently we resolve it to the 3 on beat 1 of the IM7. The 5 on beat one of bar two is followed by a b6 and a 6 on beats 2 and 3, both of them acting as chromatic passing notes between two chord tones of the V7.

As an alternating note on a beat 1 the 5 is more likely to alternate with the root, rather than a neighboring note.

EX 2.8.1.29:



The problem with this pattern is that the melodic value is not the strongest. Yet, what is interesting about it is the subtle change of rhythmic balance, with roots on beats 2 and 4 of bar three and roots on beats 1 and 3 of bar two.

Of course, it works the other way around as well:

EX 2.8.1.30:



Here we have the roots on beats 1 and 3 of bar one and more importantly the IM7 of bar three, whereas in bar two we have the roots on beats 2 and 4. Due to such little movement and the use of roots and 5s only, a line like this is an elegant alternative to a dominant pedal.

When using a 5 on a beat 1 in the context of chromatic alternating notes we have the same shift of rhythmic balance, but it is far less subtle, since the chromatic notes highlight this shift.

EX 2.8.1.31:



The result here is very similar to example 2.8.1.14 and we still have the impression of a pedal, but due to a chromatic descending approach for each off-beat, the shift of the rhythmic balance becomes very obvious. Also, due to the lack of a root of the V7 in bar two, the dominant character becomes rather unclear.

When using an ascending chromatic approach the dominant character of bar two remains stronger.

EX 2.8.1.32:



The b5 of the V7 on beats 2 and 4 of bar two functions as the root of a bII7 tritone substitution. This way we also maintain the shift of balance throughout the first two bars, using the root then the root of the bII7 substitution on beats 2 and 4. The rhythmic strength of this line supports the melodic value of the ascending chromatic approach.

In example 2.8.1.31 and 2.8.1.32 we use the 5 on beat one of the V7 of bar two. Obviously bar one doesn't matter that much and can easily be altered without really changing the character of the entire line.

EX 2.8.1.33:



or

EX 2.8.1.34:

Using a 5 on beat 1 of the II-7 of bar two in the context of a chromatic passing note is also possible and is the equivalent to example 2.8.1.29.

EX 2.8.1.35:

In this example, however, we are not exactly playing the cadence, but rather circling around a harmonic environment, using the b6 of its IM7 as an alternating note between the 6 and the 5 of the IM7. The function of the actual II-7 | V7 | IM7 cadence becomes rather weak.

Doing the same thing with the descending chromatic alternating note, bar one becomes even less connected to the original chord, but it opens the door for a nice way to bring out the V7 character of bar two.

EX 2.8.1.36:

Since the #5 of the II-7 of bar one becomes a chromatic ascending guide note to the 3 of the V7 of bar two, we create a strong dominant character. Unlike the root of the V7 on beat 1 of bar two in the previous example, the 3 has a less connection to the IM7 and becomes the guide note to the IM7.

Of course, we have a different situation when we use a 5 on beat one of the second bar of two bars with the same chord, the most obvious one being this:

EX 2.8.1.37:

This is a very simple, common way to play two bars of the same chord, implying an intermediate V7 on beat one of bar four. The same diatonic approach works descending too.

EX 2.8.1.38:

or with arpeggios, rather than scales.

EX 2.8.1.39:

These choices may not be the most exciting ones, yet there is absolutely nothing wrong with them, particularly if the harmonic content needs to be clear.

In examples 2.2.3.9 and 2.2.3.10, we have already discussed two possibilities of using a 5 on beat 1 of a V7 as part of a diminished chord on the II, IV, bVI or VII, but there are a few more.

When following the 5 on beat 1 of bar two with the b2 of the V7 we have two rather strong choices:

EX 2.8.1.40:

The quality of this line is obvious: by choosing the b2 on beat 2 we establish the V7b9, using the corresponding diminished chord. Then, using the two diatonic guide notes (the 7 on beat 3 and the 3 on beat 4) we create a whole bar of strong tension, perfectly resolving to the root of the IM7 on beat 1 of bar three. This line makes more sense in a descending direction.

Using the ascending direction is also quite strong.

EX 2.8.1.41:

The only difference is that we should resolve the 7 on beat 4 of bar two to the 3 of the IM7 on beat one of bar three, which is still pretty strong but not quite as obvious.

The remaining two options, both have two aspects in common.

EX 2.8.1.42:

If we follow the 5 on beat 1 with a b7 on beat 2, and a 3 on beat 3 of bar two, we end up with the b2 on beat 4, in order to spell out the diminished chord. This might be a little awkward for a variety of reasons: the b2 almost inevitably resolves to the 5 on beat 1 of the IM7 of bar three, so the whole cadence is more like this: II - 7 | IIo7 | V7 IM7 | IM7

Also, the shape of the line is not the most organic, which we try to compensate for by establishing it in bar one already. However, if we do this in a slow tempo, where the intention of the shape can be recognised, the outcome can be fairly elegant.

EX 2.8.1.43:

Particularly note that the b2 on beat 4 of bar two preparing another intermediate V7 and delaying the resolution for an entire bar can be a nice option.

Last but not least, here are a few more abstract approaches where we build a shape or pattern around a 5 on a beat 1.

EX 2.8.1.44:

This example, based on chromatically ascending fourths, has a very strong melody and very strong chromatic approach notes on the off beats.

The same pattern with chromatically ascending fifths is a little less clear.

EX 2.8.1.45:

The balance of guide notes and chord tones is not as even as in example 2.8.1.44, particularly in beats 2 and 3 of bars one and two.

Chromatically ascending fifths starting with a 5 on beat 1 is something we have already discussed in example 2.7.3.4. A pattern based on chromatically descending fifths is very misleading, since there are too many chromatic notes out of place or chromatic approaches not being resolved, to maintain the center of tonality.

The problem of diatonic then whole-tone patterns based on fourths is that we end up with two notes which indicate the chord of the next bar very strongly.

When choosing diatonic or whole-tone patterns based on descending fifths, we end up with a 'circle of fifths' movement, which is very contradictory to the idea of changing the chord quality every bar. The harmonic content becomes very random. In other words: a 5 on a beat 1 is not the best choice to start a pattern of diatonic or whole-tone patterns based on fourths or fifths.

If we start a chromatic scale on the 5 of beat 1 of the II-7 of bar one we end with the root of a bII7 on beat 1 of bar two.

EX 2.8.1.46:



Here we resolve it nicely, adding another descending chromatic approach on beat 4 of the V7 of bar two, to prepare an intermediate V7 in bar three, finally resolving to the IM7 in bar four.

If we stay in the chromatic context we have in this example a nice balance of chord tones and guide tones.

EX 2.8.1.47:



Every change in harmonic quality is introduced by a strong guide note. The cadence here is more or less

II-7 | bII7 | VI-7 V7 | IM7

A 5 on beat 1 is very often connected to the root of the previous bar and results in a delay of the next chord, mostly by half a bar, but sometimes by only one beat, particularly when this chord is a tritone substitution. In this case it is often combined with a shift of the rhythmic balance of the line. In the context of two bars of the same quality in a row, the 5 on beat 1 of the second bar often becomes the root of an intermediate V7.

2.8.2 The 5 on Beat Two

A 5 on a beat 2 of any bar of our cadence is a very common and safe choice. A significant characteristic of the 5 in general is that, besides the root, the 5 is the one other chord tone, that does not tell anything about the quality of the chord. By using it on a beat 2 we already define two directions of where to go in the bar: First we decide on a chord tone approach, rather than a scale, except when using substitutions, and we decide to not to be part of dictating the chord quality for the first half of the bar - given we start with the root, which is most common. In a way this makes the 5 a very comfortable note to choose, since we don't really have to make a decision and furthermore the technical aspect of choosing a 5 is very comfortable on the bass. However, there are situations, where the choice of a 5 on a beat 2 has other musical reasons.

EX 2.8.2.1:



This is the consequent follow up to the choice we have made. Of course this line is not the strongest in a lot of contexts, yet there are situations, where it is the right choice. In any case it is a strong statement suggesting a certain style and colour, perhaps considered somewhat old fashioned.

But, on the other hand, this choice of notes can leave a lot of harmonic space and can create a fairly open vibe.

EX 2.8.2.2:



By using the same notes, but changing the register, we are losing the conservative touch of example 2.8.2.1. and (particularly if combined with rhythmic finesse and the ringing sound of harmonics, as we have them in this example) we can create an environment of harmonic freedom, simply by choosing not to get involved in it. In this regard, both example 2.8.2.1 and 2.8.2.2 have something in common with using a pedal.

If the musical environment suggests that the bass keeps this open, undefining approach, we can still add some tension.

EX 2.8.2.3:



Here we still stay out of the harmonic details of the chord, but create some forward movement by choosing a chromatic descending approach, the b5, on beat 4 of each bar. Obviously the ascending chromatic approach is not an option if our intention is not to get involved in the chord quality, since it would be M3 and as such defining the gender of the chord.

EX 2.8.2.4:



By choosing the 3 on beat 4 we define the quality of the chord and play an ascending approach note, leading to the root of the next bar. In this case we can still maintain the open character of the line.

By choosing a 7 on beat 4, we more or less have to get involved in the chord quality again.

EX 2.8.2.5:



By choosing a 3 (it doesn't really make a difference if diatonic or chromatic) on beat 4 of the II-7 in bar one, we can still start with the root of the V7 on beat 1 of bar two, keeping the open vibe for most of the bar. In bar two we choose a 7 on beat 4, which should resolve to the 3 on beat 1 of the IM7 in bar three, which means we are spelling out the quality of the chord very clearly.

The previous examples (2.8.2.1 to 2.8.2.5), however, were all based on the idea of deliberately not doing what we are actually supposed to do, which is: define the harmonic quality of a chord.

If we want to do that, but already chose the root on beat 1 and the 5 on beat 2 it is about time to get on with it in beat three. The strongest note to do so, obviously is the 3, yet placing a 3 on a beat 3 can be a tricky choice, as we have already discussed in chapters 2.4.3 and 2.5.3.

The most natural place for a 3 is either beat 2, where it defines the chord quality right away, or on beat 4, where it also functions as an approach. If placed on a beat 3, preceded by a 1 on beat 1 and a 5 on beat 2 we have a few options. First we will go through the diatonic ones.

EX 2.8.2.6:



In this line we choose to follow the 3 on beat 3 by a 5. There is nothing wrong with it, harmonically; it's just a weak solution, melodically. By repeating the pattern, at least we make it a statement, which in some contexts might work, similar to example 2.8.2.1. The advantage of this line is a relatively smooth connection between bars by using the 5 on beat 4 of each bar as a diatonic descending approach to beat 1 of the next bar.

When using the root on beat 4 instead of the 5, we loose this connection.

EX 2.8.2.7:



Here we follow the 1 on beat 1, the 5 on beat 2 and the 3 on beat 3 of the V7 in bar two with a root, while we don't change bar one and three. Repeating the root on beat 4 works best, because of the dominant quality. After making no harmonic statement for two beats, we introduce the 3, which is also the strongest guide note we have in a diatonic environment. Following it by a five, a rather weak guide note, is somewhat anticlimactic. A descending 5 movement, particularly between a V7 and a IM7, however, has a lot of forward momentum. This is also the reason why the 5 on beat 4 of bar three works again. It is more or less the root of an intermediate V7.

If we break up the diatonic context and use chromatic approaches we gain a lot more melodic direction. Similar to example 2.8.2.3, we can use chromatic descending approaches.

EX 2.8.2.8:



The result is going from no tension if the first half of the bar to increasingly more tension on beats 3 and 4, and not necessarily having the strongest melodic choice.

Using a chromatic ascending approach might be more elegant in some cases.

EX 2.8.2.9.



If the cadence is already well established the fact that we actually play the same line in bar one and bar two, not distinguishing between the different qualities of the chords, is probably not an issue here.

If we choose a 7 on a beat 3 preceded by a 1 on beat 1 and a 5 on beat two we are obviously not yet defining the entire quality of the chord.

By choosing a chromatic approach on beat 4 we can still avoid defining the gender of the chord.

This example shows two different ways of using a chromatic descending approach on beat 4, preceded by a 1 on beat 1, a 5 on beat 4 and a 7 on beat 3.

EX 2.8.2.10:



In bar one, we jump to the b5 of the II-7 on beat 4, as a chromatic descending approach, resolving to the root of the V7 in bar two. Since we are ignoring the direction and the guide tone character of the 7 on beat 3, this bar might sound somewhat unconnected and random. In bar two, we choose a b2 (or b9) of the V7

on beat 4, resolving it to the 5 of the IM7 of bar three, suggesting an intermediate V7 for one more bar. Since the shape of the line is close to that of an ascending arpeggio, the line sounds more melodic than bar one, but it is difficult to resolve to the root of the next chord. Both these ways show that dealing with a 7 on a beat 3, without having established the gender of the chord already by playing a 3, can be difficult.

Playing the 3 on beat 4 is of course an option, very similar to choosing an ascending approach.

EX 2.8.2.11:



In the diatonic version we use the 3 on beat 4 of bar one as an ascending wholetone approach, whereas the 3 on beat 4 in bar two is a chromatic ascending approach. The shape of the line is not the most melodic, but it has a rather modal, vertical character. If we choose chromatic approaches all the way, we are losing the modal momentum, which supports the abstract shape of the line.

EX 2.8.2.12:



We are choosing a very strong chromatic approach on beat 4 of bar one, attracting a lot of attention to this beat. In order to maintain a nice balance of the entire line, we might consider choosing the strongest possible approach on beat 4 of bar two, as well as even on beat 4 of bar three, and rather sacrifice the shape of the line, which works better in a more modal context anyway. The balance of tension and release is shown by the letters under the example.

Choosing a chord tone approach, starting with a 1 on beat 1 and a 5 on beat 2, followed by a 3 on beat 3 and a 7 on beat 4, leaves us with similar options.

EX 2.8.2.13:



If we don't support our line by a certain pattern, but just choose a 7 as the last of the 4 chord tones on beat 4, as we do here in bar two, we have almost no choice, but to resolve it to the 3 of the IM7 on beat 1 of the next chord.

If we establish an obvious pattern, we might be able to circumvent the guide tone character of the 7 on beat 4.

EX 2.8.2.14:



Here we go for the pattern all the way, until beat 2 of bar three. In bar one, the II-7, the guide tone character of the 7 on beat 4 is not as strong, so avoiding the natural resolution is easier to follow. In bar two, the guide tone character of the 7 on beat 4 becomes more obvious, so we might as well break up the pattern right there.

EX 2.8.2.15:



A nice way to do this is naturally resolving the 7 on beat 4 of bar two to the 3 of the IM7 of bar one, starting a pattern of descending fifths, perfectly resolving to the 1 of the IM7 on beat one of bar four.

Naturally a chord tone as prominent as the 5 can be preceded by any other chord tone on beat 1 or any kind of approach note. Some of these options we have discussed in examples 2.4.1.7, 2.5.1.2, 2.6.1.6, 2.6.1.7, 2.6.1.8, 2.7.1.1-2.7.6.3 and 2.7.1.24.

The 5 on a beat 2 is also very commonly used as an alternating note in both directions, diatonic and chromatic, and it works on all chord qualities.

EX 2.8.2.16:



In this example we chose the least complicated version, alternating a 5 on a beat 2 with a diatonic 6 on beat 3, going back to the 5 on beat four. Here we do it in the II-7 of bar one, the V7 of bar two and the IM7 of bar three. Harmonically, it works absolutely fine on all three chords - it is just the line itself that might be a little boring.

The other diatonic alternating note, the 4, is not quite as comfortable.

EX 2.8.2.17:



Alternating the 5 on beat 2 with a 4 on beat 3 works best on the II-7 of bar one. The 4, being the root of the main dominant pulls the II-7 in a dominant direction, turning it into a II^{sus}4/7 chord. It also works on the IM7 of bar three, but not quite as smoothly. Its most likely interpretation would be a short IV, particularly if we think of a IM6, instead of a IM7. On the V7 chord, the same pattern would be somewhat contradictive and unmotivated, since the 4 on beat 3 of bar two is the root of our tonal center and the alternating movement has too much gravity, to avoid this interpretation. For that reason it works much better as a passing note on a V7 in a diatonic context, as we can see in example **XXXXXXX**

Using chromatic approaches works also very well.

EX 2.8.2.18:



Using a b6 as the alternating note to a 5 on beat two works best on the V7 of bar two and the IM7 of bar three. Both times the b6 has enough chromatic pull, to simply function as a chromatic approach to a 5 on beat 4. In addition, on the IM7, the b6 as a bass note creates the vibe of a IV- sound. But, unlike in example 2.8.2.17, it should obviously not be a IM6. Even in the II-7 bar, alternating the 5 of beat 2 with a b6 would probably work, yet, since the 6, rather than the b6 is one of the notes which literally defines the minor7 chord as a II-7, it may not be the best choice.

Alternating the 5 on beat 2 with the other chromatic neighbouring note, the #4, works well in all three different chord qualities of our cadence.

EX 2.8.2.19:



All three times we use the pattern of a 5 on beat 2, a #4 on beat 3 and a 5 again on beat 4, it works very smoothly. The #4 has a strong ascending direction and as a note it is too far away from the diatonic context to be contradictory.

One obstacle, when using a 5 on a beat 2 as a passing note, is that either way we have to start with either a 4 or a 6 (or #4 or b6) of the actual chord on beat 1 of the bar we choose.

Here are two examples of using a 5 on a beat 2 as a descending diatonic passing note.

EX 2.8.2.20:



At first sight bar the IM7 of bar three seems to be the most natural place for it, because we start with the 6 of the IM7 on beat one of bar three which, particularly in this chord quality is a very compatible note. Following it by the 5 on beat 2 seems also somewhat natural. The next note, the 4 on beat 3 needs to be treated more carefully. Just following the scale, would lead us to a 3 on beat 4 of the IM7 of bar three. The four might work as another passing note. On the other hand, by following it with a 2 of the IM7, we establish another intermediate dominant quality, interpreting the 4 on beat 3 as a 7 and the 2 on beat 4 as a 5 of an intermediate V7. In this case, the 6 on beat 1 of bar three becomes the root and the 5 on beat two becomes the 7 of a VI-7 substitution. The cadence then reads like this: II-7 | V7 | VI-7 V7 | IM7

Using the same idea on the II-7 of bar one works also fine.

EX 2.8.2.21:

The choice of notes that we end up with by itself might also be interpreted as a V7 rather than a II-7, but since we stay diatonic all the way it is not a very clear statement. There is enough room to interpret bar one both ways. The shape, on the other hand, of the descending diatonic lines of each bar has a nice aesthetic value itself.

In an ascending diatonic context we context we face the problem of starting with a 4 on beat 1.

EX 2.8.2.22:

Here we are using a 4 on beat one of the II-7 of bar one, followed by the 5 on beat 2 and the 6 on beat 3. Technically, all these notes are part of the diatonic scale, yet, even more so than in example 2.8.2.21, bar one is very likely to be interpreted as a V7. So, what we actually do here is substituting the II-7 with a V7: V7 | V7 | IM7 | IM7. Of course, this is a legitimate possibility. If we take a closer look, we can find a few more details in this line.

The 7 of the II-7 on beat 4 of bar one is the diatonic descending guide note, as well as the 7 on beat 4 of the V7 of bar two, which resolves very smoothly to the 3 on beat 1 of the IM7 of bar three. Even in bar four, the 5 on beat two could almost be seen as a passing note in a larger context.

When it comes to the use of substitutions, the 5 turns into the b9 of a bII7 tritone substitution, and as such becomes a perfect passing tone of the ascending altered scale.

EX 2.8.2.23:

Of course, the pattern of the ascending chromatic scale can be supported with similar patterns in bars one and three:

EX 2.8.2.24:

Particularly in a slower tempo the chromatic ascending motion of beat 1 of each bar has a nice flavour.

Obviously using a 5 on a beat 2 in the context of a b9 of a bII7 tritone substitution, other than when preceded by the root of the bII7 is not very convincing, since the b2 is the only note which expresses the tritone substitution. With any other note preceding the 5 on a beat two, it will simply be a regular V7 chord.

Also, on a beat two, the 5 can be part of a bVIdim7 substitution of the V7.

Some of these possibilities have been discussed already in the examples 2.2.4.5, 2.2.4.6, 2.2.4.9, 2.2.4.11 and 2.5.1.14.

Here are some of the remaining possibilities:

EX 2.8.2.25:

This version uses a zigzag pattern of various intervals and is diatonically very accurate, except for substituting the V7 with a bVIdim7 in bar two. A nice aspect is the diatonic cadence in bar three. All three chords have a very different approach, which is held together by the shape of the line. Bar one is diatonic, with all the important chord tones, bar two a substitution and in bar three the root movement suggests a quick III-7 VI7 II-7 V7 cadence.

The ascending version of this idea looks like this:

EX 2.8.2.26:



This is a series of ascending chord arpeggios, the bVIDim7 being partly in open position, suitable for ballads, mostly. By starting the arpeggio with the 3 of the II-7 on beat 1 of bar one we have an ascending IV6 chord. The b9 on beat 1 of the V7 of bar two, followed by the 5 on beat 2 and the 7 on beat 3 is basically IV-6. At the same time beats 3 and 4 of bar two are the strongest diatonic guide notes of the V7. For aesthetic purposes, in order to support the structure of the line we chose a rather rough descending M7 movement for the resolution of beat 4 of bar two to the root of the IM7. In a swinging medium tempo line, this might be a bad choice, but in a line like this, with an almost classical character, it works.

Using arpeggios of the bVIDim7 in closed position, with a 5 on beat 2 results in a delayed resolution to the IM7 of bar three.

EX 2.8.2.27:



In this example we start with an ascending arpeggio of the II-7 in bar one, repeating the root on beat 1 and 2. Beat 1 and 2 of bar two consist the 7 and 5 of the V7, yet they can also be heard as the 3 and root of the preceding II-7. The 3 of the V7 on beat 3 of bar two is the only note which clearly has a dominant character in this context. The b9 of the V7, which is supposed to generate the bVIDim7 character, is too late in the bar to establish this colour. It will rather be heard as descending chromatic approach to a 5 of the IM7 on beat 1 of bar three, resulting in a delayed resolution on beat 1 of bar four. The actual cadence is to this line would be this: II-7 | II-7 V7 | V7 | IM7. This is of course an option, but if our goal was to substitute the V7 in bar two with a bVIDim7 there are other choices which are more clear. One of them is the ascending bVIDim7 arpeggio with a 5 on beat two of bar two.

EX 2.8.2.28:



We start with the 5 of the II-7 on beat 1 of bar one, followed by a 3 on beat 2. This is likely to be heard as some sort of a VI-7. The 7 on beat 4 of bar one resolves smoothly to the 3 of the V7 on beat 1 of bar two. At this point we change the direction from descending to ascending. Even though the first three notes of bar two are the 3, the 5 and the 7 of the primary V7, the way they are placed here and the missing root of the V7 make it appear much more like a diminished chord of some sort. The following b9 on beat 4 of the V7 of bar two is only logical. The result is an ascending VIIIdim7 arpeggio - identical to a V7b9 arpeggio without the root. The ascending direction leaves us with the option of resolving to the 6 of the IM7 on beat 1 of bar three, creating a beat of a VI-7 vibe, which we resolve diatonically to the root of the IM7 on beat 1 of bar four. That way bar three is much closer to a IM7 than the bar three in the previous example 2.8.2.27. The cadence would read like this:

VI-7 II-7 | VIIIdim7 (bVIDim7) | VI-7 V7 III-7 / | IM7.

One more theoretical option for using a 5 on beat two of the V7 of bar two as part of a bVI7 substitution is this:

EX 2.8.2.29:



The way the notes are placed in bar two spells out the bVIDim7 character of the chord in some way, yet the melodic choice is a little awkward and needs some support. The tool of choice here is the repetition of the descending 6 on beats 3 and 4 of bars one, two and three. There is an interesting side effect to it: Every second half of each bar is somehow a substitution of the primary chord of the bar. The 5 and the 7 on beat 3 and 4 the II-7 of bar one can also represent the root and 3 of a VI-7. The same goes for bar two, where the 5 and the 7 on beats 3 and 4 of the IM7 can be the root and 3 of a V7. In bar two the 7 and 5 on beats 1 and 2 of the primary V7 can be interpreted 3 and root of a II-7 and the b9 on beat 3 clearly establishes the diminished character of the second half of the bar, followed by the strongest diatonic guide note. The result is a very nicely balanced variation of our primary cadence:

II-7 VI-7 | II-7 bVIDim7 | IM7 V7 | IM7

Even though melodically this option is a bit of a stretch, the harmonic content is very nice.

One way to help the melody could be highlighting the descending chromatic line on beats 3 of the first three bars through a rhythmic anticipation.