## บทความวิชาการ (Academic Article)

# A Practice Routine for Adding Harmonic Interest to Single Note Melodies for Improvisation

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#### Abstract

This article presents and examines a set of short exercises designed to improve improvisation skills and develop harmonic interest in single-line melodies. For aspiring improvisers, the preparation, practice and spontaneous performance required to effectively improvise on a jazz standard can appear daunting. The basic elements include mastering the appropriate scales, guide tones, arpeggios (with or without extensions such as 9ths, 11ths, 13ths), ear training and developing rhythmic proficiency. Jazz improvisation, despite its inherent spontaneity, often involves significant advance preparation. This contrasts with the literal meaning of the 16<sup>th</sup> century Italian word "improvisare" which means to perform on the spot without preparation. Playing over chord changes demands a solid understanding of harmony, along with the ability to apply this knowledge in real time.

In the initial stages of learning, students focus on mastering the correct scales. As they progress, they explore how to navigate chord progressions effectively, enabling them to create melodies that resonate harmonically with the underlying chord. Common techniques such as targeting chord notes, guide tones, tensions, and chromatic approaches, create emotional impact and harmonic expectation. Developing these competencies is a gradual process that requires significant time and harmonic knowledge and is often deferred to later stages in the learning journey, with initial focus on playing scale patterns. In essence, when a student is unable to outline the chord(s) they typically resort to playing scale patterns as an alternative.

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How can we integrate harmonic interest into our improvisational practice without requiring extensive knowledge of music theory? Is it possible to cultivate harmonic interest in improvisation at an early stage without playing over predefined chord progressions such as IV-V-I or II-V-I?

The objective of this approach is to design a practice routine with simple exercises that plant the seeds for harmonic interest in melodic ideas for improvisation through the use of leaps. The proposed exercises take a slightly different approach by emphasizing the use of jumps or leaps at an earlier learning stage. They are based on my own teaching experience and the teachings that were passed down to me over the years. These exercises are applicable to both beginners and more experienced improvisers and focus on a single key center. Over time, these drills become second nature, enabling us to apply them seamlessly in our improvisation. Furthermore, these routines will enhance our harmonic ear.

When we jump or leap from one note to another, thus creating an interval of a third or greater, our brain engages in a fascinating process. A virtual note or virtual resonance is created. It is a note that appears to be present although it is not explicitly played. Our brain retains the memory of the first note at the time the second note is played, creating the auditory impression of an interval, thereby generating harmonic interest. It can even imply a chord. In the exercises presented each note that jumps is resolved to the underlying chord triad through correct voice leading. A rhythm track and drone of the underlying triad is used to help us hear the resolutions and make the exercises more enjoyable to practice.

The first exercise introduces this principle by utilizing only diatonic notes with immediate resolution to the triad. It involves single leaps from a chord tone to a non-chord tone that is then resolved back using proper voice leading. This drill is meant to make voice leading a natural skill, so it becomes second nature. We memorize the resolution paths to the target notes, and this might take some time for an aspiring improviser, but it will become easier when scale fragments are added later. The second exercise consists of two consecutive leaps. Both leaps are resolved to the chord note but the resolution of the first note is delayed, resulting in immediate and delayed resolution of non-chord tones. Again, only diatonic notes are used here. This is more complex as we need to memorize the two notes that need to resolve. In the third exercise scale passages are added to exercises one and two. When playing

scales in steps no resolution is needed, which will make it a bit easier to apply in improvisations. The fourth exercise adds rhythm displacement to the above. Lastly the fifth exercise uses all chromatic notes and applies them to the previous exercises.

The result is an improvisational device that uses leaps, scale fragments, or both that are resolved using voice leading principles of Western tonal music. Over time and with good practice these techniques will blend into your improvisational language, promoting your harmonic interest and developing your ear. After all, an improviser sounds how he practices at home. Once one gets used to using leaps and delayed resolution, adding non-diatonic notes will result in interesting melodic ideas All chromatic notes are used here, and none of the examples use complex scales such as altered scales or diminished scales. These 10-minute exercises provide a melodic framework for improvisation that remains harmonically suggestive and harmonically balanced. Because of their strong gravitational pull toward the underlying key, they can serve as possible alternative ideas for improvisation on a dominant-tonic or subdominant-dominant-tonic progression. Incorporating these skills at an early stage of musical development helps to cultivate the harmonic ear and prehearing skills which are key components of musical improvisation.

**Keywords**: Improvisation / Jazz / Leaps

The word improvisation comes from the word the Latin word "impromptu", according to the Oxford Dictionary meaning "without preparation or planning". The word "improvisare" was added to the Italian language in the 16<sup>th</sup> century and means to perform without preparation. Musical improvisation in jazz is not without advance preparation. As Bert Ligon states, many improvisations fall into two categories: 1) paraphrasing the melody and 2) improvising on the harmony. Paraphrasing the melody is done by adding notes to the melody, changing the rhythm or embellishing the contour. Improvising on predefined chord progressions is a bit more complex and involves an understanding of harmony. 1 If you

<sup>&</sup>lt;sup>1</sup> Bert Ligon, Comprehensive Technique for Jazz Musicians (Milwaukee, WI: Hal Leonard, 1990), vii.

explained to an aspiring improviser what they will need to prepare, practice, memorize, and be able to apply instantaneously so they can improvise on a jazz standard, many would think twice about going on that road. The devices taught to prepare them for this task is overwhelming, the basics being arpeggios on seventh chords (with different tensions), all kinds of scales depending on the underlying chords, "II-V-I" patterns in all keys, ear training, guide tones, the list never ends. Most educators therefore focus on a targeted approach, where a single topic of improvisation is chosen. Hal Crook writes: "by focusing my attention on only one topic at a time (i.e., creating a restriction or target), I increase my familiarity with the topic more quickly than I otherwise would, and consequently develop ability to work with it creatively and musically. It is not unlike the method a mechanic uses to learn about or repair certain parts of an engine."

Often students become highly dependent on chord/scale methods without always hearing or applying voice leading in their improvisations. But how you practice at home has a direct effect on how you perform as an improviser. Changing your practicing habits especially at an earlier stage, will change your improvisational skills.

I designed a practice routine that implants the seeds for more harmonic interest at an earlier stage. Integrating a harmonic dimension into our improvisational practice routine without requiring extensive knowledge of music theory. It is based on teachings that were passed on to me over the years emphasizing the use of leaps and good voice leading.

#### Virtual Note

When we use jumps or leaps in a scale passage, we create what is called a virtual note. A virtual note or virtual resonance is a note that appears to be present although it is not explicitly played. When we jump (leap) from one note to another, meaning an interval of a third or higher, our brain keeps the first note in memory while the second note is played later in time, and the impression of an interval is created. We can use this to our advantage in

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<sup>&</sup>lt;sup>2</sup> Hal Crook, *How to Improvise: An Approach to Practicing Improvisation Jazz* (Rottenburg: Advance Music, 1990), 11.

improvisation and composition. This concept has many harmonic implications. It is why arpeggios sound like chords to us, even though each note is played separately (Example 1).

Only when we jump from a note, that note is kept in memory while we play the next. Van Dormael writes: "intervals smaller than a third do not produce harmony in the memory. If you run up and down a scale for example there will be no harmonic result, except maybe that the lowest and highest note may be remembered and eventually define a harmonic interval, but no chord." 3

**Example 1** Jumps or Leaps in a Scale Passage



In Example 2, we have a melody on the underlying C major triad, which jumps. The note we jump from is either dissonant or consonant against the C chord.

This is illustrated in Example 2a the E jumps, is kept in memory and rings through (virtually) but it is consonant to the underlying harmony and does need to be resolved. In Example 2b on the other hand, the F jumps, is kept in memory, but is dissonant to our C major chord and wants to resolve to E (as was the case in Example 2a. It leaves us with an uneasy feeling if not resolved.

**Example 2a** Consonant Jump **Example 2b** Dissonant Jump



<sup>3</sup> Pierre Van Dormael, *Four Principles to Understand Music* (Brussels: Art Public Publishing, 2008), 13.

The effect of a dissonant virtual resonance is even more obvious when there is a chord change. "At the change of a chord we have to check if the last note(s) from the first chord will sound right on the second chord. If yes, we can jump from it to any note we want on the second chord." "If the note is not right on the second chord it will virtually resonate in the listener's memory if we jump from it, producing a virtual wrong note." That note should be resolved by half or whole step.

In Example 3a, we made sure the last note of each measure was resolved to the closest chord note of the following chord (in the next measure). The G ( $5^{th}$  of C) is resolved to Ab (root of Abm).

In Example 3b, the E jumps to the Ab of Abm and creates an obvious dissonance because it is not resolved, and e is the #5 of Abm. It would have been better of course if it jumped to G first before continuing to Ab unless the dissonance was intentional.

**Example 3a** Chord Resolved by Step **Example 3b** Unresolved Virtual Note



Another example of virtual notes (Example 4.) Here the last note of each chord jumps and is virtually ringing into the next chord. In measure 1, the note E (3<sup>rd</sup> of C) jumps to G (7<sup>th</sup> of Abmaj7) and thus rings through into measure 2, creating a dissonance as the E is dissonant (#5) on Abmaj7. It will sound better if we resolve the e to Eb first and then jump to the Ab. In measure 2 another dissonance is created because the Ab jumps to the F and is dissonant on the F/G chord (Gsus9). Again, resolving the Ab into an A and then jump will sound better.

<sup>&</sup>lt;sup>4</sup> Pierre Van Dormael, 14.

## **Example 4** Delayed Resolution



In measure 3 the F jumps but is dissonant on the following C major chord. Resolving to the E first would be better. In this case it does not sound that bad, this is because each virtual note is resolved but later in time. This is called delayed resolution.

Learning how to improvise melodies using jumps over a major triad and avoiding dissonances by resolving, as is in Example 2, is a skill that can be taught early on and will change an improviser's creative palette. In this article a set of exercises are proposed to develop that skill.

## Ear, Mind and Rhythm: EMR

The exercises in this routine involve using our ear (intuitive), mind (analytical) and rhythm skills, in short EMR. The exercises use leaps as opposed to more scale fragments and will be combined later. Leaps create the illusion of several parts being played together.

#### 1. E (Ear):

The aim is to ultimately hear all chromatic notes in relationship to the underlying key center. For an improviser this is obviously a huge advantage. This routine will enhance your ear training skills because all notes are always resolved in each exercise, be it sometimes delayed.

# 2. M (Mind):

Initially we need to remember what notes we jump to and where that note gravitates to (resolution), but our ear does the same thing simultaneously and gradually will take over that process and less thinking comes into play. It is not important to know whether you are playing Ab, 9 tension on a G7, it is enough to hear that the Ab needs to resolve to G. (in the key of C)

## 3. R (Rhythm):

Never lose track of the rhythm and time feel. In popular music and jazz, rhythm is paramount. Many students practice without having a feel for time. Therefore, initially the exercises use the same repetitive rhythm to help students maintain their sense of time.

Make a habit of practicing with a drum loop or at least a metronome until you are confident you don't lose time, because "It don't mean a thing if you ain't got that swing".

#### Back to Basics: Triads

The concept is to use leaps (instead of scale patterns) that are resolved to the major triad as to preserve the confirmation of the underlying key. This will be more obvious in more advanced examples using non-diatonic notes. Although not entirely necessary, I suggest recording a major triad "drone" (or inversion of it) over a drum pattern loop. This will make it more fun and makes it easier to hear the resolution. The first exercise is meant to get used to the resolution path of each jump and become a less conscious process, more like a reflex.

Exercise 1: Single leaps from a chord tone to a non-chord tone, diatonic notes only, immediate resolution, 10 minutes. Follow the steps below keeping the following in mind:

1) The goal is to memorize the resolution paths to the target notes, the 1 3 5 of the tonic chord. Each jump needs to resolve as shown in Example 5.

## **Example 5** Resolution Path



- 2) Focus on playing in time. Feel the rhythm before playing. Play slow if you must. Speed is of no importance now.
- 3) No need to overcomplicate the exercises, in the beginning play continuous quarter notes or eight notes avoiding complex rhythms.

- 4) Choose a key and play the I major triad. (the key of C is used here) This is the underlying chord where all jumps resolve to.
- 5) Play a chord tone (inside-note) then jump (meaning an interval of at least a third) to any other non-chord tone of your choice and then resolve to the closest chord tone. So: chord tone-jump-resolve if needed.
- 6) If you jumped to the 2, 4, 6 or 7 then resolve them using correct voice leading as shown in Example 5.

4 to 3

6 to 5

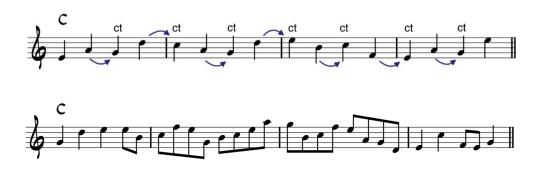
7 to 1

2 to 3 or 1

7) If you jumped to a chord-tone instead of a non-chord tone, then there is no need to resolve it because it is a stable note already.

The result is an interplay between chord tones and non-chord tones or between tensions and resolutions. It is a technical exercise meant to reinforce hearing and applying resolutions and builds the foundation for more interesting melodies. Harmonic confirmation of the underlying key center is very strong as each alternating note is resolved (Example 6).

**Example 6** Resolved Chord Tones



Exercise 2: Two leaps of diatonic notes, delayed resolution, 10 minutes.

Often in music, a non-chord tone is not resolved immediately, and its resolution is delayed. This results in a more musical approach of the first exercise. The delayed resolution

creates an extra level of harmonic tension in "time" and results in some beautiful musical ideas. Again, each note we jump from is kept in memory until it is resolved, the longer we wait to resolve, the more tension is built.

The steps are the same as explained in Exercise 1 but here the diatonic non-chord tone is not resolved immediately but we first jump to another note, which can be a chord-tone or non-chord tone, and then resolve it. The resolution is delayed. In measure 1 of Example 7, the resolution of a is delayed until the next measure. The F is in measure 2 is also delayed 1 beat. In measure 3 the D, A and F are resolved in measure 4.

**Example 7** Delayed Resolution



In Example 8, you can hear what it sounds like if *none* of the non-chord tones of the example above are resolved.

Example 8 Unresolved



The 4<sup>th</sup> of the major triad is dissonant to the underlying triad and wants/needs to resolve a half step down. Not resolving the 4<sup>th</sup> would imply a subdominant function instead of the underlying tonic function. Therefore, the 4<sup>th</sup> is the defining note of the underlying key.

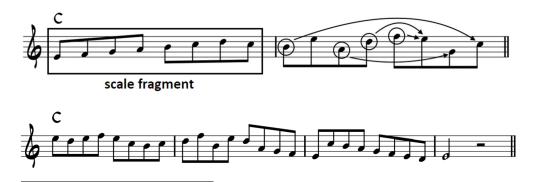
Of course, an improviser might choose *not* to resolve a specific note e.g. a 9<sup>th</sup> or a 6<sup>th</sup>, as long as that note is a stable extension of the chord structure. Many would argue, with reason of course, that this is one of the characteristics of jazz harmony and jazz improvisation. And it is but for now, we should focus on resolving each non-chord tone to the triad only. Later, this habit will be helpful when we add all chromatic notes and need to resolve unstable tensions too, for example a #5 or a \( \rightarrow 3 \) on a major chord.

Exercise 3: Short scale fragments followed by jumps, immediate and delayed resolution, 10 minutes.

In Exercise 3 we are adding scale fragments to the first exercise. The resolution paths should now become more familiar and natural. Adding scale fragments in between sections with jumps will add variety to the first exercise, because the first exercise only uses leaps. It also gives you more time to think as scales are easier to reproduce than leaps (Example 9). The notes of a scale pattern are all moving in steps, which means that none of these notes stay in memory. Each note resolves into the following note by stepwise motion. As Van Dormael wrote you could think of it as if the second note erases the previous one from memory.<sup>5</sup>

In Example 9, the first measure is a scale fragment, while measure two consists of jumps which are resolved. Switching between passages of scales and passages with jumps creates a balance.

**Example 9** Short Scale Fragments Followed by Jumps



<sup>&</sup>lt;sup>5</sup> Pierre Van Dormael, 13.

Exercise 4: Adding rhythmic embellishment to the above exercises, 10 minutes.

We are using the same concepts, but the rhythmic variations introduce an additional layer of interest to the exercises.

**Example 10** Adding Rhythmic Variation



Exercise 5: Adding non-diatonic notes to the previous exercises, 10 minutes.

Now we include all notes of the chromatic scale. This is the goal of these exercises and will give us more variety in our improvisation. Each note of the chromatic scale is resolved as shown in Example 11.

**Example 11** Chromatic Resolutions



The use of all chromatic notes allows us to play ideas that are more dissonant, but we still preserve the sense of the underlying key as each note is resolved to the tonic chord. These melodic concepts can also be used on progressions with a strong resolution towards the tonic chord (or the temporary tonic) such as a I-II-V or a IV-V-I progression. This will result in what is sometimes labelled as "outside playing", with the distinction that in these exercises all outside

notes are resolved. You should only start doing this exercise if you are becoming comfortable with the previous ones. Switching between 1 or 2 measures of inside notes and 1 or 2 measures with outside notes will imply a chord progression with a balanced harmonic rhythm like a tonic to dominant structure or a pre-dominant dominant to tonic structure. The more chromatic notes added, the higher the dissonance.

**Example 12** Adding All Chromatic Notes



# Conclusion

The exercises proposed promote the use of leaps and follow the voice leading concepts used in Western tonal music. The practical benefit for improvisation is the ability to play less linear and more "vertical" melodic ideas and hear the resolutions of those outside notes. These exercises are inspiring and fun to practice as they give instant gratification when dissonances are resolved. Although applying the rules of voice leading takes a while to get used to in the beginning, a good practice routine will make the experience more comfortable. Over time this will blend into your improvisational language, promoting your creativity and

developing your ear. After all, an improviser sounds how he practices at home. Once one gets used to using leaps and delayed resolution, adding non-diatonic notes results in interesting dissonant melodic ideas that nonetheless confirm the underlying tonality at all times. All chromatic notes are used here, and none of the examples use complex scales such as altered scales or diminished scales.

All examples in this article focused on the I major tonic chord, but of course they can also be applied to a minor key.

While using leaps that resolve to the underlying triad is the main focus of these exercises, the improviser might in the future choose to resolve to the allowed tensions of the underlying key, For example Cmaj9. All other non-diatonic notes need to be resolved. Now you can choose not to resolve the 9<sup>th</sup> and therefore make that note an important color of the underlying harmony. The ideas range from easy to complex and work well on both a single chord and short chord progressions that resolve to the tonic, such as: IIm7-V7-I or IV-V-I or V-I This practice routine is beneficial for both beginners and more advanced players. Each melodic variation implies a certain harmonic resonance, as dissonant as they may be, but reaffirms our tonal center and fulfills harmonic expectancy, a constant flow from balance to imbalance, tension to release, which is the core definition of harmony.

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